



9.10 TOWN OF FORT EDWARD

This section presents the jurisdictional annex for the Town of Fort Edward.

9.10.1 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
Mitchell Suprenant, Town Supervisor 118 Broadway, Fort Edward, NY 518-744-7595 supervisor@fortedward.net	Brian Brockway, Highway Superintendent 118 Broadway, Fort Edward, NY 518-747-5561 FEFD2701@yahoo.com

9.10.2 Municipal Profile

The Town of Fort Edward is in western Washington County, with its west town line defined by the Hudson River and the border of Saratoga County, New York. The Town contains the Village of Fort Edward and is home to the Washington County seat. The Village of Hudson Falls and Town of Kingsbury lie to the north, the Town of Argyle is to the east, and the Town of Greenwich lies to the south.

The Town has a total area of 27.4 square miles. Significant waterways in the town include Old Champlain Creek, Dead Creek, Black House Creek, Slocum Creek, Moses Kill River, Frog Pond and the Hudson River, which is 13 miles long within the Town. There is also a pond along Route 4 in the Town. The Champlain Canal runs through the Town for approximately six miles. According to the 2010 Census, the community's population was 6,371.

Growth/Development Trends

The following table summarizes recent residential/commercial development since 2010 to present and any known or anticipated major residential/commercial development and major infrastructure development that has been identified in the next five years within the municipality.

Table 9.10-1. 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					
18 residential homes	Res	18	Killian Lane (163.13-.1-1.1)	None	In Progress
Market 32	Comm	1	Upper Broadway	None	Completed
McDonalds	Comm	1	Upper Broadway	None	Completed
Expansion of several companies	Comm/Industrial	Unknown	Sullivan Parkway industrial park	None	In Progress
Known or Anticipated Development in the Next Five (5) Years					
14 lot subdivision	Res	14	SR 197	None	Possibly several more behind this subdivision
Preliminary plans for a senior housing complex	Res	70	Behind the Fort Hudson Health Center	None	-
Company expansion	Comm/Industrial	Unknown	Sullivan Parkway	None	Under consideration





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
			industrial park		for spring 2017
Water District 3	Comm/Res	Unknown	Black House Road, Lamos Lane, Fitzpatrick Lane and part of County Route 46	None	Under consideration

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

In addition to the development mentioned above, the Town is seeking to turn the GE dewatering facility into a thriving industrial park. It is on the banks of the Champlain canal with a 1500-foot wharf. This site also includes almost 6 miles of rail line on the Montreal to New York City corridor.

The Town is also in the process (2016) of forming another water district, Water District # 3, to serve the area south of the Village of Fort Edward on SR 4 to black house road, including Fitzpatrick Lane, Lamos Lane and County Route 46 from Black House Road to the Drafting Ridge development. The water in this area is undrinkable; it corrodes water tanks, faucets and anything else it runs though. The establishment of Water District #3 is a long process and an expensive one, and the Town is trying to secure some funding for the district. If the funding materializes and the district is formed, it will bring more residential development to that area.

9.10.3 Natural Hazard Event History Specific to the Municipality

Washington 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. For the purpose of this plan update, events that have occurred in the County from 2008 to present 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 the table below. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.10-2. Hazard Event History

Dates of Event	Event Type (FEMA Disaster Declaration if applicable)	Washington County Designated?	Summary of Damages/Losses
December 11-31, 2008	Severe winter storm	Yes	Flooding was reported in the town, and snow-related road closures occurred on East Rd., Patterson Rd., and Black House Rd. Floods caused damage to North River Rd., East Rd., and Woodward Rd. The Town requested assistance from the local Fire Department and EMS.
April 28-30, 2011	Flooding DR-1993	No	The Indian River near Hudson River at Fort Edward stream gage recorded new period-of-record maximum discharges during this event. Flooding damaged several houses and buildings in the Town. Flood waters inundated homes on Rogers Island, Bridge Street, and on north River road in the Fort Miller hamlet. The Fort Edward Idle Hour Club located on the southern end of Rogers Island had over \$150,000 flood damage. Flooding was also reported on Broadway Street. Numerous NFIP claims were issued as a result of the flood damage, and FEMA assisted with the recovery.
August 26-September 5,	Hurricane/T.S. Irene	Yes	The Town incurred very little damage, mostly downed trees and debris in the roadways.





Dates of Event	Event Type (FEMA Disaster Declaration if applicable)	Washington County Designated?	Summary of Damages/Losses
2011	DR-4020		

Notes:

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

9.10.4 Hazard Vulnerabilities and Ranking

The hazard profiles in Section 5.0 of this plan have 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 Fort Edward. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0. Refer to Figure 9.10-1 later in this annex for hazard vulnerable areas located in the Town of Fort Edward.

Natural Hazard Risk/Vulnerability Risk Ranking

As discussed in Section 5.3 (Hazard Ranking), each participating town or village may have differing degrees of risk exposure and vulnerability compared to Washington County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Fort Edward, which reflects hazard ranking adjustments made by the Town. Table 9.10-12 provides proposed mitigation initiatives for the high ranked hazards.

