



9.28 TOWN OF SWEDEN

This section presents the jurisdictional annex for the Town of Sweden.

9.28.1 Hazard Mitigation Plan Point of Contact

The following individuals have been identified as the hazard mitigation plan's primary and alternate points of contact.

Primary Point of Contact	Alternate Point of Contact
Mike Vergari, Fire Marshal 18 State Street, Brockport, NY 14420 585-637-8684 E-mail: michaely@townofsweden.org	Steve Lauth, Building Inspector/Code Enforcement Officer 18 State Street, Brockport, NY 14420 585-637-8684 E-mail: stevel@townofsweden.org

9.28.2 Municipal Profile

The Town of Sweden is located on the western border of Monroe County and shares part of its boundary with Orleans and Genesee Counties. The Town consists of 33.5 square miles in land area and 0.2 square mile of water. The Town is bordered by the Town of Clarkson to the north, the Towns of Parma and Ogden to the east, Genesee County to the south, and Orleans County to the west. The Erie Canal passes through the northern part of the Town and is the only waterbody of significance in the Town.

The Town of Sweden was founded in 1814 from the Town of Murray in Orleans County. The population of the Town is 14,175, according to the 2010 U.S. Census.

Growth/Development Trends

The following table summarizes recent residential/commercial development since 2010 to present and any known or anticipated major residential/commercial and major infrastructure development that has been identified in the next 5 years within the municipality. Figure 9.28-1 illustrates landslide and wildfire hazard areas and Figure 9.28-2 illustrates flood hazard areas.

Table 9.28-1. Growth and Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development
Recent Development from 2010 to present					
College Suites	Residential (Apartment)	114	4599 Redman Rd.	None	Completed
Brandon Woods	Residential (Housing Tract)	15	Wood Trace	None	In progress
Northview	Residential (Housing Tract)	20	Long Point Lane	None	In progress
Unity Medical	Commercial	1	Fourth Section Rd.	None	Completed
Known or Anticipated Development in the Next Five (5) Years					
Seniors Choice	Residential (Apartments)	90	100 Isla Way	None	In progress
Frances Apartments	Residential (Apartments)	8 Buildings	200 Owens Rd.	None	Planned
McCalisters Deli	Commercial (Deli)	1	1015 Transit Way	None	Planned

* Only location-specific hazard zones or vulnerabilities identified.





9.28.3 Natural Hazard Event History Specific to the Municipality

Monroe County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 5.0, of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. All events that have occurred in the County were summarized for this plan update, and to the extent possible, to indicate the range and impact of hazard events in the community. Information regarding specific damages is included, if available, based on reference material or local sources. This information is presented in the table below. Refer to Volume I, Section 5.0 of this plan for details of these and additional events.

Table 9.28-2. Hazard Event History

Dates of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
October 27 – November 8, 2012	Hurricane Sandy	EM-3351	Yes	10/29/12-10/30/12: Downed power lines closed East Avenue
May 13-22, 2014	Severe Storms and Flooding	DR-4180	No	East Canal Road flooded on 5/4/14 and 5/16/15
July 28, 2014	Flash Flood	N/A	N/A	East Canal Road flooded

9.28.4 Hazard Vulnerabilities and Ranking

The hazard profiles in Section 5.0 of this plan contain detailed information regarding each plan participant’s vulnerability to the hazards identified. The following summarizes the hazard vulnerabilities and their ranking in the Town of Sweden. Refer to Section 5.0 for additional vulnerability information relevant to this jurisdiction.

Hazard Risk/Vulnerability Risk Ranking

The table below summarizes the hazard risk/vulnerability rankings of potential hazards for the Town of Sweden. The hazards of concern for the Town are those with a High hazard ranking.

Table 9.28-3. Hazard Risk/Vulnerability Risk Ranking

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{a, c}	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking ^b
Severe Storm	Expected Losses from Wind Alone: \$0	Frequent	48	High
Landslide	Exposed: \$1,771,453,297	Frequent	48	High
Utility Failure	Damage Estimate Not Available	Frequent	39	High
Extreme Temperature	Damage Estimate Not Available	Frequent	36	High
Infestation	Damage Estimate Not Available	Frequent	36	High
Severe Winter Storm	1% Damage Loss Estimate: \$10,759,379 5% Damage Loss Estimate: \$53,796,894 10% Damage Loss Estimate: \$107,593,788	Frequent	36	High
Earthquake	100-year MRP GBS: \$0 500-year MRP GBS: \$91,518 2,500-year MRP GBS: \$1,721,439 Annualized: \$1,430	Frequent	18	Medium
Wildfire	Exposed Value in the WUI: \$211,119,920	Frequent	18	Medium
Flood	1% annual chance: \$1,912,100	Frequent	18	Medium
Terrorism	Damage Estimate Not Available	Frequent	18	Medium



Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{a, c}	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking ^b
Drought	Damage Estimate Not Available	Frequent	12	Low
Civil Unrest	Damage Estimate Not Available	Occasional	12	Low
Hazardous Materials	Damage Estimate Not Available	Occasional	12	Low

Notes:

- a. Building damage ratio estimates based on FEMA 386-2 (August 2001)
- b. The valuation of general building stock and loss estimates was based on custom inventory for the municipality.
High = Total hazard priority risk ranking score of 31 and above
Medium = Total hazard priority risk ranking of 15-30
Low = Total hazard risk ranking below 15
- c. Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the value of contents.
- d. Loss estimates for the flood and earthquake hazards represent both structure and contents.
- e. The HAZUS-MH earthquake model results are reported by Census Tract.

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Sweden.

Table 9.28-4. NFIP Summary

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 100-year Boundary (3)
Sweden (T)	6	1	\$1,515	0	0	3

Source: FEMA Region 2 2015

Notes:

- (1) Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and are current as of June 30, 2015. Total number of repetitive loss properties does not include severe repetitive loss properties. Number of claims represents claims closed by June 30, 2015.
 - (2) Total building and content losses from the claims file provided by FEMA Region 2.
 - (3) Number of policies inside and outside of flood zones is based on latitude and longitude provided by FEMA Region 2 in the policy file. FEMA noted that for a property with more than one entry, more than one policy may have been in force or more than one Geographic Information System (GIS) specification was possible.
- Number of policies and claims, and claims total, exclude properties outside Monroe County boundary, based on provided latitude and longitude coordinates.
- T Town

Critical Facilities

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

Table 9.2-5. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event	
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage
None identified.					

