

## 9.14 TOWN OF LISLE

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

### A.) HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact	Alternate Point of Contact
Name: Mitch Quail Sr., Highway Superintendent Address: 9256 State Route 79, Lisle, NY 13797 Phone Number: 607-849-6468 Fax Number: 607-849-4938 Email address:	Name: Gary Holmes, Engineer Address: Phone Number: 607-722-1100 Email address:
Alternate Point of Contact	Alternate Point of Contact
Name: Ed Gehm, Town Supervisor Address: 9256 State Route 79, Lisle, NY 13797 Phone Number: 607-849-6468 Fax Number: 607-849-4938 Email address:	Name: Skip Keep, Fire Department Address : Phone Number: Email address:

### B.) PROFILE

#### Population

2,707 (estimated 2010 U.S. Census)

#### Location

The Town of Lisle is located in the northwestern part of Broome County, NY. The town is bordered to the north by Cortland County and to the west by Tioga County. The Tioughnioga River passes through the town and the Whitney Point Lake lies just east of the town line. According to the U.S. Census Bureau, the town has a total area of 47.0 square miles, of which, 46.9 square miles is land and 0.1 square miles is water.

#### Brief History

The Town of Lisle was first settled around 1791 and was formed in 1801 from the Town of Union. In 1831, part of Lisle was used to create the Towns of Baker, Nanticoke and Triangle. The flood of 1935 destroyed a large part of the town and discoveries from that flood are displayed annually at the town's Maple Festival. The Whitney Point dam was constructed as a result of the flood and is 95 feet above the streambed to control water flow and prevent major flooding.

#### Governing Body Format

Home rule is strong in New York State and thus, each town and village has its own governing body. Towns are made up of a Town Board and Supervisor. Villages generally have a Supervisor, Clerk, and Council. Along with town and village roads, any public water and sewer systems are operated by the local municipality, though they may cooperate with County departments. Each municipality has charge over its own planning and zoning and uses the County personnel as a resource.

## Growth/Development Trends

The jurisdiction noted that there is no major residential/commercial development or major infrastructure development that has been identified for the next five (5) years in the municipality.

### C.) NATURAL HAZARD EVENT HISTORY SINCE 2006

Broome County has a history of natural hazard events as detailed in Volume I, Section 5 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events affecting the County and its municipalities. Below is presented a summary of events dating from the year 2006 to indicate the range and impact of natural hazard events in this community. Specific damages have been indicated if available from reference or local sources. For details of events prior to 2006, refer to Volume I, Section 5 of this plan.

Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Severe Storms and Flooding	DR 1650	Yes - IA, PA	June 26 — July 10, 2006	\$48,190.91
Severe Storms and Flooding	DR 1670	Yes - IA, PA	November 16-17, 2006	\$42,865.16
April Nor'easter	DR 1692	No	April 14 - 18, 2007	
Severe Storms and Flooding	DR 1710	No	June 19, 2007	
Severe Winter Storm	EM 3299 DR 1827	No	December 11-31, 2008	
Severe Storms and Flooding	DR 1857	No	August 8-10, 2009	
Severe Winter Storm and Snowstorm	DR 1957	No	December 26-27, 2011	
Severe Storms, Flooding, Tornado and Straight Line Winds	DR 1993	Yes - PA	April 26 — May 8, 2011	\$40,487.38
Hurricane Irene	EM 3328 DR 4020	Yes - IA, PA	August 26 — September 5, 2011	None
Remnants of Tropical Storm Lee	EM 3341 DR 4031	Yes - IA, PA	September 7-11, 2011	\$99,496.33

Note: N/A = Not applicable

**D.) NATURAL 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>
Flood	1% Annual Chance: \$2,064,310 0.2% Annual Chance: \$4,123,265	Frequent	54	High
Severe Winter Storm	1% of GBS: \$2,430,605 5% of GBS: \$12,153,023	Frequent	54	High
Severe Storm	100-Year MRP: \$0 500-Year MRP: \$36,837 Annualized Loss: \$578	Frequent	54	High
Drought	Not available	Frequent	24	Low
Extreme Temperature	Not available	Frequent	24	Low
Earthquake	500-Year MRP: \$1,070,871 2,500-Year MRP: \$9,344,426 Annualized Loss: \$14,393	Occasional	6	Low

- a. Building damage ratio estimates based on FEMA 386-2 (August 2001)
- b. 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. The valuation of general building stock and loss estimates was based on custom inventory for Broome County.
- d. Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the value of contents.
- e. Loss estimates for the flood and earthquake hazards represent both structure and contents.
- f. The HAZUS-MH earthquake model results are reported by Census Tract.

