



9.6 TOWN OF CLARKSON

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

9.6.1 Hazard Mitigation Plan Point of Contact

The following individuals have been identified as the hazard mitigation plan’s (HMP) primary and alternate points of contact.

Primary Point of Contact	Alternate Point of Contact
Paul Kimball, Supervisor P.O. Box 858 Clarkson, NY 14430 585-637-1131 paul.kimball@clarksonny.org	Chad Fabry, Code Enforcement Office/Building Inspector 3710 Lake Road P.O. Box 858 Clarkson, NY 14430 585-465-8591 chad.fabry@clarksonny.org

9.6.2 Municipal Profile

The Town of Clarkson is in the northwestern quadrant of Monroe County, bordered north by the Town of Hamlin, east by the Town of Parma, south by the Town of Sweden, and west by New York State Route 272 with Orleans County beyond. New York State Route 104, or Ridge Road, is an east-west highway cutting through the Town.

The Town of Clarkson was established in 1819 from the Town of Murray, and was reduced in 1852 when it split to form the Town of Union/Hamlin. Clarkson encompasses 33.2 square miles of land and 0.1 square mile of water. Waterways in the Town include Moorman Creek and Otis Creek, which flows northeast through the Town.

The incorporated Village of Brockport falls partially within the Town, and the hamlets of Clarkson Corners, Garland, Morton, and Redman Corners are all within the Town boundaries. Population of the Town is 6,736, according to the 2010 U.S. Census.

Growth/Development Trends

Table 9.6-1 below summarizes recent residential/commercial development in the Town of Clarkson since 2010, and lists any known or anticipated major residential/commercial development and major infrastructure development slated within the next 5 years within the municipality. Refer to the maps following Section 9.6-8 of this annex: Figure 9-6-1 illustrates landslide and wildfire hazard areas, and Figure 9-6-2 is a floodplain map.



Table 9.6-1. 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					
Autumn Woods	Multi-family	300	West Ave	Not applicable (N/A)	Pending completion
Known or Anticipated Development in the Next 5 Years					
Brookfield-Clarkson	Res / Comm	300	Ridge Rd/Sweden Walker Rd	N/A	Recent approval-not yet developed
ExpressMart	Comm	1	Ridge Rd/Sweden Walker Rd	N/A	Recent approval-not yet developed

Note: Only location-specific hazard zones or vulnerabilities are identified.

9.6.3 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 appears in each hazard profile and includes a chronology of events that have affected the County and its municipalities. For the purpose of this Plan update, to the extent possible, all events that have occurred in the County were summarized 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 Table 9.6-2 below. For details of these and additional events, refer to Volume I, Section 5.0 of this Plan.

Table 9.6-2. Hazard Event History

Dates of Event	Event Type	Federal Emergency Management Agency (FEMA) Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
May 8, 2010	High wind	N/A	N/A	None
April 26 - May 8, 2011	Severe storms, flooding, tornadoes, and straight-line winds	DR-1993	No	None
January 17, 2012	High wind	N/A	N/A	None
February 24, 2012	High winds	N/A	N/A	None
October 27 - November 8, 2012	Hurricane Sandy	EM-3351	Yes	None
June 26 - July 11, 2013	Severe storms and flooding	DR-4129	No	None
December 21, 2013	Ice storm	N/A	N/A	None
March 12, 2014	Blizzard	N/A	N/A	None
May 13-22, 2014	Severe storms and flooding	DR-4180	No	None
July 28, 2014	Flash flood	N/A	N/A	None
November 17-26, 2014	Severe winter storm, snowstorm, and flooding	DR-4204	No	None



Hazard Vulnerabilities and Ranking

The hazard profiles in Section 5.0 of this Plan convey detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the hazard vulnerabilities and their ranking in the Town of Clarkson. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

Hazard Risk/Vulnerability Risk Ranking

Table 9.6-3 below summarizes the hazard risk/vulnerability rankings of potential hazards for the Town of Clarkson. The hazards of concern for the Town are those with a High hazard ranking.