Source: Monroe County; HAZUS-MH 2.2; FEMA 2015

Note (1): HAZUS-MH 2.2 provides a general indication of the maximum restoration time for 100% operations. Clearly, a great deal of effort is needed to quickly restore essential facilities to full functionality; therefore, this will be an indication of the maximum downtime (HAZUS-MH 2.2 User Manual).

Note (2): In some cases, a facility may be located in the DFIRM flood hazard boundary; however, HAZUS did not calculate potential loss. Losses may not have been calculated because the depth of flooding does not amount to any damages to the structure according to the depth damage function used in HAZUS for that facility type. Furthermore, HAZUS-MH





may estimate potential damage to a facility that is outside the DFIRM because the model generated a depth grid beyond the DFIRM boundaries.

- NA Not available
- X Facility located within the DFIRM boundary
- Not calculated by HAZUS-MH 2.2

Other Vulnerabilities Identified

The municipality identified the following additional vulnerabilities within their community:

- East Canal Road floods during extended periods of rain or with large volumes of water.

9.28.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification
- National Flood Insurance Program
- Integration of Mitigation Planning into Existing and Future Planning Mechanisms.

Planning and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Town of Sweden.

Table 9.28-6. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Planning Capability				
Master Plan	Yes	Local		Town of Sweden and Village of Brockport Comprehensive Plan, 2013
Capital Improvements Plan	Yes	Local	Town	Town code
Floodplain Management / Basin Plan	Yes	Local	Town	Chapter 112
Stormwater Management Plan	Yes	Local	Town	Chapter 112 and 157
Open Space Plan	No			
Stream Corridor Management Plan	No			
Watershed Management or Protection Plan	Yes	Local	Town	Chapter 112
Economic Development Plan	No			
Comprehensive Emergency Management Plan	Yes	Local	Town	Town emergency plan
Emergency Response Plan	Yes	Local	Town	Town emergency plan
Post-Disaster Recovery Plan	No			
Transportation Plan	No			
Strategic Recovery Planning	No			



Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Report				
Other Plans	No			
Regulatory Capability				
Building Code	Yes	Local	Town	Building Code Administration and Enforcement Chapter 64
Zoning Ordinance	Yes	Local	Town	Zoning Chapter 175
Subdivision Ordinance	Yes	Local	Town	Land Use Development and Subdivision Regulations Chapter A177
NFIP Flood Damage Prevention Ordinance	Yes	Local	Town	Flood Damage Prevention Chapter 112
NFIP: Cumulative Substantial Damages	No			
NFIP: Freeboard	Yes	State, Local	Town	State mandated Base Flood Elevation (BFE)+2 for single and two-family residential construction, BFE+1 for all other construction types
Growth Management Ordinances	No			
Site Plan Review Requirements	Yes	Local	Town	Planning board
Stormwater Management Ordinance	Yes	Local	Town	Stormwater Management, Chapter 157
Municipal Separate Storm Sewer System (MS4)	Yes	Local	Town	Chapter 117
Natural Hazard Ordinance	No			
Post-Disaster Recovery Ordinance	No			
Real Estate Disclosure Requirement	Yes	State	Town	NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467
Other [Special Purpose Ordinances (i.e., sensitive areas, steep slope)]	Yes	Local	Town	Emergency Services Chapter 14; Environmental Conservation Board Chapter 15; Freshwater Wetlands Chapter 117

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Sweden.

Table 9.28-7. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Planning Board and Zoning Board of Appeals
Mitigation Planning Committee	No	
Environmental Board/Commission	Yes	Environmental Conservation Board
Open Space Board/Committee	No	
Economic Development Commission/Committee	No	





Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Maintenance Programs to Reduce Risk	No	
Mutual Aid Agreements	Yes	Shared services with Town and other municipalities
Technical/Staffing Capability		
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Yes	Town engineer
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Town engineer
Planners or engineers with an understanding of natural hazards	Yes	Town engineer
NFIP Floodplain Administrator	Yes	Building inspector
Surveyor(s)	No	
Personnel skilled or trained in GIS and/or HAZUS-MH applications	Yes	Secretary to Highway Superintendent
Scientist familiar with natural hazards	No	
Emergency Manager	Yes	Fire Marshal
Grant Writer(s)	No	
Staff with expertise or training in benefit/cost analysis	No	
Professionals trained in conducting damage assessments	No	

Fiscal Capability

The table below summarizes financial resources available to the Town of Sweden.

Table 9.28-8. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	No
Impact Fees for homebuyers or developers of new development/homes	No
Stormwater Utility Fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal or State Funding Programs	Yes
Open Space Acquisition Funding Programs	No
Other	No



Community Classifications

The table below summarizes classifications for community program available to the Town of Sweden.

Table 9.28-9. Community Classifications

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	NO		
Building Code Effectiveness Grading Schedule (BCEGS)	No		
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Fire Departments (Classification Unknown)	
Storm Ready	Yes	StormReady County	
Firewise	No		
Disaster/Safety Programs in/for Schools	Yes	Fire Department	
Organizations with Mitigation Focus (advocacy group, non-government)	No		
Public Education Program/Outreach (through website, social media)	Yes	Website	
Public-Private Partnerships	No		

N/A = Not applicable. NP = Not participating. - = Unavailable. TBD = To be determined.

The classifications listed above relate to the community’s ability to provide effective services to reduce its vulnerability to the hazards identified. These classifications can be viewed as a gauge of the community’s capabilities in all phases of emergency management (preparedness, response, recovery, and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS class applies to flood insurance, while the BCEGS and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10, with class 1 being the best possible classification and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1,000 feet of a creditable fire hydrant and is within 5 road miles of a recognized Fire Station.

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule
- The ISO Mitigation online ISO’s Public Protection website at <http://www.isomitigation.com/ppc-program.html>
- The National Weather Service Storm Ready website at <http://www.stormready.noaa.gov/become.shtml>
- The National Firewise Communities website at <http://firewise.org/>

Self-Assessment of Capability

The table below provides an approximate measure of the Town of Sweden’s capability to work in a hazard-mitigation capacity or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.