**E.) CAPABILITY ASSESSMENT**

This section identifies the following capabilities of the local jurisdiction:

- Legal and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community resiliency
- Community political capability
- Community classification.

The town indicates that it has moderate planning, regulatory, fiscal, community resiliency, and community political capability; high administrative and technical capability; with a moderately willing political capability to enact policies or programs to reduce hazard vulnerabilities in the community.

**E.1) Legal and Regulatory Capability**

Regulatory Tools (Codes, Ordinances., Plans)	Do you have this? (Y or N)	Enforcement Authority	Code Citation (Section, Paragraph, Page Number, Date of adoption)
1) Building Code	Y	Local – Shawn Oliver, Town of Lisle	#1 – 2006 12-14-2006 1-12-2007
2) Zoning Ordinance	Y	Local	#1 – 2006 12-14-2006 1-12-2007
3) Subdivision Ordinance	N	Local	N/A
4) NFIP Flood Damage Prevention Ordinance	Under Development	Local	None.
4a) Cumulative Substantial Damages	N	Local	None.
4b) Freeboard	N	Local	None.
5) Growth Management	N	Local Supervisor	-
6) Floodplain Management / Basin Plan	N	Army Corps of Engineers	Under development
7) Stormwater Management Plan/Ordinance	N	Broome County Emergency Management	N/A
8) Comprehensive Plan / Master Plan/ General Plan	N	Broome County Emergency Management	N/A
9) Capital Improvements Plan	Under Development	Chips	State
10) Site Plan Review Requirements	Y	Local Building Inspector	Shawn Olive
11) Open Space Plan	N	Local or County	Local
12) Stream Corridor Management Plan	Under Development	USACE	USDA NRCS BC Soil & Water
13) Watershed Management or Protection Plan	Y	Broome County, Town of Lisle, Lisle Fire Department	Nanticoke Creek Site GC Dam
14) Economic Development Plan	Y	County	
15) Comprehensive Emergency Management Plan	Y	Broome County	County Plan
16) Emergency Response Plan	Y- Under Development	Lisle Fire Department, Broome County HazMat	Updated 11-15-12
17) Post Disaster Recovery Plan	Under Development	Local Highway Department	As needed.
18) Post Disaster Recovery Ordinance	N	Local	
19) Real Estate Disclosure Requirement	N	Broome County	State Requirement

Regulatory Tools (Codes, Ordinances., Plans)	Do you have this? (Y or N)	Enforcement Authority	Code Citation (Section, Paragraph, Page Number, Date of adoption)
20) Other [Special Purpose Ordinances (i.e., critical or sensitive areas)]	N	Local or County	N

**E.2) Administrative and Technical Capability**

Staff/ Personnel Resources	Available (Y or N)	Department/ Agency/ Position
1) Planner(s) or Engineer(s) with knowledge of land development and land management practices	Y	Gary Holms
2) Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Gary Holms
3) Planners or engineers with an understanding of natural hazards	Y	Gary Holms
4) NFIP Floodplain Administrator	Y	USACE
5) Surveyor(s)	Y	USACE
6) Personnel skilled or trained in "GIS" applications	N	
7) Scientist familiar with natural hazards	N	
8) Emergency Manager	Y	Fire Department
9) Grant Writer(s)	Y	Fire Department – Joe Kellicut
10) Staff with expertise or training in benefit/cost analysis	Y	Gary Holmes/Engineer

**E.3) Fiscal Capability**

Financial Resources	Accessible or Eligible to use (Yes/No/Don't know)
1) Community Development Block Grants (CDBG)	Y – Thoma
2) Capital Improvements Project Funding	Y - Chips
3) Authority to Levy Taxes for specific purposes	Y
4) User fees for water, sewer, gas or electric service	N
5) Impact Fees for homebuyers or developers of new development/homes	N
6) Incur debt through general obligation bonds	N
7) Incur debt through special tax bonds	N
8) Incur debt through private activity bonds	N
9) Withhold public expenditures in hazard-prone areas	Unknown
10) State mitigation grant programs (e.g. NYSDEC, NYCDEP)	N
11) Other	