Table 9.10-3. 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
Earthquake	100-Year GBS: \$9,062,247	Occasional	32	Low*
	500-Year GBS: \$118,968,187			
	2,500-Year GBS: \$866,945,901			
Flood	Damage estimate not available.	Frequent	36	Medium*
Severe Weather	100-Year MRP: \$169,219	Frequent	48	Medium*
	500-year MRP: \$908,528			
	Annualized: \$8,445			
Severe Winter Weather	1% GBS: \$5,898,283	Frequent	51	Medium*
	5% GBS: \$29,491,417			
Wildfire	Estimated Value in the WUI Hazard Areas: \$750,136,827	Frequent	48	Medium*

Notes:

- * The municipality adjusted the overall hazard ranking
- 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 20-30+
 Low = Total hazard risk ranking below 20
- 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.
- f. Damage estimate for flood unavailable due to lack of digital floodplain data for Washington County.

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Fort Edward.

Table 9.10-4. NFIP Summary

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)
Fort Edward (T)	6	3	\$134,205	0	0

Source: FEMA, 2016

Note (1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA and are current as of April 30, 2016 and are summarized by Community Name. Please note the total number of repetitive loss properties excludes the severe repetitive loss properties. The number of claims represents claims closed by 4/30/2016.

Note (2) Total building and content losses from the claims file provided by FEMA Region 2.

Note (3) The policies inside and outside of the flood zones are unavailable due to lack of digital floodplain for Washington County.

Note (4) FEMA noted that where there is more than one entry for a property, there may be more than one policy in force or more than one GIS possibility.

Critical Facilities

At the time of this HMP Update, digitized flood maps for Washington County are unavailable. In order to provide some level of beneficial analysis, a desktop analysis was performed to identify critical facilities located within the floodplain (refer to Section 5.1 [Methodology and Tools] for details). The following table identifies critical facilities located within the municipality and their exposure, if any, to the possible floodplain. This information is a resource for the municipality to determine if flood mitigation actions are appropriate based on historical events and proximity of the facility to a water body. At the time of this 2018 HMP Update, the municipality did not identify any actions associated with these facilities.

The Town of Fort Edward understands the limitation of the map data and once the updated maps are available, the municipality will work with Washington County to determine which critical facilities are located within the 1% and 0.2% annual chance flood zones. Once identified, the municipality will work with the property owners and develop mitigation actions for each of the critical facilities, ensuring they will be protected to the 500-year (or worst-case scenario) level.

Table 9.10-5. Potential Flood Losses to Critical Facilities

Name	Type	Potential Flood Exposure
Fort Edward Fire Department - Station 2	Fire	X

Source: Washington County; NYS GIS Clearinghouse

Other Vulnerabilities Identified

The municipality has identified the following vulnerabilities within their community:

- Problematic snow drifts have been reported along SR-197, East Road, Black Horse Road, and Patterson Road.
- Past washouts have occurred on Woodward Road and Moore Road.
- Flooding has occurred on North River Road, East Road, and Woodward Road.

9.10.5 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 Fort Edward.

Table 9.10-6. 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	Planning Board	In process of updating
Capital Improvements Plan	No	-	-	-
Floodplain Management / Basin Plan	No	-	-	-
Stormwater Management Plan	Yes	Local	Highway Department	The Town is a “Regulated Small MS4” community
Open Space Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Watershed Management or Protection Plan	No	-	-	-
Local Waterfront Revitalization Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Comprehensive Emergency Management Plan	No	-	-	-
Emergency Response/Operations Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-
Transportation Plan	No	-	-	-
Strategic Recovery Planning Report	No	-	-	-
Other Plans:	No	-	-	-
Regulatory Capability				
Building Code	Yes	State, Local	Code Enforcement Officer	New York State Uniform Fire Prevention and Building Code and State Energy Conservation Construction Code
Zoning Ordinance	Yes	Local	Zoning Administrator	Adopted 8/7/1963
Subdivision Ordinance	Yes	Local		Local Law #8 Of 1988
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local	Code Enforcement	Flood Damage Prevention Chapter 54



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: Freeboard	Yes	State, Local	State	State mandated BFE+2 for single and two-family residential construction, BFE+1 for all other construction types
NFIP: Cumulative Substantial Damages	No	-	-	-
Growth Management Ordinances	No	-	-	-
Site Plan Review Requirements	Yes	Local	Planning Board	Site Plan Review Chapter 81
Stormwater Management Ordinance	Yes	Local	Code Enforcement Officer, Supervisor	Erosion and Sediment Control Chapter 56
Municipal Separate Storm Sewer System (MS4)	Yes	Local	Highway Department	Storm Sewers Chapter 57
Natural Hazard Ordinance	No	-	-	-
Post-Disaster Recovery Ordinance	No	-	-	-
Real Estate Disclosure Requirement	Yes	State		NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467
Other (Special Purpose Ordinances [i.e., sensitive areas, steep slope])	No	-	-	-

Administrative and Technical Capability

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

Table 9.10-7. 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	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Maintenance programs to reduce risk	No	-
Mutual aid agreements	Yes	Neighboring communities
Technical/Staffing Capability		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Planning Board
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Code Enforcement
Planners or engineers with an understanding of natural hazards	Yes	Planning Board
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement





Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Surveyor(s)	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
Emergency Manager	No	-
Grant writer(s)	Yes	Supervisor Grant Writer/Coordinator
Staff with expertise or training in benefit/cost analysis	Yes	Supervisor and Supervisor Clerk, contractor support from C.T. Male
Professionals trained in conducting damage assessments	Yes	C.T. Male

Fiscal Capability

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

Table 9.10-8. 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 - Water
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal 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 Fort Edward.

