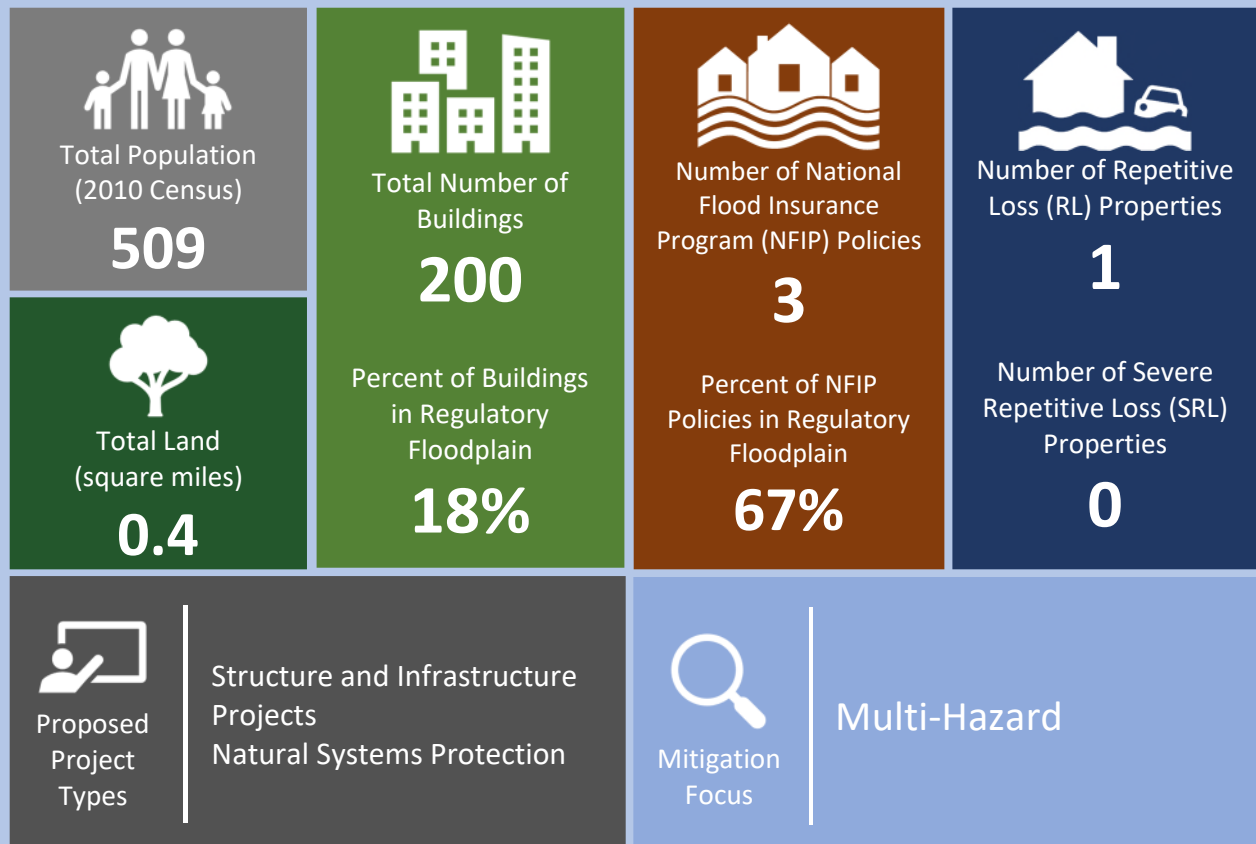
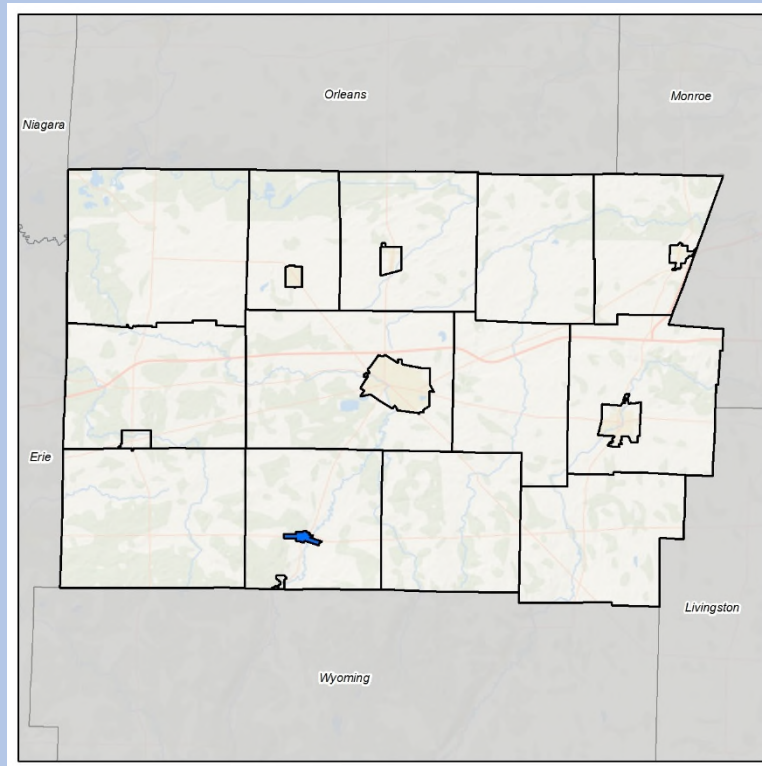




# MUNICIPAL ANNEX | Village of Alexander





## 9.4 Village of Alexander

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

### 9.4.1 Hazard Mitigation Planning Team

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

Primary Point of Contact	Alternate Point of Contact
Name: William Wagner Title: Mayor Phone Number: 585-409-1144 Address: PO Box 47 Alexander, NY 14005 Email: clerk@villageofalexander.com	Name: Troy Robbins Title: DPW Superintendent Phone Number: 595-993-5871 Address: PO Box 352 Alexander, NY 14005 Email: robbins3644@yahoo.com
Floodplain Administrator	
Name: William Wagner/Troy Robbins Title: Mayor/DPW Superintendent Phone Number: 585-409-1144/595-993-5871 Address: PO Box 47 Alexander, NY 14005/ PO Box 352 Alexander, NY 14005 Email: clerk@villageofalexander.com /robbins3644@yahoo.com	

### 9.4.2 Municipal Profile

The Village of Alexander lies in the central part of the Town of Alexander in the southern portion of Genesee County in Western New York State. The village is found within the town at the junction of Alexander Road (NY Route 98) and Broadway (US Route 20), as provided in Section 9.3 (Town of Alexander). The village has a total area of 0.42 square miles. Tonawanda Creek flows to the northeast through the village.