Table 9.6-3. Hazard Risk/Vulnerability Risk Ranking

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{1,3}	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking ²
Landslide	Exposed: \$1,812,049,577	Frequent	48	High
Severe storm	Expected Losses from Wind Alone: \$0	Frequent	48	High
Wildfire	Exposed Value in the WUI: \$1,599,964,603	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: \$11,093,390 5% Damage Loss Estimate: \$55,466,949 10% Damage Loss Estimate: \$110,933,899	Frequent	36	High
Earthquake ^{4,5}	100-year MRP GBS: \$0 500-year MRP GBS: \$2,750,487 2,500-year MRP GBS: \$34,032,850 Annualized: \$41,094	Frequent	30	Medium
Flood ⁴	1% annual chance: \$4,785,937	Frequent	18	Medium
Terrorism	Damage Estimate Not Available	Frequent	18	Medium
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:

- 1 Building damage ratio estimates were based on Federal Emergency Management Agency (FEMA) 386-2 (August 2001).
- 2 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
- 3 Loss estimates for the severe storm and severe winter storm hazards are structural values only, and do not include the value of contents.
- 4 Loss estimates for the flood and earthquake hazards represent both structure and contents.
- 5 The Hazards United States – Multi-Hazards (HAZUS-MH) earthquake model results are reported by Census Tract.

MRP Mean return period
GBS General building stock
WUI Wildland-urban interface

National Flood Insurance Program (NFIP) Summary

Table 9.6-4 below summarizes NFIP statistics for the Town of Clarkson.





Table 9.6-4. NFIP Summary

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 1% Flood Boundary (3)
Clarkson (T)	6	6	\$9,711	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 includes 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.

Numbers of policies and claims, and claims total, exclude properties outside Monroe County boundary, based on provided latitude and longitude coordinates.

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Critical Facilities

Table 9.6-5 below presents Hazards United States (HAZUS)-Multi-Hazards (MH) estimates of damage to and loss of use of critical facilities in the community resulting from 1- and 0.2-percent annual chance flood events.

Table 9.6-5. 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

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).

Some facilities may be within the Digital Flood Insurance Rate Map (DFIRM) flood hazard boundary; however, HAZUS did not calculate potential loss, perhaps because depth of flooding would not cause any damages to these structures according to the depth damage function used in HAZUS for that facility type. Further, HAZUS-MH may estimate potential damage to a facility outside the DFIRM if the model generates a depth grid beyond DFIRM boundaries.

Other Vulnerabilities Identified

The municipality did not identify any specific vulnerabilities within the community.

9.6.4 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification
- NFIP





- Integration of Mitigation Planning into Existing and Future Planning Mechanisms.

Planning and Regulatory Capability

Table 9.6-6 below summarizes regulatory tools available to the Town of Clarkson.

Table 9.6-6. 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/2008	Local	Code Enforcement Officer	Town of Clarkson Comprehensive Plan, 2005
Capital Improvements Plan	No	-	-	-
Floodplain Management / Basin Plan	No	Fed/state	-	-
Stormwater Management Plan	Yes	County	Monroe County Stormwater Coalition, Code Enforcement Officer and/or Highway Superintendent	Annual Stormwater Joint Annual Report
Open Space Plan	Yes	Local	Conservation Board	Urban Forestry Plan, 2010
Stream Corridor Management Plan	No	Fed/state	-	-
Watershed Management or Protection Plan	No	County	-	-
Economic Development Plan	No	-	-	-
Comprehensive Emergency Management Plan	No	-	-	-
Emergency Response Plan	Yes, in progress	Local	All Town departments	
Post-Disaster Recovery Plan	No	-	-	-
Transportation Plan	No	-	-	-
Strategic Recovery Planning Report	No	We have no strategy	-	-
Other Plans				
Regulatory Capability				
Building Code	Yes, 2010	State, Local	Building Inspector / Code Enforcement	Construction Codes, Uniform Chapter 52
Zoning Ordinance	Yes, 1973	Local	Planning Board, Zoning Board of Appeals	Zoning Chapter 500
Subdivision Ordinance	Yes	Local/county	Planning Board	Subdivision of Land Chapter 439
NFIP Flood Damage Prevention Ordinance	Yes	Local/Federal	2008, Highway Department, Building Inspector	Flood Damage Prevention Chapter 76



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.)
NFIP: Cumulative Substantial Damages	No	-	-	-
NFIP: Freeboard	Yes	State, Local	-	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	Planning Board	Design Criteria and Construction Specifications for Land Development, 2003
Stormwater Management Ordinance	Yes, 2007	County, Local	Monroe County Stormwater Coalition, Code Enforcement Officer and/or Highway Superintendent	Stormwater Management Chapter 110
Municipal Separate Storm Sewer System (MS4)	Yes, 2007	County, Local	Building Inspector, Code Enforcement Officer, Highway Superintendent	Storm Sewers Chapter 109
Natural Hazard Ordinance	No	-	-	-
Post-Disaster Recovery Ordinance	No	-	-	-
Real Estate Disclosure Requirement	No	-	-	New York State (NYS) mandate, Property Condition Disclosure Act, <i>NY Code</i> - Article 14 §460-467
Other (Special Purpose Ordinances [i.e., sensitive areas, steep slope])	No	-	-	-

Administrative and Technical Capability

Table 9.6-7 below summarizes potential staff and personnel resources available to the Town of Clarkson.