Table 9.10-9. 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	3/3Y	8/27/15





Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
NYSDEC Climate Smart Community	No		
Storm Ready	No	-	-
Firewise	No	-	-
Disaster/safety programs in/for schools	No	-	-
Organizations with mitigation focus (advocacy group, non-government)	No	-	-
Public education program/outreach (through website, social media)	No	-	-
Public-Private Partnerships	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

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 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 1000 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 website at: <https://www.isomitigation.com/bcegs/>
- The ISO Mitigation online ISO’s Public Protection website at <https://www.isomitigation.com/ppc/>
- The National Weather Service Storm Ready website at <https://www.weather.gov/stormready/>
- The National Firewise Communities website at <http://firewise.org/>

Self-Assessment of Capability

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

Table 9.10-10. 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	





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

National Flood Insurance Program

NFIP Floodplain Administrator (FPA)

Matthew French, Code Enforcement Officer

Flood Vulnerability Summary

The Town does not maintain lists/inventories of properties that have been flood damaged or make substantial damage estimates. There are no properties in Town currently in the process of mitigation, and no Town residents have approached the FPA with interest in mitigation activities.

Resources

The current FPA is supported in the responsibilities of floodplain administration by contract staff on an as-needed basis. There are currently no education or outreach programs to the community regarding flood hazards/risk, and flood risk reduction through NFIP insurance, mitigation, etc.

The Town reports insufficient staffing as a barrier to running an effective floodplain management program. The Town FPA does not feel adequately supported and trained to fulfill the responsibilities of a municipal floodplain administrator, and would attend continuing education and/or certification training on floodplain management if it were offered in the County for all local floodplain administrators.

Compliance History

The Town is good standing with the NFIP. According to the NYS DEC, the most recent compliance audit of the town was conducted on September 3, 1991.

Regulatory

The Town Flood Damage Prevention ordinance meets, but does not exceed the FEMA and State minimum requirements. There are other local ordinances, plans, and programs in the town that support floodplain management, including the Master Plan and Zoning Code. The planning board also considers reducing flood risk when reviewing plans.

The community is not interested in joining the Community Rating System (CRS) program to reduce flood insurance premiums for their insured.

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 the day-to-day local government operations. 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 Fort Edward has a Planning Board and Zoning Board of Appeals which 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 SEQR and Federal NEPA requirements. The Town also has several committees, including a Drainage Committee, which assists in monitoring and making recommendations for improvements in the Town's drainage district, and a Traffic and Safety Committee, which assists resident's concerns on traffic and safety issues. The Town also has a Master Plan that they are presently updating. The current plan does not refer to a local or County-wide HMP, but the updated plan will include or consider areas of natural hazard risk.

Stormwater Management Plan: The Town has a stormwater management plans that specifies projects/actions/initiatives to reduce the volume of stormwater, or otherwise mitigate stormwater flooding.

Emergency Management Plan: The Town maintains and regularly updates an Emergency Management Plan.

Regulatory and Enforcement

Construction Codes, Uniform: The building codes are strictly enforced to make new and renovated buildings as prepared 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).

Flood Damage Prevention Chapter 54: This chapter (adopted by the Town Board 8-10-87 as L.L. No. 2-1987) promotes the 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 the alteration of floodplains to prevent increased vulnerability. The Town also has a Floodplain Management Plan, FIS, and other studies related to reducing flood damages.

Sewers: The Town abides by the County-wide Sanitary Code, which protects and regulates its sewage collection and treatment facilities as a matter of public health and environmental safety. It seeks to prohibit the introduction of stormwater, surface, or sub-surface waters into sanitary sewers and to control the quantity and quality of wastes in the sewage system. All the Town's Sewer infrastructure is maintained and owned by Washington County Sewer District #2.

Storm Sewers Chapter 57: The Town protects and regulates its sewage collection and treatment facilities through the regulation of non-stormwater discharges to the municipal separate storm sewer system (MS4). It seeks to prohibit the introduction of stormwater, surface, or sub-surface waters into sanitary sewers and to control the quantity and quality of wastes in the sewage system.

Erosion and Sediment Control Chapter 56: The Town's stormwater management chapter seeks to mediate the adverse impacts of stormwater runoff, sedimentation, and erosion caused by existing drainage systems. It also serves to control the degradation of water quality in the Town.

Site Plan Review Chapter 81: The Town's Planning Board is tasked with site plan/subdivision review. The Planning Board pays special attention to ensure that developments are compatible with the intent of the Master Plan and mitigate the issues associated natural hazards.

Zoning: The Town of Fort Edwards' zoning code divides the Town into seven zones, differentiated according to use and building regulations. Protection of the Agriculture-Residential Zone and Low-Density Residential



Zone may serve to mitigate future hazards related to decreased groundwater recharge and increased stormwater runoff flooding.

Fiscal

Operating Budget: The Town's operating budget contains minimal provisions for expected repairs like snow removal, machinery, and general repair after a storm or natural disaster. The Town also allots funding for maintaining equipment used by the highway department, and contractual expenses as needed to supplement highway department staff capabilities.