Table 9.28-10. Self-Assessment Capability for the Municipality

Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)	Moderate	High
Planning and Regulatory Capability	X		
Administrative and Technical Capability	X		
Fiscal Capability	X		
Community Political Capability	X		
Community Resiliency Capability	X		
Capability to Integrate Mitigation into Municipal Processes and Activities.	X		

National Flood Insurance Program

NFIP Floodplain Administrator (FPA)

Building Inspector/Code Enforcement Officer

Flood Vulnerability Summary

The Town of Sweden has a relatively low level of flood vulnerability. Very few residents are concerned about potential flood damages, as based on the number of NFIP policies in the Town. Additionally, Town records indicate that no properties were damaged from storms or severe weather events during the last 5 years. The Town is aware of the flooding issues on East Canal Road; however, it has not yet been able to take corrective actions to mitigate this issue because funding is limited.

Resources

The Floodplain Administrator is the only person assuming the responsibilities of floodplain administration. Steve Lauth, Building Inspector and Code Enforcement Officer, provides NFIP administration services and functions, including plan review and building inspections. Currently no education or outreach is being offered to the community specifically regarding flood hazards/risk or flood risk reduction through NFIP insurance or mitigation.

The Floodplain Administrator does not report any barriers to running an effective floodplain management program in his community. At this time, he is unsure whether he is adequately supported and trained to fulfill his responsibilities as the municipal floodplain manager. The Floodplain Administrator expressed interest in attending continuing education or certification training on floodplain management if it were offered in the County for all local floodplain administrators.

Compliance History

As of June 30, 2015, there are six policies in force, three of which are within the 100-year flood boundary. There are no repetitive loss or severe repetitive loss properties in the Town. Since 1978, one claim has been paid within the Town of Sweden. According to the NFIP Policy Statistics report available at the time of this plan, the policies in the Town insured \$1.2 million of property with total annual insurance premiums of \$3,601.

The Town is currently in good standing with the NFIP. The Floodplain Administrator is unaware of any outstanding NFIP compliance issues in the community and does not know when the most recent Community Assistance Visit (CAV) was completed.





Regulatory

The Town's Flood Damage Prevention Ordinance (FDPO) was last reviewed and updated in July 2008 and is found in Chapter 112 of the local code. Floodplain management regulations and ordinances meet the FEMA and New York State minimum requirements and do not exceed these requirements.

There are other local ordinances, plans, and programs that support floodplain management and meeting NFIP requirements in the Town of Sweden, including the planning board reviews of development applications to consider efforts to reduce flood risk.

Community Rating System

The Town of Sweden does not participate in the CRS program at this time. The Town has not considered joining the CRS program at this time.

Other Capabilities Identified

Previous actions that are now on-going programs and capabilities are described below. Refer to Table 9.28-11 presented later in this annex.

The Town has integrated the following actions as ongoing programs:

- Stockpiles emergency supplies.
- Solicits mutual aid agreements for both routine and emergency response, as well as inter-municipal and interagency cooperation.
- Engages emergency service jurisdictions in local municipal government processes.
- Enforces government permit processes. This may pertain to existing and/or new infrastructure.
- Provides comprehensive inspection services. This may pertain to existing or new infrastructure.
- Administers a Floodplain Management Program. Administration may pertain to existing or new infrastructure.
- Identifies "special hazard" areas.
- Maintains public infrastructure (both existing and new).
- Enforces Building Code as required for existing and new infrastructure.
- Complies with applicable federal and state regulations and regularly reviews local laws.
- Secures and provides redundant critical systems and facilities for both new and existing infrastructure, as funding allows.
- Develops alternate communications plan.
- Installs permanent backup power supply at public facilities (for both existing and new infrastructure).
- Reviews emergency plans for public facilities to ensure that appropriate measures are considered and referenced.

The Town supports the local utility companies in the following ongoing action: review utility service and restoration plans.

The Town supports the County in the following ongoing action: ensures proper disposal of hazardous waste.



Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

Hazard mitigation must be integrated into the day-to-day local government operations for a community to succeed in reducing long-term risk. As part of this planning effort, each community was surveyed to obtain a better understanding of their community's progress in plan integration. A summary is provided below. In addition, the community identified specific integration activities that will be incorporated into municipal procedures.

Planning

Land Use Planning: The Town of Sweden has a Planning Board and Zoning Board of Appeals that review all applications for development and consider natural hazard risk areas in their review. Many development activities require additional levels of environmental review, specifically New York State Environmental Quality Review (NYS SEQRA) and federal National Environmental Policy Act (NEPA) requirements.

Town of Sweden and Village of Brockport Comprehensive Plan, 2013: The Town of Sweden and Village of Brockport jointly updated Comprehensive Plan (previous versions from 2002 and 2005) to focus on development and land use in the Town and Village. The plan includes identification of natural hazard risk areas and environmentally sensitive areas, such as floodplains and wetlands. The Comprehensive Plan contains land use and zoning recommendations for managing hazard risks and directing growth. Some of the recommendations included the following:

1. Encourage innovative engineering standards for effective solutions that enhance aesthetics, safety, and economics and protect the environment.
2. Require site designs that minimize impacts to the natural environment, impacts of traffic on site and off site, erosion, sedimentation, and storm water runoff.
3. Work to improve the Town's and Village's ratings under the Federal Emergency Management Agency's flood insurance Community Rating System, if it is determined that this improvement would be cost effective.
4. Support private sector efforts to protect significant environmental areas and coordinate these activities with the community's comprehensive planning program where applicable.
5. Prepare an Open Space Plan for the protection and preservation of open spaces. (The Open Space Plan should be all-inclusive, covering the entire Town and all resources.)

Stormwater Management, 2014: The Town of Sweden participates in the Monroe County Stormwater Coalition and has established several ordinances since 2007 to protect the community against stormwater issues. These ordinances include a stormwater model final construction ordinance, stormwater post-construction model ordinance, and stormwater illicit discharge ordinance. The Town also submits annual MS4 reports to NYS DEC to verify its continuing compliance with relevant regulations.

Regulatory and Enforcement

Building Code Administration and Enforcement Chapter 64: The building codes are strictly enforced to prepare new and renovated buildings as much as possible for hazard related incidents. The Town complies with New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code).

Emergency Services Chapter 14: The Town of Sweden has established regulations concerning the ambulances services that provide care within the Town. These regulations are to ensure that residential needs are met in the most effective and safe way possible and that they help prevent any conflict of interest between private and public entities.



Environmental Conservation Board Chapter 15: The Town’s Environmental Conservation Board works to ensure that the Town of Sweden maintains the biological integrity of the natural environment for both aesthetic and functional benefits.

Flood Damage Prevention Chapter 112: This article promotes the public health, safety, and general welfare of residents and seeks to minimize public and private losses caused by flood conditions and erosion. The chapter regulates development to promote flood resistant structures and controls the alteration of floodplains to prevent increased vulnerability.