Table 9.6-7. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Planning Board
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Conservation Board
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Maintenance programs to reduce risk	Yes	All departments
Mutual aid agreements	Yes	Local
Technical/Staffing Capability		
Planner(s) or engineer(s) with knowledge of land	Yes	Building Department Coordinator; Chatfield Engineers





Resources	Is this in place? (Yes or No)	Department/ Agency/Position
development and land management practices		
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Town Code Enforcement Officer/Building Inspector
Planners or engineers with an understanding of natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Building Inspector / Code Enforcement Officer
Surveyor(s)	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	No	-
Scientist familiar with natural hazards	No	-
Emergency Manager	No	-
Grant writer(s)	Yes	Assistant to the Supervisor
Staff with expertise or training in benefit/cost analysis	Yes	Chatfield Engineers and/or Supervisor's Office
Professionals trained in conducting damage assessments	No	-

Fiscal Capability

Table 9.6-8 below summarizes financial resources available to the Town of Clarkson.

Table 9.6-8. 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	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Unknown
Withhold public expenditures in hazard-prone areas	No
Other federal or state funding programs	Unknown
Open space acquisition funding programs	Unknown
Other	N/A



Community Classifications

Table 9.6-9 below summarizes classifications of community programs available to the Town of Clarkson.

Table 9.6-9. 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 (Insurance Services Office [ISO] Fire Protection Classes 1 to 10)	No	-	-
Storm Ready	Yes	StormReady County	-
Firewise	No	-	-
Disaster/safety programs in/for schools	No	No schools in town	-
Organizations with mitigation focus (advocacy group, non-government)	No	-	-
Public education program/outreach (through website, social media)	No	-	-
Public-Private Partnerships	No	-	-

The classifications listed above relate to the community’s ability to provide effective services to lessen 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 costs of various forms of insurance. The Community Rating System (CRS) class applies to flood insurance, while the Building Code Effectiveness Grading Schedule (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 classification is higher if the subject property is more than 1000 feet from 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 <https://www.isomitigation.com/ppc/>
- The National Weather Service Storm Ready website at <http://www.stormready.noaa.gov/index.html>
- The National Firewise Communities website at <http://firewise.org/>

Self-Assessment of Capability

Table 9.6-10 below provides an approximate measure of the Town of Clarkson’s capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.





Table 9.6-10. 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 - tax cap		
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 municipality does not make substantial damage estimates, and has no record of properties that have undergone flood damage from past events, including Hurricanes Floyd, Irene, Sandy, or other events. The Town has no knowledge of any property owners interested in mitigation (elevation or acquisition), or currently undertaking mitigation projects.

Resources

While the Town’s Flood Damage Prevention Ordinance appoints the Building Inspector to administer and implement the ordinance, no single operational staff is assigned to functions of the NFIP FPA. As a result, NFIP administration services and functions are not provided regularly on a department level, and no targeted community education or outreach is conducted regarding flood hazards/risk and flood risk reduction through NFIP insurance, mitigation, etc. Even so, Town officials do not report any barriers to running an effective floodplain management program in the community, and would consider attending continuing education and/or certification training on floodplain management if offered in the County for all local FPAs.

Compliance History

As of June 30, 2015, six policies were force in the Town of Clarkson, three of which were within the 1% flood boundary. No repetitive loss or severe repetitive loss properties are in the Town. Between 1978 and June 30, 2015, six claims have been paid within the Town totaling \$9,711. According to the NFIP Policy Statistics report available at the time of this Plan, policies in the Town of Clarkson insure over \$1.25 million of property with total annual insurance premiums of \$3,231.

The Town is in good standing in the NFIP, and is unaware of when the most recent Community Assistance Visit (CAV) occurred.

Regulatory

The Town’s Flood Damage Prevention Ordinance (FDPO) was last reviewed and adopted in 2008, and appears in Chapter 76 of the local code. Floodplain management regulations and ordinances meet and do not exceed





FEMA and New York State (NYS) minimum requirements. In addition, local planning and other support boards are actively involved with flood mitigation and enforcement of the flood damage prevention ordinance.