Education and Outreach

The town provides contact information for local emergency resources on its website's home page, including the Police-Fire-Ambulance, Fort Edward Volunteer Fire Department, Fort Edward Village Police, and Fort Edward Volunteer Rescue Squad.

The Town Code Enforcement office participates in associations that support natural hazard risk reduction and build hazard management capabilities.

9.10.6 Mitigation Strategy and Prioritization

This section discusses past mitigations 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 2010 Plan. It should be noted that during the 2010 planning process, only general, countywide actions were identified for each municipality. The Town of Fort Edward reviewed the previous actions and selected actions they chose to carry forward as part of this plan update. 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 9.10-11. Status of Previous Mitigation Actions

2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status	Next Step (Include in 2018 HMP or Discontinue)	Describe Next Step
CR 46, landslide. Habitual slope stability issues compromise the south bound lanes at this location annually. Propose a slope stabilization project at this location.	County and NYS DHSES	No Progress	N/A	Include	CR 46, landslide. Habitual slope stability issues compromise the south bound lanes at this location annually. Propose a slope stabilization project at this location.
The equipment required to excavate drainage ditches and roadways to increase culvert pipe size is not available for local municipal use unless it is contracted. Local highway departments have the expertise to do the work, but not the equipment. A suggestion was made to purchase with mitigation funding five (5) excavators for Towns with the greatest need. (MOA b/t Fort Edward, Argyle, Kingsbury)	County and NYS DHSES	No Progress	This action is not relevant to the Town	Discontinue	At the time of this plan update, this action does not pertain to the Town; therefore, it will not be included in the 2018 HMP Update.



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Fort Edward has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2010 Plan:

- None identified

Proposed Hazard Mitigation Initiatives for the Plan Update

The Town of Fort Edward participated in a mitigation action workshop in September 2016 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

Table 9.10-12 summarizes the comprehensive-range of specific mitigation initiatives the Town of Fort Edward 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 are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. 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 the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.10-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.10-12. 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
T. Fort Edward-1	Use the results and guidance from the Hazard Mitigation Plan to steer future Master Plan updates to incorporate mitigation into the goals and objectives, as well as in future planning decisions. Additionally, integrating hazard mitigation into the master plan promotes collaboration between planners and emergency managers, ensuring that hazard assessment information is incorporated into future land use and other elements of the master plan.	N/A	All hazards	1, 2, 3	Town Planning Board	Medium	Low	Local budget	Short-term	High	LPR	PR
T. Fort Edward-2	Improve drainage by increasing the culvert sizes at sites where roads have washed out due to natural hazards in the past to meet 50-year storm requirements and reduce flooding overflow at the following locations: <ul style="list-style-type: none"> East Road By improving these sites reduces the potential of roadway flooding and washouts, allowing emergency personnel full access to the town in the event of an emergency.	N/A	Flood, severe storm	1, 4	Town Public Works / Highway	High	Medium	Local Budget, FEMA (HMGP, FMA, PDM), CDBG	Short	Medium	SIP	PP, PR, SP
T. Fort Edward-3	Send local Floodplain Administrator to County and State trainings and to complete certification programs with respect to floodplain management. Also provide continuing education and training to ensure code enforcement and proper inspections. Becoming certified in floodplain management lays the foundation for ensuring that highly qualified individuals are available to meet the challenge of	Existing	Flood, severe storm	1, 2, 4	Town Board, County Public Safety	Medium	Low	Local Budget	Short	Medium	EAP	PR, PI





Table 9.10-12. 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
	breaking the damage cycle and stopping its negative drain on the nation's human, financial and natural resources.											
T. Fort Edward-4	Evaluate North River Road, East Road, and Woodward Road for flooding issues. Identify solutions to alleviate flooding and address those solutions. By identifying floodprone areas, the Town can gain a better of understanding on ways to protect properties from flood damage. Once protected, this will reduce or eliminate the damages caused by flooding.	Existing	Flood, severe storm	1, 4	Town Public Works / Highway	Medium	Medium	FEMA (HMGP, FMA, PDM), County, Local Budget	Short	High	SIP	PP, PR, SP
T. Fort Edward-5 (previous action)	Stabilize slope at CR 46 where south bound lanes are annually compromised. To do this, the town will use proper bank stabilization methods including planting vegetation on the slope and installing riprap. This project will reduce future losses to the roadway and hindrance to transportation system are greater than the cost to implement the project.	Existing	Flood, Severe Storm, Landslide	1, 4, 5	Town Public Works / Highway	Medium	Medium	Local Budget	Short	High	SIP	PP, PR, SP
T. Fort Edward-6	Improve drainage by increasing the culvert sizes at sites where roads have washed out due to natural hazards in the past to meet 50-year storm requirements and reduce flooding overflow at the following locations: <ul style="list-style-type: none"> Black Horse Road By improving these sites reduces the potential of roadway flooding and washouts, allowing emergency personnel full access to the town in the event of an emergency.	N/A	Flood, severe storm	1, 4	Town Public Works / Highway	High	Medium	Local Budget, FEMA (HMGP, FMA, PDM), CDBG	Short	Medium	SIP	PP, PR, SP