The estimated 2016 U.S. Census American Community Survey population was 549, an increase from the 2010 Census (509). Data from the 2016 U.S. Census American Community Survey estimates that 10.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

#### History and Cultural Resources

The Village of Alexander was founded in 1802 by Alexander Rea. The village was incorporated in 1834. The Alexander Classical School (1837-1886) was housed in a cobblestone building that is now the Alexander Town Hall and Museum.

#### Growth/Development Trends

Table 9.4-1 summarizes major residential/commercial development that known or anticipated to take place prior to 2023. The map in Figure 9.4-1 illustrates the hazard areas along with the location of potential new development.





**Table 9.4-1. 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
<b>Recent Development from 2008 to present</b>					
Alexander Water Tank	Municipal	1	Off Rt 20	None	Water storage upgrade
<b>Known or Anticipated Development in the Next Five (5) Years</b>					
Water System Replacement Project	Municipal	N/A	Village-wide	Village-wide	Water Main Replacement

\* Only location-specific hazard zones or vulnerabilities identified.

### 9.4.3 Hazard Event History Specific to the Village of Alexander

Genesee County has a history of natural hazard events, as detailed in Volume I, Section 5.0 (Risk Assessment). A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities. The Village of Alexander’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Genesee County. Table 9.4-2 provides details regarding municipal-specific loss and damages the village experienced during hazard events. Information provided in the table below is based on reference material or local sources. In addition to these events, the village has a history of log jams on Tonawanda Creek. These log jams have caused flooding within the Town and Village of Alexander.

**Table 9.4-2. Hazard Event History**

Dates of Event	Event Type (Disaster Declaration if applicable)	Genesee County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 9, 2008	High Wind	N/A	A powerful cold front crossed the region during early morning hours. The thunderstorms that accompanied the front produced damaging wind gusts measured to 75 mph.	Although the county was impacted, the village did not report losses.
January 30, 2008	High Wind	N/A	Low pressure over upper Michigan tracked across the northern Great Lakes to Quebec. Winds increased to 25 to 40 mph with gusts measured to 75 mph.	Although the county was impacted, the village did not report losses.
June 6, 2008	Hail	N/A	Thunderstorms moving through the region produced strong winds and hail.	Although the county was impacted, the village did not report losses.
September 14, 2008	High Wind	N/A	The remains of Hurricane Ike moved over the area, resulting in high winds with gusts measured to 66 mph.	Although the county was impacted, the village did not report losses.
December 28, 2008	High Wind	N/A	A complex area of low pressure developed over the midsection of the nation and strengthened as it moved into the western Great Lakes region then into Quebec. Winds accompanying the system increased rapidly across the area ranging from 30 to 40 mph sustained. A peak gust of 75 mph was recorded the Buffalo Airport.	Although the county was impacted, the village did not report losses.



Dates of Event	Event Type (Disaster Declaration if applicable)	Genesee County Designated?	Summary of Event	Municipal Summary of Damages and Losses
July 25, 2009	Tornado	N/A	A tornado crossed the Town of Darien and village of Corfu in Genesee County. The tornado was rated an EF1 with wind speeds estimated close to 100 mph.	Although the county was impacted, the village did not report losses.
May 8, 2010	High Wind	N/A	Deep low pressure passed over western New York with its trailing cold front rapidly sweeping east across the region. Winds increased within a few hours of the approaching front to gust speeds of 60 to 65 mph.	Although the county was impacted, the village did not report losses.
April 26- May 8, 2011	Severe Storms, Flooding, Tornadoes, High Wind (DR-1993)	No	Following the passage of a strong cold front, strong synoptic winds developed across western New York. Gusts reached up to 83 mph.	Although the county was impacted, the village did not report losses.
July 31, 2012	Flash Flood	N/A	A slow moving cold front caused thunderstorms resulting in heavy rains. Over parts of Genesee County, two to three inches of rain fell in less than two hours.	Although the county was impacted, the village did not report losses.
October 29, 2012	High Wind (DR-4085)	Yes	Remnants of Hurricane Sandy brought strong winds and heavy rains to western and north central New York. Wind gusts were measured to 60 mph.	Although the county was impacted, the village did not report losses.
November 17-19, 2014	Lake Effect Snow (DR-4204)	Yes	Heavy lake effect snow fell throughout the region in back to back events resulting in over 3 feet of snow and several deaths in the region.	Although the county was impacted, the village did not report losses.
November 24, 2014	Flood	N/A	Up to six feet of snow which fell during two lake effect events the previous week melted as temperatures climbed into the 60s. Snow water equivalents ranged from four to six inches. The melting snow combined a limited rainfall to produce some urban and river flooding over the lake-effect snow affected area.	Although the county was impacted, the village did not report losses.
March 8, 2017	High Wind	N/A	Deep low pressure brought strong winds to the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph.	Although the county was impacted, the village did not report losses.

Notes:

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

### 9.4.4 Hazard Ranking and Jurisdiction-Specific Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) have detailed information regarding each plan participant’s vulnerability to the identified hazards. This section provides a summary of exposure and impacts from significant hazards of concern as identified by the Village of Alexander.

#### Hazard Risk Ranking

This section includes the community-specific identification of the primary hazard concerns, based on identified problems, impacts, and the results of the risk assessment as presented in Section 5 (Risk Assessment). The





ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy, as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating town or village may have differing degrees of risk exposure and vulnerability compared to Genesee 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 Village of Alexander. The Village of Alexander has reviewed the county hazard risk/vulnerability risk ranking table, as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- The village felt that drought had an occasional probability of occurrence and should be listed with a medium hazard ranking instead of high. Occurrence was changed from frequent to occasional and the hazard ranking was changed from high to medium.
- The village agreed with the remainder of the risk rankings.