Community Rating System

The Town of Clarkson does not participate in the CRS program at this time, and would decline to attend a CRS seminar if offered locally.

Other Capabilities Identified

Previous actions that are now ongoing programs and capabilities are described below. Refer to Table 9.6-11 later in this annex.

- The Town Highway Department maintains public infrastructure and provides construction information and project status on sites that impact traffic as part of its normal operations.
- The Code Enforcement Officer enforces the building code and government permit processes, and provides comprehensive inspection services as part of his/her normal operations.
- The Town Board conducts regular reviews of local laws and complies with all applicable federal and state regulations.

Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

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

Planning

Land Use Planning: The Town of Clarkson 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 NYS State Environment Quality Review (SEQR) and Federal National Environmental Protection Act (NEPA) requirements.

Design Criteria and Construction Specifications for Land Development, 2003: The Town developed this instructional guide to help control development of property within the Town of Clarkson, and to ensure proper design and construction of facilities. The Town considers the importance of hazard risks in its design criteria, with focuses on stormwater management, sediment and erosion control, and flood hazard prevention.

Town of Clarkson Comprehensive Plan, 2005: The Town most recently adopted its Comprehensive Plan in May 2005. It includes some hazard and mitigation-related goals, such as "Preserve Natural Features."

Urban Forestry Plan, 2010: The Town of Clarkson received a grant from the NYS Department of Environmental Control (DEC) Urban and Community Forestry Program in 2009 to develop an urban forestry program for the Town. While most of the plan does not consider hazard impact, the Town does note the importance of selecting and maintaining non-exotic trees to prevent infestation from non-native species, as well as potential for pest problems if tree care is not adequately conducted.



Regulatory and Enforcement

Construction Codes, Uniform Chapter 52: The building codes are strictly enforced to prepare new and renovated buildings as well as possible for hazard-related incidents. The Town complies with New York State Uniform Fire Prevention and Building Code (the Uniform Code).

Flood Damage Prevention Chapter 76: This chapter promotes public health, safety, and general welfare of residents, and seeks to minimize public and private losses due to flood conditions. The chapter regulates development to promote flood resistant structures and controls alteration of floodplains to prevent increased vulnerability.

Freshwater Wetlands Chapter 79: 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.

Stormwater Management Chapter 110: The Town’s stormwater management chapter seeks to mediate adverse impacts of stormwater runoff caused by existing drainage systems. It also serves to minimize/control degradation of water quality in the Town.

Subdivision of Land Chapter 439: The Town’s Planning Board is tasked with site plan/subdivision review.

Zoning Chapter 500: The Town of Clarkson’s zoning code includes districts and standards pertaining to the district overlay and safety requirements. Due to the low percentage of undeveloped land in the Town, the chapter does not include specific reference hazards; however, it does include a general reference to the flood damage prevention ordinance in the Town.

Fiscal

Operating Budget: The Town’s operating budget includes minimal provisions for expected repairs like snow removal and infrastructure repair after a storm or natural disaster.

Education and Outreach

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

Clarkson residents can sign up for reverse 911 cell phone notifications of emergency situations through the Monroe County Emergency Communications Department.

9.6.5 Mitigation Strategy and Prioritization

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

Past Mitigation Initiative Status

Table 9.6-11 below indicates progress on the community’s mitigation strategy identified in the 2011 Plan. Previous actions that are now ongoing programs and capabilities are indicated as such in Table 9.6-11, and may also appear under “Capability Assessment” presented previously in this annex. Actions carried forward as part of this Plan update are included and prioritized in the following subsection (in Table 9-6-12).