Freshwater Wetlands Chapter 117: This chapter establishes the Town’s authority over any activities related to wetlands. It notes that freshwater wetlands are an invaluable resource for flood protection, wildlife habitat, open space, water resources, recreation, and more, and it seeks to preserve and protect local freshwater wetlands.

Solid Waste Management Chapter 155: The Town has developed laws regarding disposal of solid waste to prevent public health concerns, to decrease the flow of solid waste to landfills, to aid in the conservation of valuable resources, and to reduce the capacity of existing and proposed resource facilities.

Stormwater Management Chapter 157: The Town’s stormwater management chapter seeks to mediate the adverse impacts of stormwater runoff rates, sedimentation, and erosion caused by existing drainage systems. It also serves to control the degradation of water quality in the Town.

Zoning Chapter 175: The Town of Sweden zoning code includes districts and standards pertaining to safe development of structures in Town. The zoning code does not overtly note hazard mitigation; however, it is designed to ensure the wellbeing of its residents.

Land Use Development and Subdivision Regulations Chapter A177: The Town’s Planning Board is tasked with site plan/subdivision review. The Planning Board pays special attention to ensure that developments mitigate the issues associated natural hazards.

Fiscal

Operating Budget: The Town’s operating budget contains minimal provisions for expected repairs like snow removal and infrastructure repair after a storm or natural disaster. It also contains funding for special districts, including the Sweden drainage district and consolidated sewer district.

Capital Improvement Program: The Town of Sweden Highway Department notes on its webpage that it routinely repairs infrastructure including catch basins, manholes, sanitary sewer lines, and storm sewer lines, as well as paving, blacktopping, and sealing roads; constructing new roads; construction facilities at Town Park; replacing culvert pipes and ditching; mowing and trimming roadsides; and picking up dead animals. All of these tasks are allotted under the Town’s highway budget and seek to mitigate or prevent a variety of hazards.

Education and Outreach

Town of Sweden staff attend trainings and classes sponsored by Monroe County Department of Planning and Development, the Monroe County Office of Emergency Management, or by state and federal agencies, as able and to meet all professional requirements. Town emergency responders also have the option to attend courses at the Monroe County Public Safety Training Facility.

Although the Town website does not have a webpage devoted to hazard education materials, it provides a webpage with information on its stormwater management program. The Town Highway Department webpage



shares helpful tips with residents on winter snow removal and plowing. The Town website also has a “News” page, where it provides links to the Town Code, Town Board Meeting dates, local relevant news, and copies of recent Town newsletters. The Town does not maintain any social media platforms; however, the Town newsletter has the capability to inform Town residents of hazard-relevant information and events. In addition, residents have the ability to sign up for reverse 911 cell phone notifications of emergencies through the Monroe County Emergency Communications Department.

9.28.6 Mitigation Strategy and Prioritization

This section discusses past mitigation actions and status, describes proposed hazard mitigation initiatives, and prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2011 plan. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.28-11. Past Mitigation Initiative Status

2011 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2017 HMP? or Discontinue)	Describe Next Step 1. If including action in the 2017 HMP, revise/reword to be more specific (as appropriate). 2. If Discontinue, explain why.
ES-3: Establish an active Recruitment and Retention (of providers) Program.	N/A	No Progress	N/A	Discontinued	Not applicable to Town.
ES-4: Stockpile emergency supplies.	N/A	No progress	N/A	Discontinued	Integrated into normal operations
ES-5: Solicit “Mutual Aid” agreements.	Town	In Progress	N/A	Discontinued	Integrated into normal operations
ES-6: Engage emergency service jurisdictions in local municipal government processes.	Town	In progress	N/A	Discontinued	Integrated into normal operations
NRP-1: Ensure proper disposal of Hazardous Waste.	County	In progress	N/A	Discontinued	Integrated into normal operations
NRP-2: Enforce government permit processes. This may pertain to existing and/or new infrastructure.	Town	In progress	N/A	Discontinued	Integrated into normal operations
NRP-3: Provide comprehensive inspection services. This may pertain to existing and/or new infrastructure.	Town	In Progress	N/A	Discontinued	Integrated into normal operations
NRP-4: Administer a Floodplain Management Program. This may pertain to existing and/or new infrastructure.	Town	In progress	N/A	Discontinued	Integrated into normal operations
NRP-5: Maintain “Urban Forests.”	N/A	No progress	N/A	Discontinued	Not applicable to Town.
PEA-3: Review Utility Service & restoration plans.	Utility Company	In progress	N/A	Discontinued	Integrated into normal operations
PEA-4: Identify and utilize a “Speakers Bureau.”	N/A	No progress	N/A	Discontinued	Not applicable to Town.





2011 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2017 HMP? or Discontinue)	Describe Next Step 1. If including action in the 2017 HMP, revise/reword to be more specific (as appropriate). 2. If Discontinue, explain why.
PP-1: Identify “special hazard” areas.	Town	In progress	N/A	Discontinued	Integrated into normal operations
PP-2: Maintain public infrastructure. This may pertain to existing and/or new infrastructure.	Town	In progress	N/A	Discontinued	Integrated into normal operations
PP-3: Solicit inter-municipal and interagency cooperation.	Town	In progress	N/A	Discontinued	Integrated into normal operations
PP-4: Promote purchase of appropriate hazard insurance policies. This may pertain to existing and/or new infrastructure.	N/A	No progress	N/A	Discontinued	Not applicable to Town
PP-5: Property acquisition	N/A	No progress	N/A	Discontinued	Not applicable to Town
PR-1: Enforce Building Code as required for existing and new infrastructure.	Town	In progress	N/A	Discontinued	Integrated into normal operations
PR-2: Comply with applicable federal and state regulations.	Town	In progress	N/A	Discontinued	Integrated into normal operations
PR-5: Regular review of Local Laws	Town	In progress	N/A	Discontinued	Integrated into normal operations
SP-1: Disaster “proof” public facilities. This may pertain to existing and/or new infrastructure.	N/A	No progress	N/A	Discontinued	Not applicable to Town
SP-2: Secure and provide redundant critical systems and facilities. This may pertain to existing and/or new infrastructure.	Town	In progress	N/A	Discontinued	Integrated into normal operations
SP-3: “Target Harden” facilities. This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town