**Table 9.4-3. Hazard Risk/Vulnerability Risk Ranking**

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard <sup>a, c</sup>	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking <sup>b</sup>
Civil Unrest	Damage estimate not available	Occasional	24	Medium
Drought	Damage estimate not available	Occasional	33	Medium
Earthquake <sup>d, e</sup>	RCV Exposed to D and E Soils: \$65,318	Occasional	24	Medium
Epidemic	Damage estimate not available	Frequent	39	High
Extreme Temperature	Damage estimate not available	Frequent	39	High
Flood <sup>d</sup>	RCV Exposed to 1% Annual Chance Flood Event \$27,337,000	Frequent	27	Medium
Hazardous Materials	Damage estimate not available	Frequent	42	High
Severe Storm	100-year MRP: \$0	Frequent	48	High
	500-year MRP: \$0			
Severe Winter Weather	100-year MRP: \$2,225,380	Frequent	51	High
	500-year MRP: \$11,126,900			
Terrorism	Damage estimate not available	Rare	14	Medium
Transportation Accident	Damage estimate not available	Frequent	42	High
Utility Failure	Damage estimate not available	Frequent	45	High
Wildfire	Estimated RCV in WUI Hazard Area \$147,175,000	Occasional	30	Medium

Notes:

- a. Building damage ratio estimates based on FEMA 386-2 (August 2001)
- b. The valuation of general building stock and loss estimates was based on custom inventory for the municipality.  
High = Total hazard priority risk ranking score of 31 and above  
Medium = Total hazard priority risk ranking of 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.

### Critical Facilities Flood Risk

DEC Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for state projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a SFHA unless constructed according to specific mitigation specifications, including being raised 2 feet above the BFE. This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 500-year flood event or worst damage scenario. For those that do not meet this criterion, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

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

Table 9.4-4. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Town of Alexander Highway Garage	DPW	X	X	V. Alexander-6
Village of Alexander Treatment Facility	Wastewater	X	X	-

Source: Genesee County 2017; HAZUS-MH

The village noted that the Village of Alexander Treatment Facility is protected to the 0.2-percent flood level.

### Identified Issues

The municipality has identified the following vulnerabilities within their community:

- Flooding of Tonawanda Creek within village limits with possible damage to sewer and water mains.

### 9.4.5 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 Village of Alexander.



Table 9.4-5. 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.)
<b>Planning Capability</b>				
Comprehensive Plan	No	-	-	-
Capital Improvements Plan	No	-	-	-
Floodplain Management / Basin Plan	Yes	Genesee County	-	Floodplain Management Plan
Stormwater Management Plan	No	-	-	-
Open Space Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Watershed Management or Protection Plan	Yes	Genesee County	Planning	Watershed Management Plan
Economic Development Plan	No	-	-	-
Comprehensive Emergency Management Plan	No	-	-	-
Emergency Operation Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-
Transportation Plan	No	-	-	-
Strategic Recovery Planning Report	No	-	-	-
Other Plans:	No	-	-	-
<b>Regulatory Capability</b>				
Building Code	Yes	State & Local	Code Enforcement	NYS Fire and Building Code
Zoning Ordinance	Yes	State - Local	Code Enforcement	Local Law No. 2 of 1975
Subdivision Ordinance	No	-	-	-
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local	Code Enforcement	NYS Building Code
NFIP: Cumulative Substantial Damages	No	-	-	-
NFIP: Freeboard	No	State, Local	Code Enforcement	State mandated BFE+2' for all construction
Growth Management Ordinances	No	-	-	-
Site Plan Review Requirements	Yes	State, Local	Code Enforcement	Site Plan Checklist
Stormwater Management Ordinance	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	Yes	Local	Code Enforcement	NYS Building Code
Natural Hazard Ordinance	No	-	-	-
Post-Disaster Recovery Ordinance	No	-	-	-



Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Real Estate Disclosure Requirement	Yes	State	-	NYS mandate, Property Condition Disclosure Act, NY Code – Article 14 Chapter 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 Village of Alexander.

Table 9.4-6. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
<b>Administrative Capability</b>		
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	Yes	Tree trimming along creek bank, clear falling trees
Mutual aid agreements	Yes	-
<b>Technical/Staffing Capability</b>		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Contract when needed
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Contract when needed
Planners or engineers with an understanding of natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Mayor/DPW Superintendent
Surveyor(s)	Yes	Contract when needed
Personnel skilled or trained in GIS or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Genesee County Planning
Scientist familiar with natural hazards	No	-
Emergency Manager	Yes	Genesee County OEM
Grant writer(s)	Yes	Jay Orsso
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-

### Fiscal Capability

The table below summarizes financial resources available to the Village of Alexander.





**Table 9.4-7. Fiscal Capabilities**

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes, Jay Grasso
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes, Village Board of Trustees (3)
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other	No

**Community Classifications**

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

**Table 9.4-8. 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	6	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	N/A	-	-
Natural disaster/safety programs in/for schools	Yes	County	N/A
Organizations with mitigation focus (advocacy group, non-government)	No	-	-
Public education program/outreach (through website, social media)	NP	-	-
Public-private partnership initiatives addressing disaster-related issues	NP	-	-
Other	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 (<https://www.isomitigation.com/bcegs/>).
- The ISO Mitigation online ISO’s Public Protection website (<https://www.isomitigation.com/ppc/>).
- New York State Climate Smart Communities (<http://www.dec.ny.gov/energy/56876.html>).
- The National Weather Service Storm Ready (<https://www.weather.gov/stormready/communities>).
- The National Firewise Communities website at <http://firewise.org/>.

### Self-Assessment of Capability

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

Table 9.4-9. 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 – low funding	-	-
Administrative and technical capability	X – low funding	-	-
Fiscal capability	X – low funding	-	-
Community political capability	X – low funding	-	-
Community resiliency capability	X – low funding	-	-
Capability to integrate mitigation into municipal processes and activities	X – low funding	-	-

### National Flood Insurance Program

This section provides specific information on the management and regulation of the regulatory floodplain.