Table 9.6-11. 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	Discontinue	Not applicable to Town.
ES-4: Stockpile emergency supplies.	Highway Department	No Progress	0% Complete. No Funding	Include in 2017 HMP	Stockpile emergency supplies
ES-5: Solicit “Mutual Aid” agreements.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
ES-6: Engage emergency service jurisdictions in local municipal government processes.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
NRP-1: Ensure proper disposal of Hazardous Waste.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
NRP-2: Enforce government permit processes. This may pertain to existing and/or new infrastructure.	Code Enforcement Officer	In Progress	As Required	Discontinue	Ongoing operational capability.
NRP-3: Provide comprehensive inspection services. This may pertain to existing and/or new infrastructure.	Code Enforcement Officer	In Progress	As Required	Discontinue	Ongoing operational capability.
NRP-4: Administer a Floodplain Management Program. This may pertain to existing and/or new infrastructure.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
NRP-5: Maintain “Urban Forests.”	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
PEA-3: Review Utility Service & restoration plans.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
PEA-4: Identify and utilize a “Speakers Bureau.”	N/A	No Progress	N/A	Discontinue	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.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
PP-2: Maintain public infrastructure. This may pertain to existing and/or new infrastructure.	Highway Department	In progress	Ongoing re: town owned infrastructure	Discontinue	Ongoing operational capability.
PP-3: Solicit inter-municipal and interagency cooperation.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
PP-4: Promote purchase of appropriate hazard insurance policies. This may pertain to existing and/or new infrastructure.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
PP-5: Property acquisition	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
PR-1: Enforce Building Code as required for existing and new infrastructure.	Code enforcement officer	In progress	As required	Discontinue	Ongoing operational capability.
PR-2: Comply with applicable federal and state regulations.	Town board	In progress	As required	Discontinue	Ongoing operational capability.
PR-5: Regular review of Local Laws	Town board	In progress	As required	Discontinue	Ongoing operational capability.
SP-1: Disaster “proof” public facilities. This may pertain to existing and/or new infrastructure.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
SP-2: Secure and provide redundant critical systems and facilities. This may pertain to existing and/or new infrastructure.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
SP-3: “Target Harden” facilities. This may pertain to existing and/or new infrastructure.	N/A	No Progress	N/A	Discontinue	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.	N/A	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	Not applicable to Town.
EPI-PR-2: Local Project. Provide HIV screening and public education (Democrat & Chronicle, 7-21-03).	N/A	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	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.
Fire-PEA-2: Local Project. Churchville Volunteer Fire Department develops and schedules an annual campaign for Fire Prevention at schools, community functions, and public facilities using its interactive displays.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
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.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
Fire-SP-1: Local Project. Plan, design and develop enhanced, local facilities for on-site specialized emergency training.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
FI-ES-1: Provide Special Operations and Tactical Rescue training including water rescue training	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
FI-ES-4: Churchville Project. Enhance Fire Department Personnel Emergency Notification	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
FI-ES-5: Churchville Project. Provide water rescue training and equipment e.g. Wet Suits and associated equipment.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
FI-PEA-1: Provide information about the Erie Canal and its spillway locations	N/A	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	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-2: Participate in the federal Community Rating System. This may pertain to existing and/or new infrastructure.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
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	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	Not applicable to Town.
FI-PR-1: Implement an annual, “Waterway/Drainage Maintenance” Program	N/A	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	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).	N/A	No Progress	N/A	Discontinue	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.
This may pertain to existing and/or new infrastructure.					
Fl-SP-2: Local Project. Implement municipal mitigation measures identified by USGS modeling, proposed by the Storm Water Coalition and agreed by local parties. This may pertain to existing and/or new infrastructure.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
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	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	Not applicable to Town.
Ice-ES-2: Regularly review restoration priorities	N/A	No Progress	N/A	Discontinue	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-ES-3: Enhance utility “Town Liaison” Program	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
Ice-NRP-1: Churchville Project. Replace trees (forestation) in Village of Churchville that were destroyed by various storm events.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
Ice-PEA-2: Develop alternate communications plan	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
Ice-PEA-3: Provide automated utility restoration schedule to the public	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
Ice-PEA-4: Provide more public outreach during an emergency	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
Ice-PEA-5: Expand utility Customer Service capacity	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
Ice-PEA-6: Expand information available on websites	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
Ice-PP-1: Encourage installation of backup power supply. This may pertain to existing and/or new infrastructure.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
Ice-PR-1: Implement an “Annual, Tree/Stream Maintenance Program”	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
Ice-PR-2: Relocate vulnerable utilities. This may pertain to existing and/or new infrastructure.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
Ice-PR-2A: Fairport Electric Project. Relocate vulnerable utilities	N/A	No Progress	N/A	Discontinue	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-2B: Fairport Electric Project. Relocate vulnerable utilities	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
Ice-PR-3: Develop DPW/DOT Plans for debris clearance, removal, and disposal	N/A	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	Not applicable to Town.
Ice-SP-1: Install permanent backup power supply at public facilities. This may pertain to existing and/or new infrastructure.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
Land-PEA-1: Local Project. Promote understanding and use of (telephone number) 811, "Call Before You Dig."	N/A	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	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.
Terr-PR-1: Provide intelligence to local authorities about legal surveillance and threat assessment activities.	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
Terr-PR-2: Review emergency plans for public facilities to ensure that appropriate measures are considered and referenced	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
Terr-PR-3: Schools Project. Comply with Project Save regulations for plan review and revision cycles.	N/A	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	Not applicable to Town.
Trans-PEA-1: Local Project. Provide traffic reports through the local broadcasters	N/A	No Progress	N/A	Discontinue	Not applicable to Town.
Trans-PEA-2: Local Project. Provide construction information and project status on sites that impact traffic	Highway Department	In progress	As required	Discontinue	Ongoing operational capability.
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	No Progress	N/A	Discontinue	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	No Progress	N/A	Discontinue	Not applicable to Town.