Table 9.10-12. 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
T. Fort Edward-7	<p>Improve drainage by increasing the culvert sizes at sites where roads have washed out due to natural hazards in the past to meet 50-year storm requirements and reduce flooding overflow at the following locations:</p> <ul style="list-style-type: none"> Patterson Road. <p>By improving these sites reduces the potential of roadway flooding and washouts, allowing emergency personnel full access to the town in the event of an emergency.</p>	N/A	Flood, severe storm	1, 4	Town Public Works / Highway	High	Medium	Local Budget, FEMA (HMGP, FMA, PDM), CDBG	Short	Medium	SIP	PP, 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
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

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 in 2015)
SRL	Severe Repetitive Loss Grant Program (discontinued in 2015)

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:

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





Costs:

- 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 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 could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

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



Table 9.10-13. 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
T. Fort Edward-1	Include reference to 2017 Washington County HMP Update in the update of the Town's Master Plan	1	1	1	1	1	0	0	0	0	1	1	1	1	0	9	High
T. Fort Edward-2	Drainage Improvements on East Road	1	0	1	1	0	1	0	0	0	1	1	1	0	0	7	Medium
T. Fort Edward-3	Send local staff members to attend trainings and conferences to become educated on how to efficiently run a local Floodplain Administration program.	1	1	1	1	1	0	1	1	0	1	1	1	0	0	10	Medium
T. Fort Edward-4	Evaluate North River Road, East Road, and Woodward Road for flooding issues. Identify solutions to alleviate flooding and address those solutions.	1	1	1	1	1	0	0	0	0	1	1	1	1	0	9	High
T. Fort Edward-5 (previous action)	Slope stabilization project at CR 46, landslide.	1	0	1	1	0	1	0	0	0	1	1	1	0	0	7	Medium
T. Fort Edward-6	Drainage Improvements on Black Horse Road	1	0	1	1	0	1	0	0	0	1	1	1	0	0	7	Medium
T. Fort Edward-7	Drainage Improvements on Patterson Road	1	0	1	1	0	1	0	0	0	1	1	1	0	0	7	Medium

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions.





9.10.7 Future Needs to Better Understand Risk/Vulnerability

None at this time.

9.10.8 Hazard Area Extent and Location

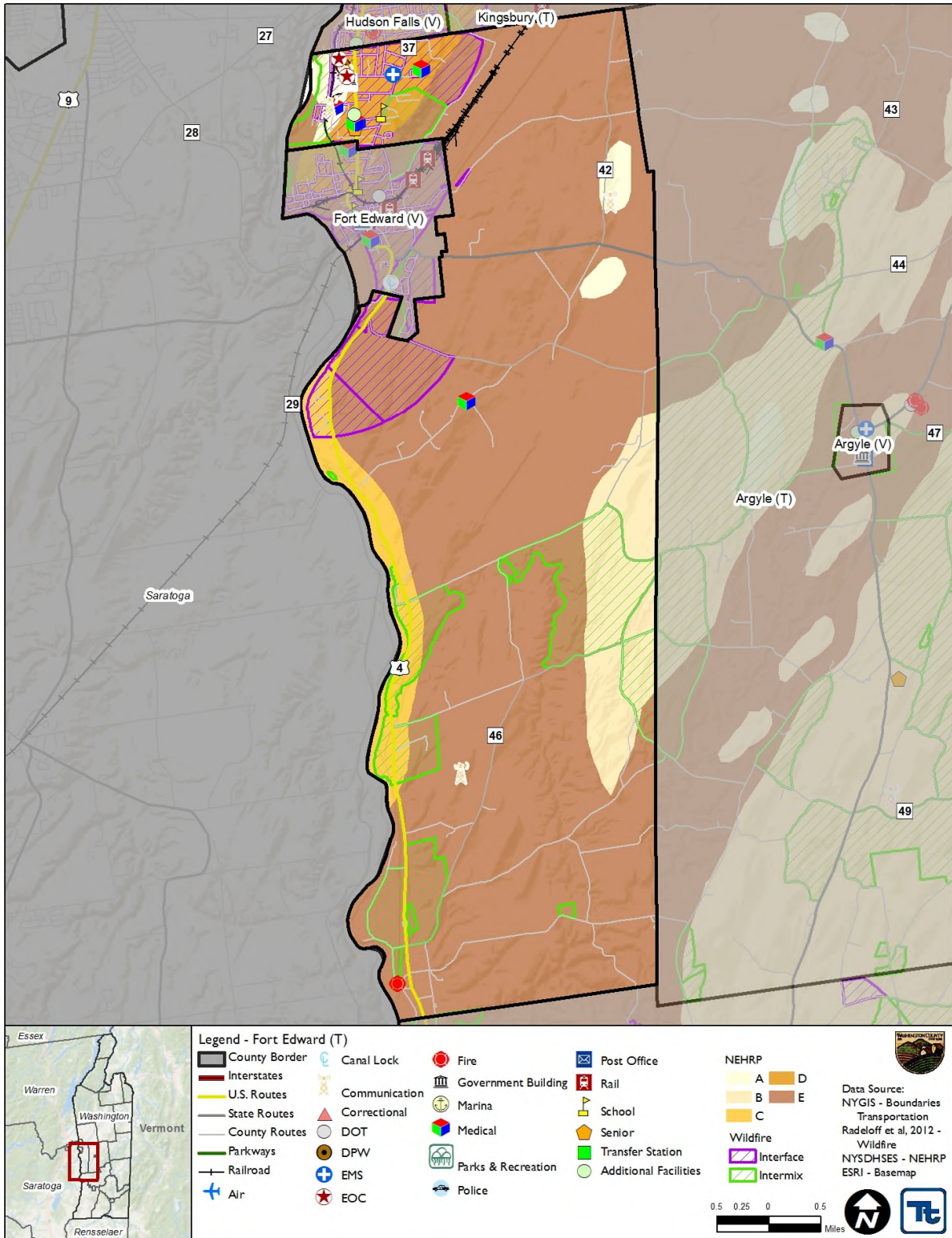
Hazard area extent and location maps have been generated for the Town of Fort Edward that illustrate the probable areas impacted within the municipality. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Town of Fort Edward has significant exposure. These maps are illustrated in the hazard profiles within Section 5.4, Volume I of this Plan.