2011 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2017 HMP? or Discontinue)	Describe Next Step 1. If including action in the 2017 HMP, revise/reword to be more specific (as appropriate). 2. If Discontinue, explain why.
SP-4: Expand fiber telecommunications networks.	Phone Company	In progress	N/A	Discontinued	Not applicable to Town
Dam-PEA-1: Churchville Project. Provide maps of flood plain area to residents who could be affected by a dam failure. This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town
Dam-PEA-2: Riga Project. Provide maps of flood plain area to residents who could be affected by a dam failure. This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town
EPI-PR-2: Local Project. Provide HIV screening and public education (Democrat & Chronicle, 7-21-03).	N/A	N/A	N/A	Discontinued	Not applicable to Town
Fire-ES-1: Local Project. The Henrietta Fire District is developing a Special Operations Unit for Confined Space Rescue, Low and High-Angle Rescue, Water Rescue, and Trench Rescue.	N/A	N/A	N/A	Discontinued	Not applicable to Town
Fire-ES-2: Local Project. Continue to provide Emergency Medical Services to the community. The Churchville Volunteer Fire Department is the first responder agency to all medical emergencies in our community.	N/A	N/A	N/A	Discontinued	Not applicable to Town
Fire-PEA-1: Local Project. Henrietta Fire District develops and schedules an annual campaign for Fire Prevention using its mobile Fire Safety Trailer and a portable interactive kiosk at schools, community functions, and public facilities.	N/A	N/A	N/A	Discontinued	Not applicable to Town
Fire-PEA-2: Local Project. Churchville Volunteer Fire Department develops and schedules an annual campaign for Fire	N/A	N/A	N/A	Discontinued	Not applicable to Town





2011 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2017 HMP? or Discontinue)	Describe Next Step 1. If including action in the 2017 HMP, revise/reword to be more specific (as appropriate). 2. If Discontinue, explain why.
Prevention at schools, community functions, and public facilities using its interactive displays.					
Fire-PP-1: Encourage residential use of smoke detectors through public education, and “give away” programs. This may pertain to existing and/or new infrastructure.	Fire Dept	In Progress	N/A	Discontinued	Not applicable to Town
Fire-SP-1: Local Project. Plan, design and develop enhanced, local facilities for on-site specialized emergency training.	N/A	N/A	N/A	Discontinued	Not applicable to Town
FI-ES-1: Provide Special Operations and Tactical Rescue training including water rescue training	N/A	N/A	N/A	Discontinued	Not applicable to Town
FI-ES-4: Churchville Project. Enhance Fire Department Personnel Emergency Notification	N/A	N/A	N/A	Discontinued	Not applicable to Town
FI-ES-5: Churchville Project. Provide water rescue training and equipment e.g. Wet Suits and associated equipment.	N/A	N/A	N/A	Discontinued	Not applicable to Town
FI-PEA-1: Provide information about the Erie Canal and its spillway locations	N/A	N/A	N/A	Discontinued	Not applicable to Town
FI-PEA-3: Riga Project. Provide maps of flood plain area to residents who could be affected by a dam failure. This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town
FI-PP-1: Encourage affected property owners to purchase Flood Insurance. This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town
FI-PP-2: Participate in the federal Community Rating System. This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town





2011 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2017 HMP? or Discontinue)	Describe Next Step 1. If including action in the 2017 HMP, revise/reword to be more specific (as appropriate). 2. If Discontinue, explain why.
FI-PP-4: Local Project. Town of Gates “Multi-Lot Letter of Map Amendment” for more than 100 homes that were mislabeled as residing in flood zones on FEMA maps (Democrat & Chronicle, 1.22.10).	N/A	N/A	N/A	Discontinued	Not applicable to Town
FI-PP-5: Local Projects with the U.S. Army Corps of Engineers, “Risk Management Program.” Levy inspection, safety analysis and maintenance requirements (SEMO Region V meeting, 7.29.08).	N/A	N/A	N/A	Discontinued	Not applicable to Town
FI-PR-1: Implement an annual, “Waterway/Drainage Maintenance” Program	N/A	N/A	N/A	Discontinued	Not applicable to Town
FI-PR-5: Local Project. Implement an annual de-silting program in the Town of Henrietta, to increase the storage capacity for storm water detention and retention ponds. This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town
FI-PR-6: Local Project. Town of Greece drainage study on Fleming and Veness creeks between Latta Road, Windsor Blvd., Denise Road and Dewey Ave. (Democrat & Chronicle, 1.3.10).	N/A	N/A	N/A	Discontinued	Not applicable to Town
FI-SP-1: Local Project. Implement mitigation measures for Irondequoit Creek, as identified by the U.S. Army Corps of Engineer’s 2003 proposal, and as agreed by local parties. (reference – Democrat & Chronicle, 3-2-03). This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town
FI-SP-2: Local Project. Implement municipal mitigation measures identified by USGS modeling, proposed by the Storm Water	N/A	N/A	N/A	Discontinued	Not applicable to Town





2011 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2017 HMP? or Discontinue)	Describe Next Step 1. If including action in the 2017 HMP, revise/reword to be more specific (as appropriate). 2. If Discontinue, explain why.
Coalition and agreed by local parties. This may pertain to existing and/or new infrastructure.					
Fl-SP-5: Local Project. Design and build a regional detention facility upstream of the Rolling Meadows and Tallwoods Subdivision in the Town of Parma. This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town
Fl-SP-6: Local Project. Town of Parma bridge replacement on Hill Road (Town ROW), over Salmon Creek to raise the bridge approaches from the floodplain, to increase the freeboard elevation, to decrease backwater, and to meet 50-year storm construction standards. This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town
Fl-SP-7: Local Project. Town of Henrietta replace road culverts to improve flow and reduce flooding potential on Parkmeadow Drive, Tomahawk Trail and Colleen Way. This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town
Ice-ES-1: Develop a strategy to reduce the time it takes to clear streets (Rights-of-Way) of debris	N/A	N/A	N/A	Discontinued	Not applicable to Town
Ice-ES-2: Regularly review restoration priorities	N/A	N/A	N/A	Discontinued	Not applicable to Town
Ice-ES-3: Enhance utility “Town Liaison” Program	N/A	N/A	N/A	Discontinued	Not applicable to Town
Ice-NRP-1: Churchville Project. Replace trees (forestation) in Village of Churchville that	N/A	N/A	N/A	Discontinued	Not applicable to Town