<u>2011 Mitigation Action</u>	<u>Responsible Party</u>	<u>Status</u> (In progress, No progress, Complete)	<u>Describe Status</u> 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)?	<u>Next Step</u> (Include in 2017 HMP or Discontinue)	<u>Describe Next Step</u> 1. If including action in the 2017 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
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	No Progress	N/A	Discontinue	Not applicable to Town.



Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy

The Town of Clarkson did not identify any completed mitigation projects/activities not identified in the previous mitigation strategy in the 2011 Plan.

Proposed Hazard Mitigation Initiatives for the Plan Update

FEMA Region II led a meeting of 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 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 9.6-12 below summarizes the comprehensive range of specific mitigation initiatives the Town of Clarkson would like to pursue in the future to reduce effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. Implementation of these initiatives will depend on available funding (grants and local match availability), and some initiatives may be modified or omitted at any time based on 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 Table 9.6-12 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. 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. Table 9.6-12 below summarizes evaluation of each mitigation initiative, listed by Action Number.

Table 9.6-13 summarizes prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.6-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
TCL-1	Stockpile emergency supplies	N/A	All hazards	1, 2	Highway Department	High	Medium	Local operating budgets, private-sector funds, mitigation grants	Short-Term, OG	High	LPR	ES
TCL-2	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, and 4	Town Clerk	High	Low	Operating budget	OG	High	EAP	PI

Notes:

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

*Does this mitigation initiative reduce 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
 CDBG Community Development Block Grant
 GCRS Community Rating System
 DPW Department of Public Works
 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:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 PDM Pre-Disaster Mitigation Grant Program
 RFC Repetitive Flood Claims Grant Program (discontinued)
 SRL Severe Repetitive Loss Grant Program (discontinued)

Timeline:

Short 1 to 5 years
 Long Term 5 years or greater
 OG On-going program
 DOF Depending on funding





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 ongoing program.
- Medium Could budget for under existing work plan, but would require a reapportionment of the budget or a budget amendment, or 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 costs of the proposed project.

Mitigation Category:

- Local Plans and Regulations (LPR) – Actions that include government authorities, policies, or codes that influence the way land and buildings are developed and built.
- Structure and Infrastructure Project (SIP) – Actions that 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 impacts of hazards.
- Natural Systems Protection (NSP) – Actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – 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 stormwater management regulations.
- Property Protection (PP) – 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 impacts 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 protection of essential facilities

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 reduction of risk exposure to life and property, or project will provide an immediate reduction in risk exposure to property.
- High Project will have an immediate impact on reduction of risk exposure to life and property.



Table 9.6-13. 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
TCL-1	Stockpile emergency supplies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High
TCL-2	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

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Mitigation actions carried forward from prior strategies have either retained their prioritization (shown by “-“ within updated prioritization criteria), or have been re-prioritized at the discretion of the jurisdiction if the jurisdiction believes re-evaluation is appropriate due to changed conditions since the original prioritization.



9.6.6 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.6.7 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Town of Clarkson that illustrate areas probably to be impacted within the municipality (see Figures 9.6-1 and 9.6-2 below). These maps are based on the best available data at the time of preparation of this Plan, and are considered adequate for planning purposes. Maps have been generated only for those hazards (i.e., wildfire and flooding) that can be clearly identified via application of mapping techniques and technologies, and to which the Town of Clarkson has significant exposure. These maps also appear in the hazard profiles within Section 5.4, Volume I of this Plan.

9.6.8 Additional Comments

None at this time.