9.10.9 Additional Comments

None at this time.



Figure 9.10-1. Town of Fort Edward Hazard Area Extent and Location





Action Number:

T. Fort Edward - 1

Mitigation Action Name:

Include reference to 2018 Washington County HMP Update in the update of the Town's Master Plan.

Assessing the Risk	
Hazard(s) addressed:	All hazards
Specific problem being mitigated:	The Master Plan does not currently address hazard identification and risk assessment or mitigation goals. By not addressing hazards and risk in the master plan, it is uncertain if hazard assessment information will be incorporated into future land use and other elements of the master plan.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No action - Current problem persists. Update Master Plan without referencing HMP – hazard assessment information is most likely not incorporated into future land use and other elements of the plan.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Use the results and guidance from the Hazard Mitigation Plan to steer future Master Plan updates to incorporate mitigation into the goals and objectives, as well as in future planning decisions. Additionally, integrating hazard mitigation into the master plan promotes collaboration between planners and emergency managers, ensuring that hazard assessment information is incorporated into future land use and other elements of the master plan.
Mitigation Action Type	Local Plans and Regulations (LPR)
Goals Met	Goal 1: Protect Life and Property Goal 2: Increase Public Awareness Goal 3: Encourage Partnerships
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	Medium
Estimated Cost	Low
Priority*	High
Plan for Implementation	
Responsible Organization	Town Planning Board
Local Planning Mechanism	Hazard Mitigation, Master Plan
Potential Funding Sources	Local budget
Timeline for Completion	Short-term
Reporting on Progress	
Date of Status Report/ Report of Progress	No progress; New project



Action Number:
Mitigation Action Name:

T. Fort Edward - 1
 Include reference to 2018 Washington County HMP Update in the update of the Town's Master Plan.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	1	
Fiscal	1	Municipal budget and staff time
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
Total	9	
Priority (H/M/L)	High	



Action Number:

T. Fort Edward-2

Mitigation Action Name:

Drainage Improvements on East Road.

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm
Specific problem being mitigated:	<p>Roads have washed out due to natural hazards in the past including:</p> <ul style="list-style-type: none"> • East Road. • Black Horse Road. • Patterson Road. <p>When they wash out, roads are closed which prevent vehicles accessing those areas of the town. This impacts the health and safety of residents as it prevents emergency personnel from getting to those residents in the event of an emergency.</p>
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	<p>If left unimproved, flooding will persist, leading to roadway washout and increasing risk to life and safety.</p> <p>Relocate roadways that have previously washed out – not feasible</p>
Action/Project Intended for Implementation	
Description of Selected Action/Project	<p>Improve drainage by increasing the culvert sizes at sites where roads have washed out due to natural hazards in the past to meet 50-year storm requirements and reduce flooding overflow at East Road. By improving these sites reduces the potential of roadway flooding and washouts, allowing emergency personnel full access to the town in the event of an emergency.</p>
Mitigation Action Type	Structure and Infrastructure Project (SIP)
Goals Met	<p>Goal 1: Protect Life and Property</p> <p>Goal 4: Provide for Emergency Services</p>
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	High – reduce risk of washout, and improve public safety on roadway
Estimated Cost	Medium to High
Priority*	Medium
Plan for Implementation	
Responsible Organization	Town Highway Department
Local Planning Mechanism	Hazard Mitigation, Capital Improvement
Potential Funding Sources	Local Budget, FEMA (HMGP, FMA, PDM), CDBG
Timeline for Completion	Short (1 to 5 years)
Reporting on Progress	
Date of Status Report/ Report of Progress	<p>Date:</p> <p>Progress on Action/Project:</p>



Action Number:
Mitigation Action Name:

T. Fort Edward-2
Drainage Improvements on East Road

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Will ensure through access for motorists, including emergency services personnel
Property Protection	0	
Cost-Effectiveness	1	Reduced future losses to the roadway and hindrance to transportation system are greater than the cost to implement the project
Technical	1	Project is technically feasible
Political	0	
Legal	1	Town has legal jurisdiction over the physical project location
Fiscal	0	
Environmental	0	No known environmental impacts
Social	0	No known social impacts
Administrative	1	Town has administrative capability to manage the work
Multi-Hazard	1	Flood, Severe Storm
Timeline	1	Can be completed within 5 years
Agency Champion	0	
Other Community Objectives	0	
Total	7	
Priority (High, Medium, or Low)	Medium	



Action Number:

T. Fort Edward - 3

Mitigation Action Name:

Send local staff members to attend trainings and conferences.