2011 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2017 HMP? or Discontinued)	Describe Next Step 1. If including action in the 2017 HMP, revise/reword to be more specific (as appropriate). 2. If Discontinue, explain why.
were destroyed by various storm events.					
Ice-PEA-2: Develop alternate communications plan	Town	In Progress	N/A	Discontinued	Integrated into normal operations
Ice-PEA-3: Provide automated utility restoration schedule to the public	N/A	N/A	N/A	Discontinued	Not applicable to Town
Ice-PEA-4: Provide more public outreach during an emergency	N/A	N/A	N/A	Discontinued	Not applicable to Town
Ice-PEA-5: Expand utility Customer Service capacity	N/A	N/A	N/A	Discontinued	Not applicable to Town
Ice-PEA-6: Expand information available on websites	N/A	N/A	N/A	Discontinued	Not applicable to Town
Ice-PP-1: Encourage installation of backup power supply. This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town
Ice-PR-1: Implement an “Annual, Tree/Stream Maintenance Program”	N/A	N/A	N/A	Discontinued	Not applicable to Town
Ice-PR-2: Relocate vulnerable utilities. This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town
Ice-PR-2A: Fairport Electric Project. Relocate vulnerable utilities	N/A	N/A	N/A	Discontinued	Not applicable to Town
Ice-PR-2B: Fairport Electric Project. Relocate vulnerable utilities	N/A	N/A	N/A	Discontinued	Not applicable to Town





2011 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2017 HMP? or Discontinue)	Describe Next Step 1. If including action in the 2017 HMP, revise/reword to be more specific (as appropriate). 2. If Discontinue, explain why.
Ice-PR-3: Develop DPW/DOT Plans for debris clearance, removal, and disposal	N/A	N/A	N/A	Discontinued	Not applicable to Town
Ice-PR-4: Lobby state and federal officials to require permanent installation of emergency generators on-site at health care facilities and elderly housing facilities. This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town
Ice-SP-1: Install permanent backup power supply at public facilities. This may pertain to existing and/or new infrastructure.	Town	In progress	N/A	Discontinued	Integrated into normal operations
Land-PEA-1: Local Project. Promote understanding and use of (telephone number) 811, "Call Before You Dig."	County	In progress	N/A	Discontinued	Not applicable to Town
Land-PR-1: Local Project. Enact Local Laws: to restrict development on steep slopes; to require property owners and/or mine operators to rehabilitate open mines at closing. This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town
SC-PR-1: Local Project. Enact Local Laws that require property owners to demolish and remove unsafe structures from their property(ies). This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town
Terr-PP-1: Implement a strategy to "target harden" critical and public facilities. This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town
Terr-PR-1: Provide intelligence to local authorities about legal surveillance and threat assessment activities.	N/A	N/A	N/A	Discontinued	Not applicable to Town
Terr-PR-2: Review emergency plans for public facilities to ensure that appropriate measures are considered and referenced	Town	In progress	N/A	Discontinued	Integrated into normal operations



2011 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2017 HMP? or Discontinue)	Describe Next Step 1. If including action in the 2017 HMP, revise/reword to be more specific (as appropriate). 2. If Discontinue, explain why.
Terr-PR-3: Schools Project. Comply with Project Save regulations for plan review and revision cycles.	N/A	N/A	N/A	Discontinued	Not applicable to Town
Trans-ES-1: Local Project. The Town of Henrietta's Highway "Snow & Ice Control" Program is testing treated road salt for benefits associated with its application to enhance the capacity of normal road salt.	N/A	N/A	N/A	Discontinued	Not applicable to Town
Trans-PEA-1: Local Project. Provide traffic reports through the local broadcasters	N/A	N/A	N/A	Discontinued	Not applicable to Town
Trans-PEA-2: Local Project. Provide construction information and project status on sites that impact traffic	N/A	N/A	N/A	Discontinued	Not applicable to Town
Util-ES-1: Local Projects. Provide power back-up supply for municipal fueling stations. This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town
Util-PP-1: Local Utilities Project. Preserve capacity to generate local power and enhance the ability to segregate local supply from the national power grid during major failures, e.g. August 14, 2003. This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town
WSC-PR-1: Provide redundant back-up power supply for public supply treatment facilities and system pump stations. This may pertain to existing and/or new infrastructure.	N/A	N/A	N/A	Discontinued	Not applicable to Town



Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy

The Town of Sweden has identified the following mitigation projects and activities that have also been completed but were not identified in the previous mitigation strategy in the 2011 Plan:

- Identified the need for a retention pond on East Canal Road to mitigate flooding problems. Has not yet been able to implement because funding is limited.

Proposed Hazard Mitigation Initiatives for the Plan Update

FEMA Region 2 led a meeting for all Monroe County municipalities in November 2015 to discuss the purpose, goals, and long-term benefits of identifying mitigation actions to include in the updated HMP. FEMA provided handouts on creating a functionally diverse jurisdictional planning team, guidance for identifying integration actions, and guidelines for completing an action worksheet for jurisdictions to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards.

Additionally, Monroe County hosted two Annex Workshops in December 2015 to assist municipalities in completing their jurisdictional annexes, including identifying mitigation projects and developing action worksheets. All jurisdictions were provided with a set of sample mitigation actions that satisfied County goals of addressing all hazards and representing all six CRS categories, along with a refresher instruction sheet on how to complete an action worksheet and an example of a completed action worksheet.

In January 2016, Monroe County jurisdictions were provided the results of the municipal risk assessment to further assist with development of their mitigation strategies. Throughout the planning process, jurisdictions had access to mitigation planners who were available to assist with development of the jurisdictional annexes, including the mitigation strategy and action worksheets, as necessary.

Table 9.28-12 summarizes the comprehensive range of specific mitigation initiatives the Town of Sweden would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives depend on available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete prioritization of mitigation initiatives. A numeric rank is assigned for each new mitigation action (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as “High,” “Medium,” or “Low.” The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.28-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.28-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
TSW-1	Conduct education and outreach to residents and business owners to inform them if their properties are in known hazard areas, and actions they can take to protect their properties.	Existing	Earthquake, Extreme Temperatures, Flood, Infestation, Landslide, Severe Storms, Severe Winter Storms, Wildfire, HazMat, Utility Failure	1, 3, 4	Town Clerk	High	Low	Operating budget	OG	High	EAP	PI
TSW-2	Identify funding streams, acquire land on East Canal Road, and install a retention pond as a corrective action to mitigate flooding in this area.	Existing and New	Flood, Severe Storm	1, 2, 3	Town of Sweden	High	High	FEMA HMGP, FMA, and PDM; HUD CDBG; USDA Emergency Watershed Protection Program; NYDEC WQIP, Water Quality Management Planning (604(b)) projects, and others; NYSDHSES; County; Local match	Short-Term, DOF	High	SIP	PR, SP

Notes:

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

*Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure? Not applicable (N/A) is inserted if this does not apply.