Figure 9.6-1. Town of Clarkson Landslide and Wildfire Hazard Area Extent and Location Map

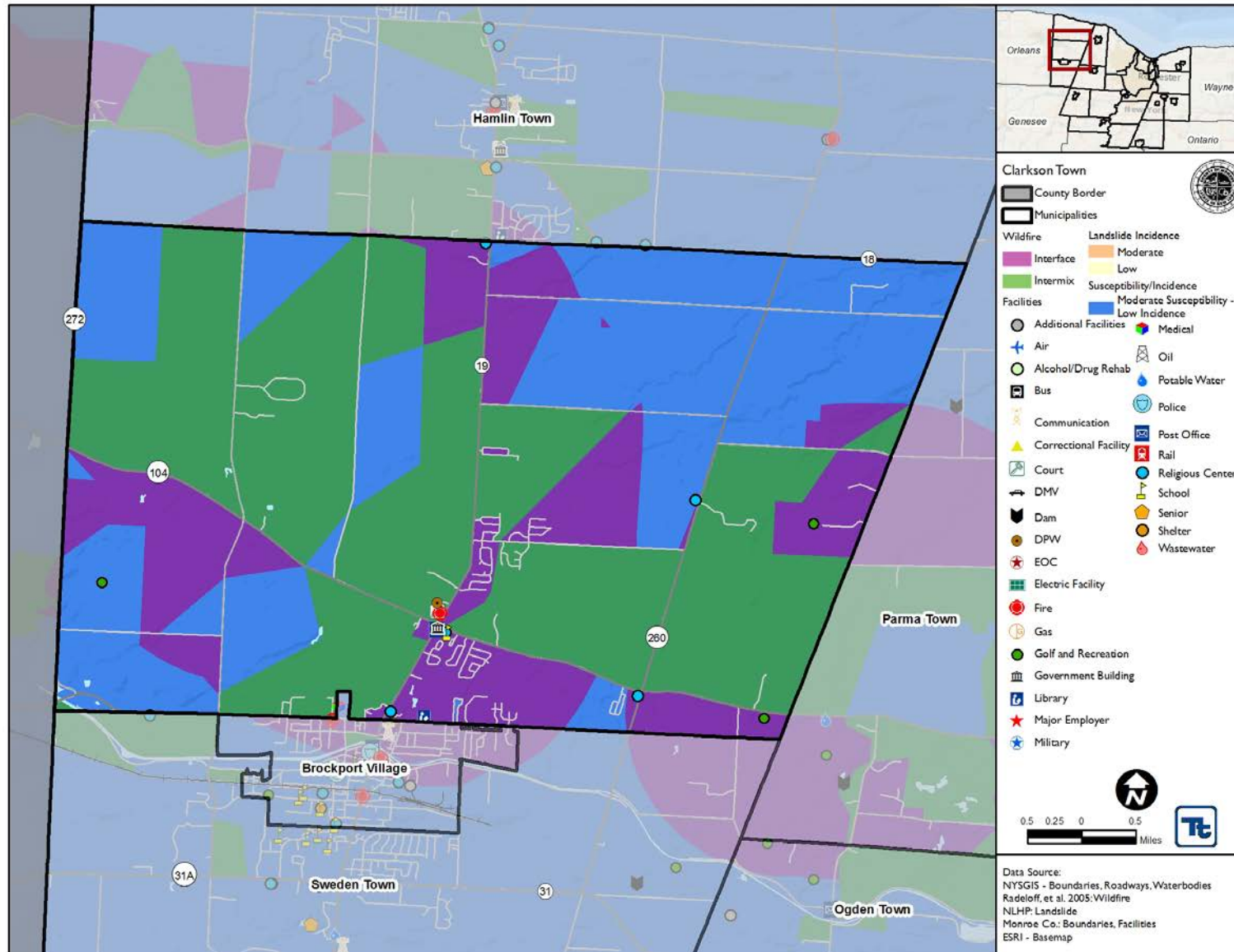
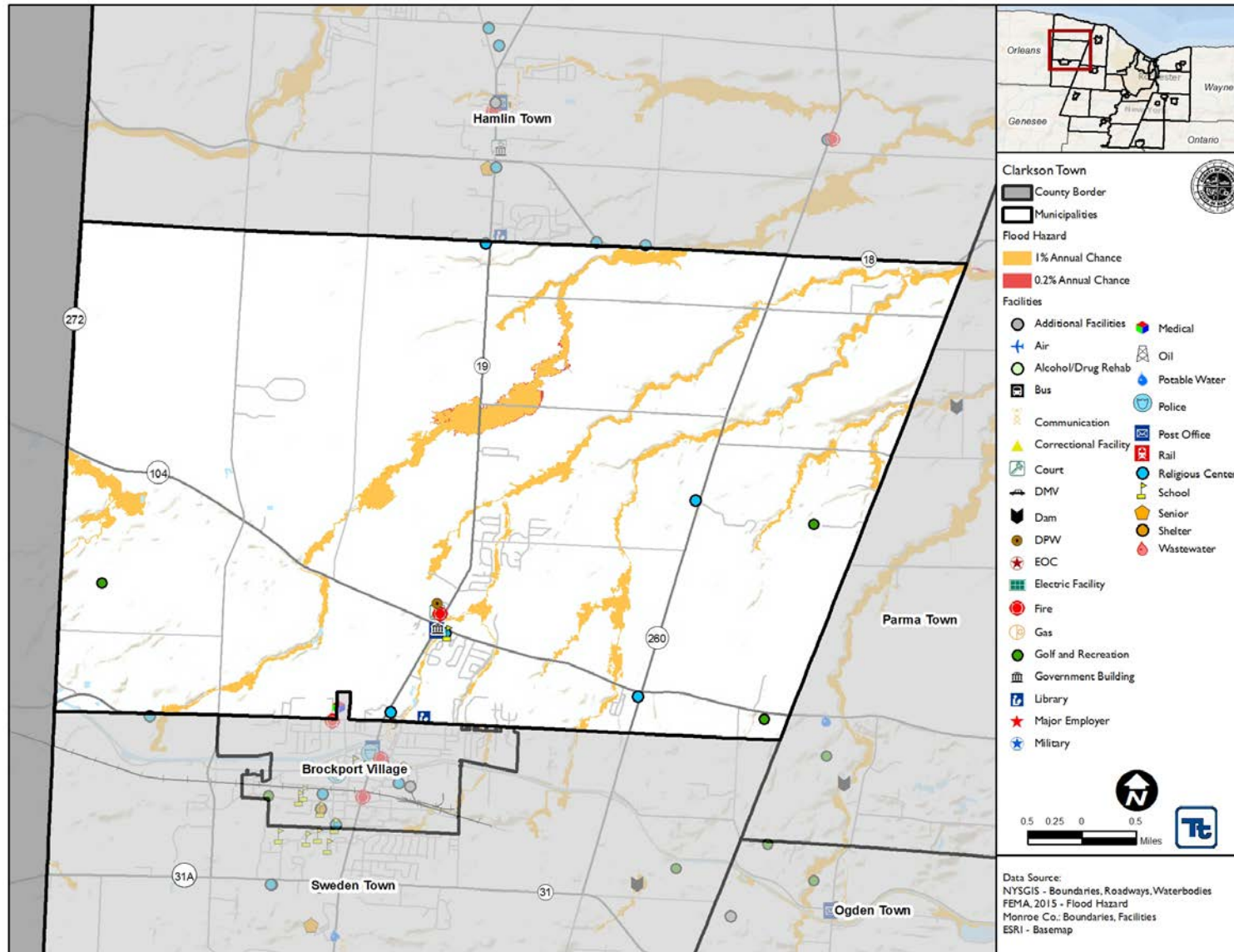