#### E.4) Community Classifications

Program	Classification	Date Classified
Community Rating System (CRS)	10	
Building Code Effectiveness Grading Schedule (BCEGS)	-	
Public Protection	-	
Storm Ready	-	
Firewise	-	

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

The classifications listed above relate to the community's effectiveness in providing services that may impact its vulnerability to the natural 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 one (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
- The ISO Mitigation online ISO's Public Protection website at <http://www.isomitigation.com/ppc/0000/ppc0001.html>
- The National Weather Service Storm Ready website at <http://www.weather.gov/stormready/howto.htm>
- The National Firewise Communities website at <http://firewise.org/>

## F. MITIGATION STRATEGY

### F.1) Past Mitigation Actions/Status

The jurisdiction reported that the installation of bigger pipes was the only mitigation project/activity that was completed, planned, or ongoing in the community.

The progress of mitigation actions from the 2007 Hazards Mitigation plan is indicated in Section F.3. Actions that are in not yet complete or are ongoing have been carried over to this plan update.

### F.2) Hazard Vulnerabilities Identified

It is estimated that in the Town of Lisle, 1,378 residents live within the 1% annual chance flood area (NFIP Special Flood Hazard Area). Of the municipality's total land area, 4.5% is located within the 1% annual chance flood area. \$15,279,907 (3.5%) of the municipality's general building stock replacement cost value (structure and contents) is located within the 1% annual chance flood area.

There are 11 NFIP policies in the community and there are 0 policies located within the 1% annual chance flood area. FEMA has identified 0 Repetitive Loss (RL) including 0 Severe Repetitive Loss (SRL) properties in the municipality.

Further information regarding the community's participation in the NFIP is provided in the table below.

### NFIP Summary

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 1% Boundary (3)	# Policies in 0.2% Boundary (3)	# Policies Outside the 0.2% Flood Hazard (3)
Lisle (T)	11	3	\$11,826	0	0	0	0	11

Source:

- (1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 2, in April 2012 using the "Comm\_Name". These statistics are current as of January 31, 2012. Please note the total number of repetitive loss properties includes the severe repetitive loss properties.
- (2) Total building and content losses from the claims file provided by FEMA Region 2 (current as of January 31, 2012).
- (3) The policy locations used are based on the latitude and longitude provided by FEMA Region 2.

HAZUS-MH estimates that for a 1% annual chance flood, \$20,64,310 (0.5%) of the municipality's general building stock replacement cost value (structure and contents) will be damaged, 156 people may be displaced, 23 people may seek short-term sheltering, and an estimated 535 tons of debris could be generated. HAZUS-MH estimates the following damage and loss of use to critical facilities in the community as a result of a 1% annual chance flood event:

Name	Municipality	Type	Exposure		Potential Loss from 1% Flood Event			Potential Loss from 0.2% Flood Event		
			1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	Days to 100-Percent <sup>(1)</sup>	Percent Structure Damage	Percent Content Damage	Days to 100-Percent <sup>(1)</sup>
Killawog Post Office	Lisle (T)	Post Office	X	X	3.5	21.2	-	11.5	69.6	NA
WELL #1	Lisle (T)	Potable Water	X	X	23.7		-	40.0	-	NA

Source: HAZUS-MH 2.1

Note: NA = Not available; T = Town

= No loss calculated by HAZUS-MH 2.1

X = Facility located within the DFIRM boundary.

(1) HAZUS-MH 2.1 provides a general indication of the maximum restoration time for 100% operations. Clearly, a great deal of effort is needed to quickly restore essential facilities to full functionality; therefore this will be an indication of the maximum downtime (HAZUS-MH 2.1 User Manual).

Please note in some cases, a facility may be located in the DFIRM flood hazard boundary; however HAZUS did not calculate potential loss. This may be because the depth of flooding does not amount to any damages to the structure according to the depth damage function used in HAZUS for that facility type.

Please refer to the Hazard Profiles for additional vulnerability information relevant to this jurisdiction.