Assessing the Risk	
Hazard(s) addressed:	Flood, severe storm
Specific problem being mitigated:	Staff members have not been formally trained on Floodplain Administration; therefore, they may not fully understand floodplain management in the State, county and town.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No action - Current problem persists. Hire trainers to come to Town to conduct trainings – costly.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Send local Floodplain Administrator to County and State trainings and to complete certification programs with respect to floodplain management. Also provide continuing education and training to ensure code enforcement and proper inspections. Becoming certified in floodplain management lays the foundation for ensuring that highly qualified individuals are available to meet the challenge of breaking the damage cycle and stopping its negative drain on the nation's human, financial, and natural resources.
Mitigation Action Type	Education and Awareness Programs (EAP)
Goals Met	Goal 1: Protect Life and Property Goal 2: Increase Public Awareness Goal 4: Provide for Emergency Services
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	Medium
Estimated Cost	Low
Priority*	Medium
Plan for Implementation	
Responsible Organization	Town Board, Code Enforcement, County Public Safety
Local Planning Mechanism	Hazard Mitigation
Potential Funding Sources	Local Budget
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	No progress; new project



Action Number:

T. Fort Edward - 3

Mitigation Action Name:

Send local staff members to attend trainings and conferences to become educated on how to efficiently run a local Floodplain Administration program.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	0	
Fiscal	1	Municipal budget / staff time
Environmental	1	
Social	0	
Administrative	1	Staff that works with floodplain management will benefit
Multi-Hazard	1	Flood, Severe Storm
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
Total	10	
Priority (H/M/L)	Medium	



Action Number:

T. Fort Edward - 4

Mitigation Action Name:

Evaluate and address local flooding issues.

Assessing the Risk	
Hazard(s) addressed:	Flood, severe storm
Specific problem being mitigated:	At the time of this plan update, North River Road, East Road, and Woodward Road flooding during periods of rain. It is uncertain as to what needs to be done to alleviate the flooding along these roadways. When flooded, the roads need to be closed, impacted the continuity of operations for emergency and essential personnel.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No action - Current problem persists. Relocate roadways where flooding occurs – not feasible.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Evaluate North River Road, East Road, and Woodward Road for flooding issues. Identify solutions to alleviate flooding and address those solutions. By identifying floodprone areas, the Town can gain a better of understanding on ways to protect properties from flood damage. Once protected, this will reduce or eliminate the damages caused by flooding.
Mitigation Action Type	Structure and Infrastructure Project (SIP)
Goals Met	Goal 1: Protect Life and Property Goal 4: Provide for Emergency Services
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	Medium
Estimated Cost	Medium
Priority*	High
Plan for Implementation	
Responsible Organization	Town Public Works / Highway
Local Planning Mechanism	Hazard Mitigation
Potential Funding Sources	FEMA (HMGP, FMA, PDM), County, Local Budget
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	No progress; new project



Action Number: T. Fort Edward - 4
 Mitigation Action Name: Evaluate and address local flooding issues.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	By identifying floodprone areas, the Town can gain a better of understanding on ways to protect properties from flood damage
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	0	
Fiscal	0	Need to obtain funding to complete
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	9	
Priority (H/M/L)	High	



Action Number:

T. Fort Edward-5

Mitigation Action Name:

Slope Stabilization.

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm, Landslide
Specific problem being mitigated:	Slope failure at CR 46. Habitual slope stability issues compromise the south bound lanes at this location annually. The slope failures lead to road closures which impacts the continuity of operations of emergency and essential personnel in the town.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	If left unimproved, flooding and slope failures will persist, leading to roadway washout and increasing risk to life and safety. Move CR 46 away from areas with slope stability issues – costly/not feasible.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Stabilize slope at CR 46 where south bound lanes are annually compromised. To do this, the town will use proper bank stabilization methods including planting vegetation on the slope and installing riprap. This project will reduce future losses to the roadway and hindrance to transportation system are greater than the cost to implement the project.
Mitigation Action Type	Structure and Infrastructure Project (SIP)
Goals Met	Goal 1: Protect Life and Property Goal 4: Provide for Emergency Services
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	High – reduce risk of road failure, and improve public safety
Estimated Cost	Medium
Priority*	Medium
Plan for Implementation	
Responsible Organization	Town Public Works / Highway
Local Planning Mechanism	N/A
Potential Funding Sources	Local Budget
Timeline for Completion	Short (1 to 5 years)
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:



Action Number: T. Fort Edward-5
 Mitigation Action Name: Slope Stabilization.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Will ensure through access for motorists, including emergency services personnel
Property Protection	0	
Cost-Effectiveness	1	Reduced future losses to the roadway and hindrance to transportation system are greater than the cost to implement the project
Technical	1	Project is technically feasible
Political	0	
Legal	1	Town has legal jurisdiction over the physical project location
Fiscal	0	
Environmental	0	No known environmental impacts
Social	0	No known social impacts
Administrative	1	Town has administrative capability to manage the work
Multi-Hazard	1	Severe Storm, Flood, Landslide
Timeline	1	Can be completed within 5 years
Agency Champion	0	
Other Community Objectives	0	
Total	7	
Priority (High, Medium, or Low)	Medium	



Action Number:

T. Fort Edward-6

Mitigation Action Name:

Drainage Improvements on Black Horse Road.