Figure 9.6-2. Town of Clarkson Hazard Area 1% and 0.2% Floodplain Map





Action Number:

TCL-2

Mitigation Action Name:

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.

Assessing the Risk	
Hazard(s) addressed:	Earthquake, Extreme Temperatures, Flood, Infestation, Landslide, Severe Storms, Severe Winter Storms, Wildfire, HazMat, Utility Failure
Specific problem being mitigated:	Enhancing local public information dissemination to increase preparedness and mitigation at an individual level.
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 or worsens 2. Conduct education and outreach – selected action
Action/Project Intended for Implementation	
Description of Selected Action/Project	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.
Mitigation Action Type	EAP
Goals Met	1, 3, 4
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	Low
Priority*	High
Plan for Implementation	
Responsible Organization	Town Clerk
Local Planning Mechanism	--
Potential Funding Sources	Operating budget
Timeline for Completion	Ongoing
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:



Action Number:

TCL-2

Mitigation Action Name:

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.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Enhance awareness and preparedness among residents, increasing safety.
Property Protection	1	Encourage greater property protection and mitigation at individual level.
Cost-Effectiveness	1	Most cost-effective project option.
Technical	1	
Political	1	
Legal	1	
Fiscal	1	Does not require external funding.
Environmental	0	
Social	1	Will benefit large number of residents.
Administrative	-1	Requires increased administration and time for implementation.
Multi-Hazard	1	Earthquake, flood, infestation, landslide, wildfire, hazardous materials
Timeline	1	Ongoing
Agency Champion	0	
Other Community Objectives	1	
Total	10	
Priority (High, Med, or Low)	High	