#### NFIP Floodplain Administrator (FPA)

William Wagner, Mayor and Troy Robbins, Superintendent

#### National Flood Insurance Program (NFIP) Summary

The Village of Alexander does not maintain lists/inventories of properties that have been flood damaged. The FPA’s noted that four residential structures and one municipal structure have been damaged due to flood events. The village does not make substantial damage estimates. No properties are currently interested or in the process of mitigation. For mitigation, the village would rely on municipal bonding and grants for funding. The village has a history of log jams causing flooding on Tonawanda Creek.

The following table summarizes the NFIP statistics for the Village of Alexander.





Table 9.4-10. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# SRL Properties	# Policies in the 1% Flood Boundary
Village of Alexander	3	11	\$136,019	1	0	2

Source: FEMA 2018

Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of February 28, 2018.

The total number of repetitive loss properties does not include severe repetitive loss properties

RL Repetitive Loss; SRL Severe Repetitive Loss

### Resources

The Mayor and the Superintendent of Public Works assume the responsibilities of floodplain administration. The FPA noted that low funding presents a barrier to running an effective floodplain management program. However, the FPA stated they feel adequately supported and trained to fulfill their responsibilities. The FPA would consider attending continuing education and/or certification training on floodplain management if it were offered in the county for all local floodplain administrators.

### Compliance History

The Village of Alexander is in good standing in the NFIP. The village has not had a compliance audit or CAV.

### Regulatory

The village’s floodplain management regulations/ordinances meet the minimum Federal and State NFIP regulatory requirements. The FPA noted that there are other local ordinances, plans, and programs that support floodplain management and the meeting of NFIP requirements. The village would attend a seminar on the CRS program if offered locally.

### 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, which is also indicated below.

### Planning

#### Existing Integration

The Village of Alexander’s Watershed/Stream Corridor Management Plan and the Comprehensive Emergency Management Plan are county level plans. The village does not have a Master/Comprehensive Plan, Stormwater Plan, Re-Development Plan, Growth Plan, Economic Development Plan, Open Space Plan, Local Waterfront Revitalization Plan, Continuity of Operations/Continuity of Government Plan, Post-Disaster Recovery Plan, Post-Disaster Redevelopment Plan, or Strategic Recovery Plan.

#### Opportunities for Future Integration

New or updated planning documents could refer to the County Hazard Mitigation Plan and include information on natural hazards. Local planning documents could provide more detail on the specific hazards facing the village.





## Regulatory and Enforcement (Ordinances)

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### Existing Integration

The Village of Alexander follows the State of New York’s building and fire code. Municipal zoning, subdivision regulations, and the site plan review process require developers to take additional actions to mitigate natural hazard risk but do not specifically consider natural hazard risk. The Planning Board and Zoning Board of Appeals are provided with county reviews to guide their decisions with respect to natural hazard risk management.

### Opportunities for Future Integration

During updates to ordinances, the village could consider including natural hazard risk management.

## Operational and Administration

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### Existing Integration

**Planning Board:** The Village of Alexander’s Planning Board is comprised of four board members and a chairperson.

**Zoning Board of Appeals:** The Village of Alexander’s Zoning Board of Appeals is comprised of five board members and a chairperson.

**Hazard Resistant Construction:** The village works to minimize the creation of windborne debris by requiring hazard resistant construction through appropriately designing, manufacturing and installing architectural features using wind resistant design and construction. For winter storms, the village requires utilizing construction practices that can handle heavy snow loads. The village encourages structural retrofits to assure roofs, walls and windows meet minimum wind-load and snow-load design factors. This has proven to greatly reduce damage even with a total lack of code enforcement.

The Village of Alexander does not have a municipal planner, contract planning firm, Planning Board, Zoning Board of Adjustments, or any other Boards or Committees that include functions with respect to managing natural hazard risk. Stormwater Management functions are performed by the Superintendent of the Department of Public Works. The village can contract out for preparation of benefit/cost analysis and mitigation projects grant applications. The village would contract with firms that are capable of performing substantial damage estimates, if such estimates were necessary. The village does not supply the staff with training or continuing professional education supporting natural hazard risk. No staff have job descriptions that specifically include identifying or implementing mitigation projects/actions or other efforts to reduce natural hazard risk. Village staff do participate in building code officials groups that support natural hazard risk reduction and build hazard management capabilities. The village does not have other hazard management programs in place.

### Opportunities for Future Integration

The village could provide training for staff on various natural hazard related topics, such as substantial damage determinations.

## Funding

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### Existing Integration

The municipal operating budget does not have line items for mitigation projects, and the village does not have a capital improvements budget. The village has recently submitted for grant funding with matching funds (25 percent).



The Genesee County Soil and Water Conservation District (SWCD) assisted municipalities with past state grant funding for mitigation-related projects. In 2011, the SWCD secured \$18,641.33 through the NYS Soil & Water Conservation Committee Conservation Project Funds to remove a log jam that was causing flooding in the Village of Alexander. No local funds were matched.

### **Opportunities for Future Integration**

The village could include mitigation projects as line items in the municipal budget as relevant and continue to apply for grant funding to support hazard mitigation.

### **Education and Outreach**

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#### **Existing Integration**

The Village of Alexander does not have any outreach or education programs involving natural hazard risk management.

#### **Opportunities for Future Integration**

The village could develop educational information regarding natural hazard risk management and create outreach programs. The village plans to disclose risks of flood zones to property owners. Both existing and prospective property will be informed if a piece of property is located within the 100-year flood zone. A strategy will be implemented to inform potential property owners, possibly by encouraging home inspectors to provide this information to potential property owners in a pre-purchase home inspection. Also, a large map of flood zones and flood overlay zones could be prominently posted in a public area of the municipal offices. Existing property owners could be informed of mitigation strategies used to lessen the impact of flooding.

### **Sheltering, Evacuation, and Temporary Housing**

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Temporary housing, evacuation routes, and sheltering measures must be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

#### **Temporary and Permanent Housing**

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The Village of Alexander has identified the following site for the placement of temporary housing for residents displaced by a disaster:

- Alexander Recreational Hall: Route 98 Alexander. The site has a capacity of 500. The site does not have a backup generator.

The village has not identified potential sites suitable for relocating houses of the floodplain or building new homes after properties in the floodplain are acquired.

#### **Evacuation and Sheltering Needs**

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The Village of Alexander has identified the following designated emergency shelter:

- Alexander Recreational Hall: Route 98 Alexander. The site has a capacity of 400, does not accommodate pets, is ADA compliant, does not have backup power, and can supply first aid medical services.