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm
Specific problem being mitigated:	<p>Roads have washed out due to natural hazards in the past including:</p> <ul style="list-style-type: none"> East Road. Black Horse Road. Patterson Road. <p>When they wash out, roads are closed which prevent vehicles accessing those areas of the town. This impacts the health and safety of residents as it prevents emergency personnel from getting to those residents in the event of an emergency.</p>
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	<p>If left unimproved, flooding will persist, leading to roadway washout and increasing risk to life and safety. Relocate roadways that have previously washed out – not feasible</p>
Action/Project Intended for Implementation	
Description of Selected Action/Project	<p>Improve drainage by increasing the culvert sizes at sites where roads have washed out due to natural hazards in the past to meet 50-year storm requirements and reduce flooding overflow at Black Horse Road. By improving these sites reduces the potential of roadway flooding and washouts, allowing emergency personnel full access to the town in the event of an emergency.</p>
Mitigation Action Type	Structure and Infrastructure Project (SIP)
Goals Met	Goal 1: Protect Life and Property Goal 4: Provide for Emergency Services
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	High – reduce risk of washout, and improve public safety on roadway
Estimated Cost	High
Priority*	Medium
Plan for Implementation	
Responsible Organization	Town Highway Department
Local Planning Mechanism	Hazard Mitigation, Capital Improvement
Potential Funding Sources	Local Budget, FEMA (HMGP, FMA, PDM), CDBG
Timeline for Completion	Short (1 to 5 years)
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:



Action Number: T. Fort Edward-6
 Mitigation Action Name: Drainage Improvements on Black Horse Road.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Will ensure through access for motorists, including emergency services personnel
Property Protection	0	
Cost-Effectiveness	1	Reduced future losses to the roadway and hindrance to transportation system are greater than the cost to implement the project
Technical	1	Project is technically feasible
Political	0	
Legal	1	Town has legal jurisdiction over the physical project location
Fiscal	0	
Environmental	0	No known environmental impacts
Social	0	No known social impacts
Administrative	1	Town has administrative capability to manage the work
Multi-Hazard	1	Flood, Severe Storm
Timeline	1	Can be completed within 5 years
Agency Champion	0	
Other Community Objectives	0	
Total	7	
Priority (High, Medium, or Low)	Medium	



Action Number:

T. Fort Edward-7

Mitigation Action Name:

Drainage Improvements on Patterson Road.

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm
Specific problem being mitigated:	<p>Roads have washed out due to natural hazards in the past including:</p> <ul style="list-style-type: none"> • East Road. • Black Horse Road. • Patterson Road. <p>When they wash out, roads are closed which prevent vehicles accessing those areas of the town. This impacts the health and safety of residents as it prevents emergency personnel from getting to those residents in the event of an emergency.</p>
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	<p>If left unimproved, flooding will persist, leading to roadway washout and increasing risk to life and safety.</p> <p>Relocate roadways that have previously washed out – not feasible.</p>
Action/Project Intended for Implementation	
Description of Selected Action/Project	<p>Improve drainage by increasing the culvert sizes at sites where roads have washed out due to natural hazards in the past to meet 50-year storm requirements and reduce flooding overflow at Patterson Road. By improving these sites reduces the potential of roadway flooding and washouts, allowing emergency personnel full access to the town in the event of an emergency.</p>
Mitigation Action Type	Structure and Infrastructure Project (SIP)
Goals Met	<p>Goal 1: Protect Life and Property</p> <p>Goal 4: Provide for Emergency Services</p>
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	High – reduce risk of washout, and improve public safety on roadway
Estimated Cost	High
Priority*	Medium
Plan for Implementation	
Responsible Organization	Town Highway Department
Local Planning Mechanism	Hazard Mitigation, Capital Improvement
Potential Funding Sources	Local Budget, FEMA (HMGP, FMA, PDM), CDBG
Timeline for Completion	Short (1 to 5 years)
Reporting on Progress	
Date of Status Report/ Report of Progress	<p>Date:</p> <p>Progress on Action/Project:</p>



Action Number:
Mitigation Action Name:

T. Fort Edward-7
Drainage Improvements on Patterson Road.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Will ensure through access for motorists, including emergency services personnel
Property Protection	0	
Cost-Effectiveness	1	Reduced future losses to the roadway and hindrance to transportation system are greater than the cost to implement the project
Technical	1	The project is technically feasible
Political	0	
Legal	1	The Town has legal jurisdiction over the physical project location
Fiscal	0	
Environmental	0	No known environmental impacts
Social	0	No known social impacts
Administrative	1	Town has administrative capability to manage the work
Multi-Hazard	1	Flood, Severe Storm
Timeline	1	Can be completed within 5 years
Agency Champion	0	
Other Community Objectives	0	
Total	7	
Priority (High, Medium, or Low)	Medium	