Acronyms and Abbreviations:

CAV Community Assistance Visit
 CRS Community Rating System
 DPW Department of Public Works

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 PDM Pre-Disaster Mitigation Grant Program

Timeline:

Short 1 to 5 years
 Long Term 5 years or greater
 OG On-going program





Acronyms and Abbreviations:

FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
NYS DHSES	New York State Division of Homeland Security and Emergency Services
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:

RFC	Repetitive Flood Claims Grant Program (discontinued)
SRL	Severe Repetitive Loss Grant Program (discontinued)

Timeline:

DOF	Depending on funding
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Costs:

Where actual project costs have been reasonably estimated:

Low	< \$10,000
Medium	\$10,000 to \$100,000
High	> \$100,000

Where actual project costs cannot reasonably be established at this time:

Low	Possible to fund under existing budget. Project is part of, or can be part of an existing on-going program.
Medium	Could budget for under existing work plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
High	Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.

Benefits:

Where possible, an estimate of project benefits (per FEMA's benefit calculation methodology) has been evaluated against the project costs, and is presented as:

Low=	< \$10,000
Medium	\$10,000 to \$100,000
High	> \$100,000

Where numerical project benefits cannot reasonably be established at this time:

Low	Long-term benefits of the project are difficult to quantify in the short term.
Medium	Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.
High	Project will have an immediate impact on the reduction of risk exposure to life and property.

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 action 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 actions minimize damage and losses and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These actions 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 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 after a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.28-13. Summary of Prioritization of Actions

Mitigation Action / Project Number	Mitigation Action/Initiative	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
TSW-1	Conduct education and outreach to residents and business owners to inform them if their properties are in known hazard areas, and actions they can take to protect their properties.	1	1	1	1	1	1	1	0	1	-1	1	1	1	1	11	High
TSW-2	Identify funding streams, acquire land on East Canal Road, and install a retention pond as a corrective action to mitigate flooding in this area.	1	1	1	-1	1	1	-1	1	1	1	1	1	1	0	9	High

Note: Refer to Section 6, which contains the guidance on conducting the prioritization of mitigation actions.



9.28.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.28.8 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Town of Sweden that illustrate the probable areas affected within the municipality. These maps are based on the best available data when this plan was prepared and are considered adequate for planning purposes. Maps have been generated only for those hazards (wildfire, landslide, and flooding) that can be clearly identified using mapping techniques and technologies and for which the Town of Sweden has significant exposure. These maps are illustrated in the hazard profiles within Section 5.4, Volume I, of this plan.

9.28.9 Additional Comments

None at this time.



Figure 9.28-1. Town of Sweden Wildfire and Landslide Hazard Area Extent and Location Map