The village identified the following evacuation routes:

- Route 20 East or West
- Route 98 North or South

### **9.4.6 Mitigation Strategy and Prioritization**

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

#### **Past Mitigation Initiative Status**

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The following table indicates progress on the community’s mitigation strategy identified in the 2008 Plan. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs, and capabilities are indicated as such in the following table and above in Section 9.4.5 (Capability Assessment).



Table 9.4-11. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2019 HMP or Discontinue 2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate). 3. 3. If discontinue, explain why.
						Cost		
	25. Raise awareness of and enforce existing floodplain regulations. All municipalities in Genesee County currently participate in the National Flood Insurance Program (NFIP) and should therefore have flood regulations.	Flooding	Original problem not identified in the 2008 HMP	Municipalities	Ongoing capability	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing capability
	26. Raise minimum residential elevations required in flood prone areas. New Flood Insurance Rate Maps should indicate the base flood elevation. If new maps are not available, the base flood elevation should be designated by an engineer prior to development.	Flooding	Original problem not identified in the 2008 HMP	Municipalities	In Progress	Cost		1. Include in 2019 HMP
						Level of Protection		2. Update flood damage prevention ordinance to include the state mandated freeboard requirement.
						Damages Avoided; Evidence of Success		3.
	27. Develop a coordinated sandbagging plan between the County Highway Department, County Emergency Management, and select municipalities where the county can help distribute sand in flood emergencies. Municipalities need to inventory and purchase their own sandbags for flood events, but municipal officials would like to have a better sense of how and when the county will help. The Army Corps of Engineers has sandbags that can be used in emergencies but would like each municipality to purchase their own sandbags to better handle situations alone. A clear understanding of sandbagging responsibilities and options is needed, as well as an increase in the number of available sandbags.	Flooding	Original problem not identified in the 2008 HMP	County EMO	No Progress	Cost		1. Include in 2019 HMP
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3.
	28. Assist flood prone homeowners/businesses to relocate out of flood zones. Based on the updated FIRMs, each municipality should	Flooding	Original problem not identified in the 2008 HMP	Municipalities	No progress	Cost		1. Discontinue
						Level of Protection		2.



Section 9.4: Village of Alexander

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps
	identify flood-prone properties and offer to work with the land owners to accomplish the relocation.					Damages Avoided; Evidence of Success		3. Lack of funds
	29. Assist flood prone homeowners/businesses who do not want to relocate out of a designated flood zone with upgrading their properties to make them more flood-resistant.	Flooding	Original problem not identified in the 2008 HMP	Municipalities	No progress	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Lack of funds
	30. Continue participation in the National Flood Insurance Program (NFIP).	Flooding	Original problem not identified in the 2008 HMP	Municipalities	Ongoing capability	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing capability
	31. Disclose risks of flood zones to property owners. Both existing and prospective property owners should be informed if a piece of property is located within the 100-year flood zone. A strategy should be implemented to inform potential property owners, possibly by encouraging home inspectors to provide this information to potential property owners in a pre-purchase home inspection. Also, a large map of flood zones and flood overlay zones could be prominently posted in a public area of the municipal offices. Existing property owners should be informed of mitigation strategies that can be used to lessen the impact of flooding.	Flooding	Original problem not identified in the 2008 HMP	Municipalities	Ongoing capability	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing capability
	37. Encourage the construction of underground utilities and the retrofitting of above ground utilities to underground. Develop a strategy to incrementally bury utilities in existing development on a schedule. Legislate that utilities be buried in new development and develop model ordinances and policies to be used in achieving this goal. Develop creative	Ice Storm, Winter Storm, Severe Storm, Tornado, Utility Failure	Original problem not identified in the 2008 HMP	Municipalities	No Progress	Cost		1. Include in 2019 HMP
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3.







Section 9.4: Village of Alexander

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2019 HMP or Discontinue 2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate). 3. 3. If discontinue, explain why.
						Cost	Damages Avoided; Evidence of Success	
	financing strategies or income-eligible programs to assist with the implementation of this concept.							
	42. Require the use of hazard resistant construction. For wind storms, minimize the creation of windborne debris by appropriately designing, manufacturing, and installing architectural features using wind resistant design and construction. For winter storms, use construction practices that can handle heavy snow loads.	Ice Storm, Winter Storm, Severe Storm, Tornado, Utility Failure	Original problem not identified in the 2008 HMP	Municipalities	Ongoing capability	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing capability- NYSF+BC
	43. Establish a strategy to encourage structural retrofits to assure roofs, walls, and windows meet minimum wind-load and snow-load design factors. This has proven to greatly reduce damage even with a total lack of code enforcement.	Ice Storm, Winter Storm, Severe Storm, Tornado, Utility Failure	Original problem not identified in the 2008 HMP	Municipalities	Ongoing capability	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing capability- NYSF+BC
	51. Develop overlay zoning districts to protect aquifers and surface water supply sources in local development review procedures. Identify and locate such physical characteristics to provide a framework for determining the suitability of a site for a proposed land use. Municipalities might find a template to be helpful in developing such districts.	Water Supply Contamination	Original problem not identified in the 2008 HMP	Municipalities	No Progress	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. No longer a priority. Water supply comes from outside village.
	52. Enforce separation of water wells from manure storage. In a county with significant agricultural areas, manure storage locations could significantly affect local water supplies. All livestock farms should participate in an Agricultural Environmental Management program and use best practices, including good nutrient management.	Water Supply Contamination	Original problem not identified in the 2008 HMP	Municipalities	No Progress	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Not an issue in the village. No manure storage in the village.



### Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Alexander identified the following mitigation projects/activities that were completed but were not identified in the previous mitigation strategy in the 2008 Plan:

- The Genesee County SWCD assisted municipalities with state grant funding in the past for mitigation-related projects. In 2011, the SWCD secured \$18,641.33 through the NYS Soil & Water Conservation Committee Conservation Project Funds to remove a log jam that was causing flooding in the Village of Alexander. No local funds were matched.

### Proposed Hazard Mitigation Initiatives for the Plan Update

The Village of Alexander participated in a mitigation action workshop on June 18, 2018 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 9.4-12 summarizes the comprehensive-range of specific mitigation initiatives the Village of Alexander 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 9.4-13 provides a summary of the prioritization of all proposed mitigation initiatives.



Table 9.4-12. Proposed Hazard Mitigation Initiatives

V. Alexander-1	<b>Project Number</b>	Tonawanda Creek erosion prevention.			<b>Priority</b>	High
	<b>Description of Problem</b>	Erosion along Tonawanda Creek threatens a sewer line at the Wastewater Treatment Facility.			<b>Lead &amp; Support Agencies</b>	Highway Department, Village of Alexander Wastewater Treatment Facility
	<b>Description of Solution</b>	The village will install an additional 125 feet of Ready Rock to the existing 175 feet section. Areas of the existing 175 section that are degraded will be replaced or repaired.			<b>Estimated Benefits</b>	Protection of Wastewater Treatment Facility sewer line. Prevention of erosion along Tonawanda Creek.
	<b>Hazard(s) Mitigated</b>	Flood, Severe Storm	<b>Estimated Timeline</b>	Within 1 year	<b>Estimated Cost</b>	\$300,000
	<b>Mitigation Category</b>	SIP	<b>Critical Facility</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>Potential Funding Sources</b>	HMGP, PDM
<b>CRS Category</b>	PP	<b>EHP Issues</b>	Yes, permitting to install Ready Rock along Creek bank.	<b>Goals Met</b>	2	
V. Alexander-2	<b>Project Number</b>	Replace stormwater pipe under Route 98.			<b>Priority</b>	High
	<b>Description of Problem</b>	Route 98 has an undersized stormwater pipe (near Route 20/Broadway and Railroad) that runs under the roadway. The undersized pipe results in flooding.			<b>Lead &amp; Support Agencies</b>	Highway Department, NYS DOT
	<b>Description of Solution</b>	Coordinate efforts with the NYS DOT to replace the existing 8" stormwater pipe under Route 98 with a 12" pipe.			<b>Estimated Benefits</b>	Reduction in stormwater flooding in area next to Route 98.
	<b>Hazard(s) Mitigated</b>	Flood, Severe Storm	<b>Estimated Timeline</b>	Within 6 months	<b>Estimated Cost</b>	\$150,000
	<b>Mitigation Category</b>	SIP	<b>Critical Facility</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>Potential Funding Sources</b>	Municipal budget, bonds, NYS DOT, HMGP, PDM
<b>CRS Category</b>	SP	<b>EHP Issues</b>	None	<b>Goals Met</b>	2	
V. Alexander-3 (former 26)	<b>Project Number</b>	Update Flood Damage Prevention Ordinance.			<b>Priority</b>	High
	<b>Description of Problem</b>	The village's flood damage prevention ordinance needs to be updated to include the 2' freeboard requirement.			<b>Lead &amp; Support Agencies</b>	Village floodplain administrator
	<b>Description of Solution</b>	The village will update the flood damage prevention ordinance to include the NYS 2' freeboard requirement			<b>Estimated Benefits</b>	Buildings built to state required standards.
	<b>Hazard(s) Mitigated</b>	Flood	<b>Estimated Timeline</b>	Within 6 months	<b>Estimated Cost</b>	<\$100
	<b>Mitigation Category</b>	LPR	<b>Critical Facility</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>Potential Funding Sources</b>	Municipal budget
<b>CRS Category</b>	PR	<b>EHP Issues</b>	None	<b>Goals Met</b>	1, 2	



<b>Project Number</b>	<b>Project Name</b>	Develop a coordinated sandbagging plan between the County Highway Department, County Emergency Management, and Village of Alexander			<b>Priority</b>	High
V. Alexander-4	<b>Description of Problem</b>	Municipalities need to inventory and purchase their own sandbags for flood events but municipal officials would like to have a better sense of how and when the county will help. The Army Corps of Engineers has sandbags that can be used in emergencies but would like each municipality to purchase their own sandbags to better handle situations alone.			<b>Lead &amp; Support Agencies</b>	County, USACE, Village Board.
	<b>Description of Solution</b>	A clear understanding of sandbagging responsibilities and options will be developed in a plan.			<b>Estimated Benefits</b>	Plan in place for sandbagging, time saved developing plan for sandbagging. Better prepared for flooding events.
	<b>Hazard(s) Mitigated</b>	Flood	<b>Estimated Timeline</b>	Within 1 year	<b>Estimated Cost</b>	<\$100
	<b>Mitigation Category</b>	LPR	<b>Critical Facility</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>Potential Funding Sources</b>	Municipal budget
	<b>CRS Category</b>	ES	<b>EHP Issues</b>	None	<b>Goals Met</b>	1, 2
<b>Project Number</b>	<b>Project Name</b>	Encourage the construction of underground utilities and the retrofitting of above ground utilities to underground.			<b>Priority</b>	Medium
V. Alexander-5	<b>Description of Problem</b>	Above ground utilities are prone to failure during storm events.			<b>Lead &amp; Support Agencies</b>	Village Board
	<b>Description of Solution</b>	Develop a strategy to incrementally bury utilities in existing development on a schedule. Legislate that utilities be buried in new development, and develop model ordinances and policies to be used in achieving this goal. Develop creative financing strategies or income-eligible programs to assist with the implementation of this concept.			<b>Estimated Benefits</b>	Power is maintained during severe weather events
	<b>Hazard(s) Mitigated</b>	Winter storm, severe storm, tornado, utility failure	<b>Estimated Timeline</b>	Within 6 months	<b>Estimated Cost</b>	<\$100
	<b>Mitigation Category</b>	LPR	<b>Critical Facility</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>Potential Funding Sources</b>	Village budget
	<b>CRS Category</b>	PR	<b>EHP Issues</b>	None	<b>Goals Met</b>	1, 2
<b>Project Number</b>	<b>Project Name</b>	Protect the Town of Alexander Highway Garage to the 500-year flood level.			<b>Priority</b>	Medium
V. Alexander-6	<b>Description of Problem</b>	The facility is in the 100-year floodplain. The village does not have jurisdiction over the facility.			<b>Lead &amp; Support Agencies</b>	Village FPA
	<b>Description of Solution</b>	The village will contact the Town of Alexander to discuss mitigation options to protect the facility to the 500-year flood level. The Town has purchased additional land out of the floodplain and may relocate the facility.			<b>Estimated Benefits</b>	Highway Garage is protected to the 500 year flood level.
	<b>Hazard(s) Mitigated</b>	Flood	<b>Estimated Timeline</b>	Within 6 months	<b>Estimated Cost</b>	<\$100
	<b>Mitigation Category</b>	EAP	<b>Critical Facility</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>Potential Funding Sources</b>	Municipal budget
	<b>CRS Category</b>	PI	<b>EHP Issues</b>	None	<b>Goals Met</b>	1, 2