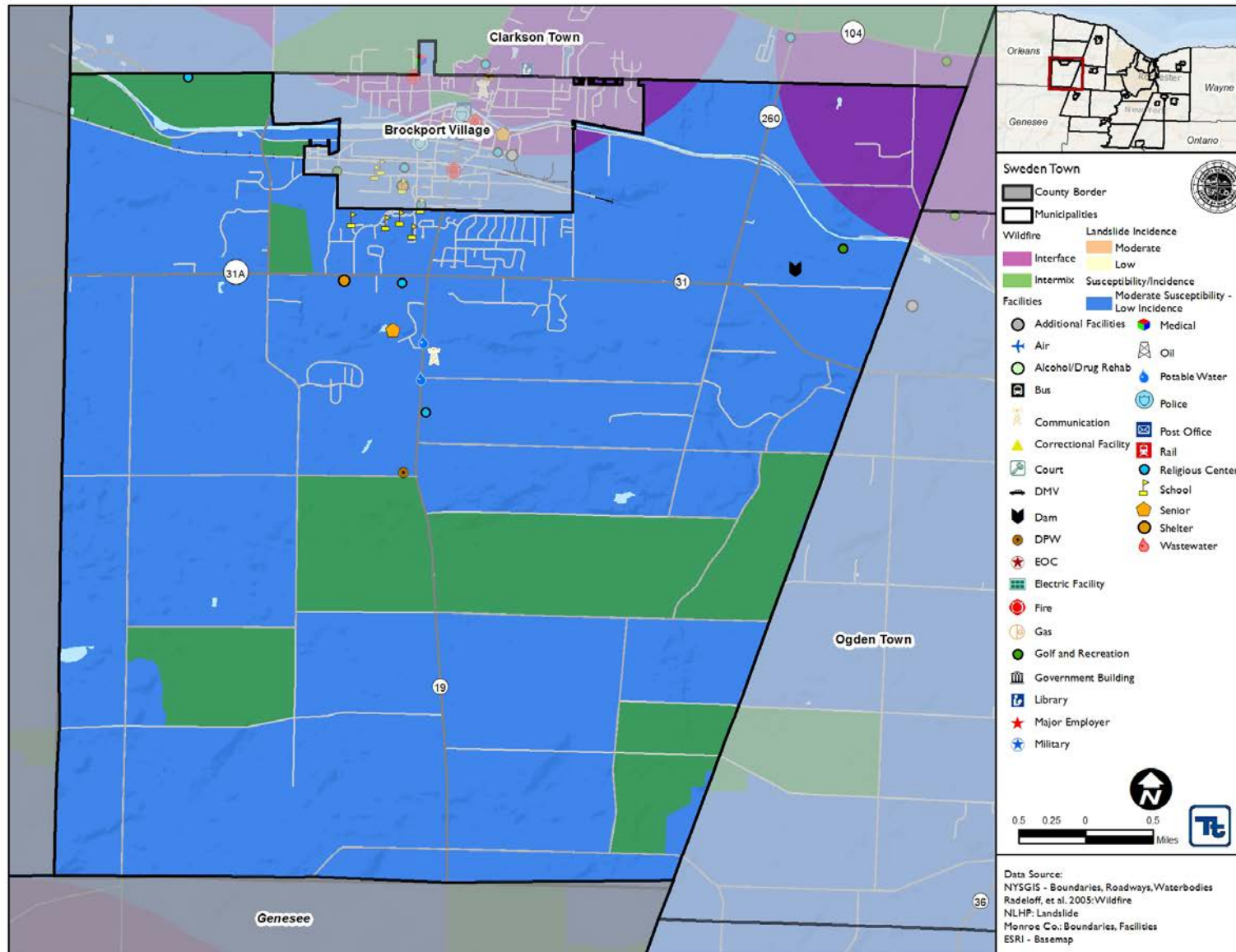
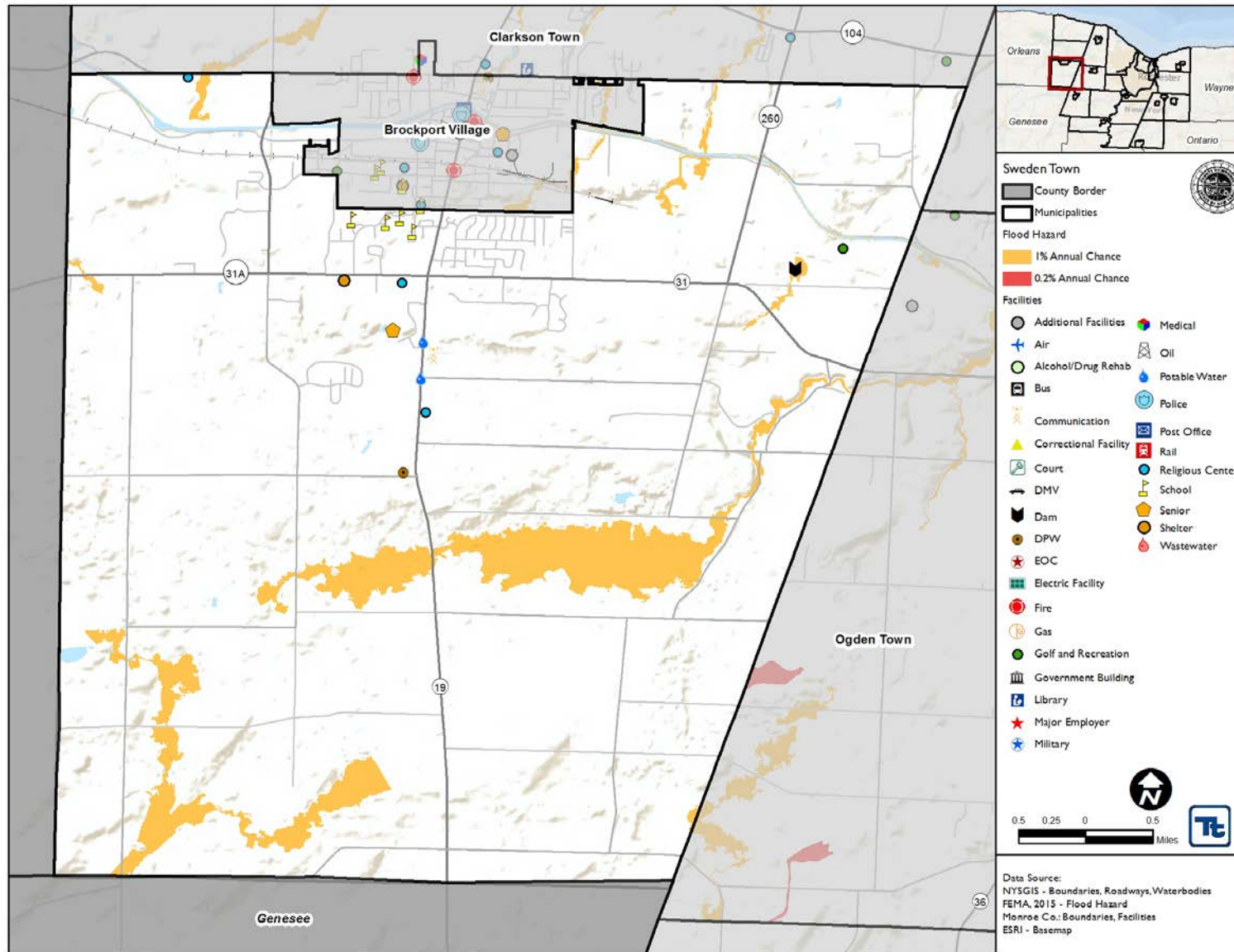




Figure 9.28-2. Town of Sweden Hazard Area 1% and 0.2% Floodplain Map





Name of Jurisdiction: Town of Sweden
 Name and Title Completing Worksheet: _____
 Action Number: TSW-2
 Mitigation Action Name: Retention Pond on East Canal Road

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm
Specific problem being mitigated:	East Canal Road floods during extended periods of rain or after receiving large volumes of water.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	<ol style="list-style-type: none"> 1. Do nothing – vulnerability continues and possibly worsens. 2. Buy out all properties on road – not financially feasible or cost-effective. 3. Acquire land to install a retention pond – selected action.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Identify funding streams, acquire land on East Canal Road, and install a retention pond as a corrective action to mitigate flooding in this area.
Mitigation Action Type	SIP
Goals Met	1, 2, 3
Applies to existing and or new development, or not applicable	Existing and New
Benefits (losses avoided)	High (Reduce loss of life/injury and property damage)
Estimated Cost	High
Priority*	High
Plan for Implementation	
Responsible Organization	Town of Sweden
Local Planning Mechanism	--
Potential Funding Sources	FEMA Hazard Mitigation Grant Program (HMGP), Flood Mitigation Assistance (FMA), and Pre-Disaster Mitigation (PDM); HUD Community Development Block Grant (CDBG) Program; USDA Emergency Watershed Protection Program; NYDEC Water Quality Improvement Project (WQIP), Water Quality Management Planning (604(b)) projects, and others; NYSDHSES; County; Local match
Timeline for Completion	Short, Dependent on Funding (DOF)
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:



Action Number: TSW-2

Mitigation Action Name: Retention Pond on East Canal Road

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Reduce risk of accidents and injury from flooded roadway
Property Protection	1	Protect East Canal Road and nearby properties from stormwater and flood damage
Cost-Effectiveness	1	Most cost-efficient option
Technical	-1	Requires some technical study to determine capacity and location for retention pond
Political	1	Supported by Town of Sweden
Legal	1	
Fiscal	-1	Requires outside funding
Environmental	1	Reduce stormwater flooding and possible degradation of water quality from stormwater
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	1	Short, DOF
Agency Champion	1	Town of Sweden
Other Community Objectives	0	
Total	9	
Priority (High, Med, or Low)	High	