Notes:

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

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

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

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

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

Critical Facility:


- Yes  - Critical Facility located in 1% floodplain





Table 9.4-13. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community	Total	High / Medium / Low
V. Alexander-1	Tonawanda Creek erosion prevention	0	1	1	1	1	1	0	1	1	1	1	1	1	1	12	High
V. Alexander-2	Replace Stormwater pipe under Route 98	0	1	1	1	1	0	1	1	1	1	1	1	1	1	12	High
V. Alexander-3 (former 26)	Update Flood Damage Prevention Ordinance	1	1	1	1	0	1	1	1	0	0	0	1	0	1	9	High
V. Alexander-4 (former 27)	Develop a coordinated sandbagging plan between the County Highway Department, County Emergency Management, and Village of Alexander	1	1	1	1	1	0	1	1	1	1	0	1	1	1	12	High
V. Alexander-5 (former 37)	Encourage the construction of underground utilities and the retrofitting of above ground utilities to underground.	0	1	0	0	0	0	0	1	1	1	0	1	0	1	6	Medium
V. Alexander-6	Protect the Alexander Highway Garage to the 500-year flood level.	0	1	0	0	1	0	1	1	1	1	0	0	1	1	8	Medium

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



#### **9.4.7 Future Needs To Better Understand Risk/Vulnerability**

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None at this time.

#### **9.4.8 Staff and Local Stakeholder Involvement in Annex Development**

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The Village of Alexander followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including the Mayor and Department of Public Works. The Mayor represented the community on the Genesee County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix B (Meeting Documentation).

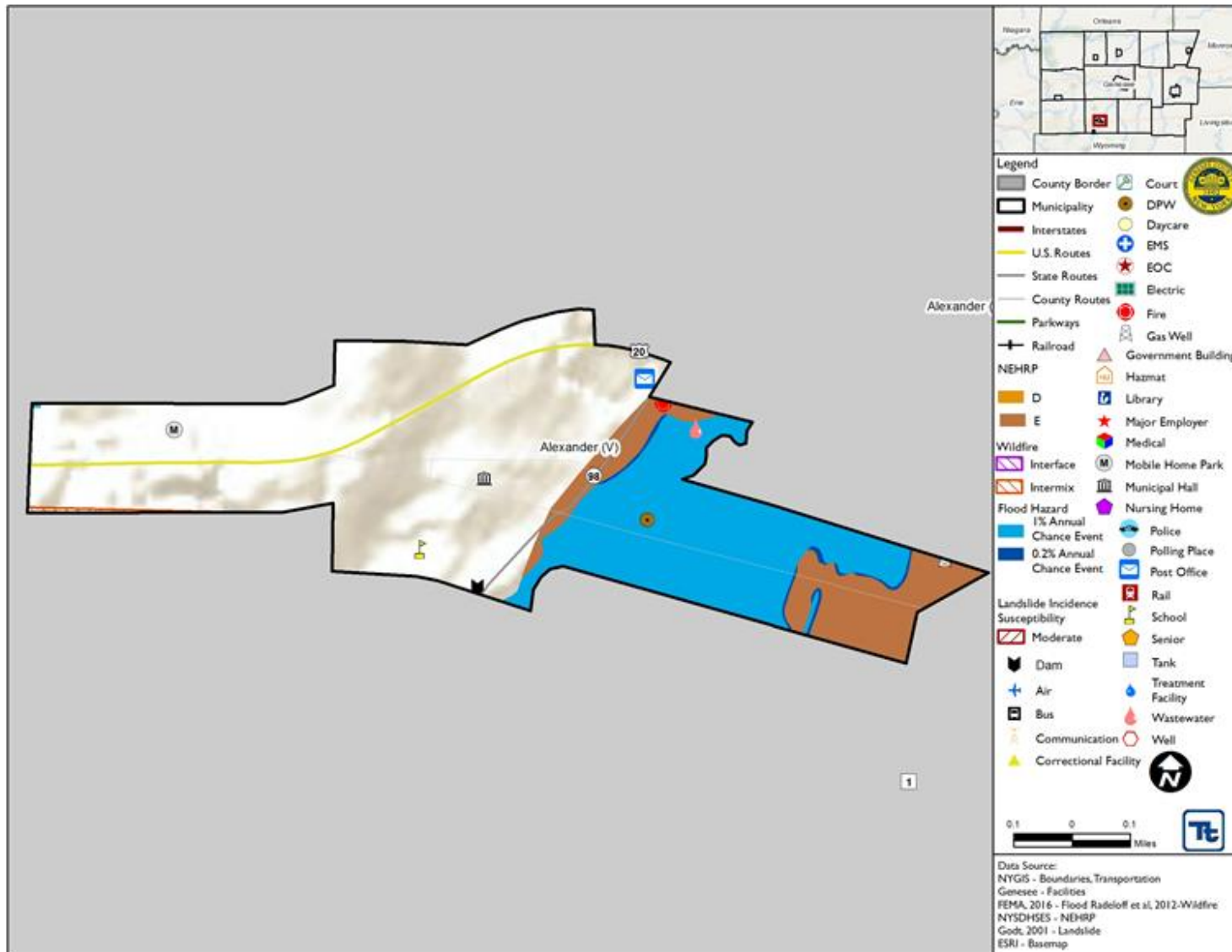
#### **9.4.9 Hazard Area Extent and Location**

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Hazard area extent and location maps were generated for the Village of Alexander 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 adequate for planning purposes. Maps only have been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Village of Alexander has significant exposure. A map of the Village of Alexander hazard area extent and location is provided on the following page. This map indicates the location of the regulatory floodplain, as well as identified critical facilities within the municipality.



Figure 9.4-1. Village of Alexander Hazard Area Extent and Location Map







Village of Alexander Action Worksheet			
<b>Project Name:</b>	Tonawanda Creek erosion prevention.		
<b>Project Number:</b>	V. Alexander-1		
<b>Risk / Vulnerability</b>			
<b>Hazard(s) of Concern:</b>	Flood, Severe Storm		
<b>Description of the Problem:</b>	The Village of Alexander's Wastewater Treatment Facility is located along Tonawanda Creek. The facility is protected to the 500-year flood elevation. However, one of the sewer lines running along the creek is being threatened by erosion. Erosion along the creek is a historical issue. In the 1980's, the village installed a 175 feet section of Readi-Rock, an engineered retaining wall. At the end of this section, erosion has continued. This area is where the sewer line is threatened. The 175 feet section of Readi-Rock also has broken down over time and needs to be repaired. If erosion continues, the sewer line may be exposed and rupture of the line might occur.		
<b>Action or Project Intended for Implementation</b>			
<b>Description of the Solution:</b>	The village will install an additional 125 feet of Readi-Rock to the existing 175 feet section. Areas of the existing 175 section that are degraded will be replaced or repaired.		
<b>Is this project related to a Critical Facility?</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
<b>Is this project related to a Critical Facility located within the 100-year floodplain?</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Already protected to the 500-year flood elevation.
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
<b>Level of Protection:</b>	300 feet of Tonawanda Creek bank protected from erosion.	<b>Estimated Benefits (losses avoided):</b>	Protection of Wastewater Treatment Facility sewer line. Prevention of erosion along Tonawanda Creek.
<b>Useful Life:</b>	50 years	<b>Goals Met:</b>	2
<b>Estimated Cost:</b>	\$300,000	<b>Mitigation Action Type:</b>	Structural and Infrastructure Project.
<b>Plan for Implementation</b>			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	Within 1 year
<b>Estimated Time Required for Project Implementation:</b>	1 year	<b>Potential Funding Sources:</b>	HMGP, PDM
<b>Responsible Organization:</b>	Highway Department, Village of Alexander Wastewater Treatment Facility	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	
<b>Three Alternatives Considered (including No Action)</b>			
<b>Alternatives:</b>	<b>Action</b>	<b>Estimated Cost</b>	<b>Evaluation</b>
	No Action	\$0	Problem continues.
	Add to existing Ready Rock without repair	\$280,000	The existing Ready Rock will continue to degrade and may leave sewer line vulnerable
	Relocate sewer line	N/A	Not technically feasible on site. There is not enough space to relocate the line away from the creek.
<b>Progress Report (for plan maintenance)</b>			
<b>Date of Status Report:</b>			
<b>Report of Progress:</b>			
<b>Update Evaluation of the Problem and/or Solution:</b>			



Action Worksheet		
<b>Project Name:</b>	Tonawanda Creek erosion prevention	
<b>Project Number:</b>	V. Alexander-1	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	The project will protect the Village of Alexander Wastewater Treatment Plant sewer line
Cost-Effectiveness	1	
Technical	1	The village has previously completed the project on a smaller scale.
Political	1	
Legal	1	The village has the legal authority to complete the project.
Fiscal	0	The project will require grant funding assistance.
Environmental	1	The project will reduce the likelihood of sewage entering Tonawanda Creek
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	1	
Agency Champion	1	Highway Department, Village of Alexander Wastewater Treatment Facility
Other Community Objectives	1	
<b>Total</b>	12	
<b>Priority (High/Med/Low)</b>	High	



Village of Alexander Action Worksheet			
<b>Project Name:</b>	Replace stormwater pipe under Route 98.		
<b>Project Number:</b>	V. Alexander-2		
<b>Risk / Vulnerability</b>			
<b>Hazard(s) of Concern:</b>	Flood, Severe Storm		
<b>Description of the Problem:</b>	Route 98 has an undersized stormwater pipe (near Route 20/Broadway and Railroad) that runs under the roadway. The undersized pipe results in flooding. The higher elevation side of the roadway includes stormwater components. The stormwater pipe flows into Tonawanda Creek. Work on this stormwater pipe would require coordination with NYS DOT.		
<b>Action or Project Intended for Implementation</b>			
<b>Description of the Solution:</b>	The village will coordinate efforts with the NYS DOT to replace the existing 8" stormwater pipe under Route 98 with a 12" pipe.		
<b>Is this project related to a Critical Facility?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
<b>Is this project related to a Critical Facility located within the 100-year floodplain?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
<b>Level of Protection:</b>	Increase size of pipe from 8" to 12"	<b>Estimated Benefits (losses avoided):</b>	Reduction in stormwater flooding in area next to Route 98.
<b>Useful Life:</b>	30 years	<b>Goals Met:</b>	2
<b>Estimated Cost:</b>	\$150,000	<b>Mitigation Action Type:</b>	Structure and Infrastructure Project
<b>Plan for Implementation</b>			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	Within 2 years
<b>Estimated Time Required for Project Implementation:</b>	1 month	<b>Potential Funding Sources:</b>	Municipal budget, NYS DOT, HMGP
<b>Responsible Organization:</b>	Highway Department, NYS DOT	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	
<b>Three Alternatives Considered (including No Action)</b>			
<b>Alternatives:</b>	<b>Action</b>	<b>Estimated Cost</b>	<b>Evaluation</b>
	No Action	\$0	Problem continues.
	Re-route stormwater flow	N/A	Stormwater components not able to be rerouted.
	Build detention pond	\$150,000	Not enough room for construction
<b>Progress Report (for plan maintenance)</b>			
<b>Date of Status Report:</b>			
<b>Report of Progress:</b>			
<b>Update Evaluation of the Problem and/or Solution:</b>			



Action Worksheet		
<b>Project Name:</b>	Replace Stormwater pipe under Route 98	
<b>Project Number:</b>	V. Alexander-2	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Properties next to Route 98 will have stormwater flooding risk reduced.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	0	The project requires coordination with NYS DOT to conduct work under Route 98
Fiscal	1	The village could fiscally support the project if grant funding is not available through bond.
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	1	Project could be completed over several months
Agency Champion	1	Highway Department
Other Community Objectives	1	Stormwater management
<b>Total</b>	12	
<b>Priority (High/Med/Low)</b>	High	