## F.3) PROPOSED HAZARD MITIGATION INITIATIVES

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	2007 Action Status
1.	Continue training in the National Incident Command System (ICS), under the National Incident Management System (NIMS).	N/A	All	4-1 4-3 4-8	Lisle Fire Department	High	Low	Municipal Budget	On-going	Medium	ES	Completed
2.	Maintain backup portable generator for Town of Lisle DPW facility.	Existing	All	1-1 4-3 4-5	Town DPW	High	Low	Municipal Budget	On-going	High	ES	Ongoing
3.	Assist in the update of flood plain (FIRM) maps – Jurisdictional Level. Specific assistance can be provided in the area of attending map update meetings held by FEMA, NYDEC and USGS; and identification of flood-prone areas outside of currently designated areas	N/A	Flood	1-1 1-3 2-3	Town Planning Board	High	Medium	Municipal Budget	On-going	Medium	PR	Ongoing
4.	Continue participation in the National Flood Insurance Program (NFIP).	N/A	Flood	1-2 1-7 2-1	Town Planning Board	High	Low	Municipal Budget	On-going	High	PR	Ongoing
5.	Evaluate the replacement and/or upgrading of culverts on Popple Hill Road and Oregon Hill Road.	Existing	Flood	1-3 1-11	Town Highway Dept.	Medium	Medium	Grant opportunities Municipal Budget	Short Term	Medium	NR	Ongoing
6.	Evaluate the level of protection of levee and maintenance/repair procedures.	NA	All	1-1 1-5 1-6	Village Council/Board, Village Clerk/Army Corps.	Low	Low	Municipal Budget	Short	High	PP, SP	New
7	Replace Walker Avenue Bridge, which was originally built in 1948 with a 20-ton weight limit and is in bad shape.	Existing	Flood	1-1 1-11	Town DPW	High	High	Federal grant opportunities/CHIPS?	Short	High	SP	New
Flood-1	Purchase, relocate, or elevate structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority.											



Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	2007 Action Status
	<p>Phase 1: Identify appropriate candidates based on cost-effectiveness versus retrofitting.</p> <p>Phase 2: Where relocation is determined to be a viable option, work with property owners toward implementation of that action based on available funding from FEMA and local match availability</p>											
	Please see above.	Existing	Flood, Severe Storm	1-1 1-2 2-1 2-2 3-2	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from BCPD, NYSOEM, FEMA	High	High	FEMA Mitigation Grants	Long Term DOF	Medium	PP	New
	<p>Maintain compliance with and good-standing in the NFIP including adoption and enforcement of floodplain management requirements (e.g. regulating all new and substantially improved construction in Special Hazard Flood Areas), floodplain identification and mapping, and flood insurance outreach to the community. Further, continue to meet and/or exceed the minimum NFIP standards and criteria through the following NFIP-related continued compliance actions identified as Initiatives (below).</p>											
Flood2	Please see above.	N/A	Flood, Severe Storm	1-1 1-2 1-4 1-5 1-6 1-7 2-1 2-2 3-2	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from NYSOEM, FEMA	High	Low-Medium	Municipal Budget	On-going	High	PR, PE	New
	<p>Conduct and facilitate community and public education and outreach for residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction:</p> <ul style="list-style-type: none"> <li>Provide and maintain links to the HMP website, and regularly post notices on the County/municipal homepage(s) referencing the HMP webpages.</li> <li>Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation.</li> <li>Use email notification systems and newsletters to better educate the public on flood insurance, the availability of mitigation grant funding, and personal natural hazard risk reduction measures.</li> </ul> <p>Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding.</p>											
Flood-3	Please see above.	N/A	All Hazards, Or Flood	1-2 1-7 1-9 2-1 2-2 3-2 3-4	Municipality with support from Planning Partners, BCPD, NYSOEM, FEMA	Medium	Medium	Municipal Budget, HMA programs with local or county match	Short Term		PE	New

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	2007 Action Status
				4-6								
Flood-4	Obtain and archive elevation certificates	N/A	Flood, Severe Storm	1-1 1-2 1-4 1-5 4-1	NFIP Floodplain Administrator	Medium	Low	Municipal Budget	On-going	High	PR	New
Flood-5	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0	New and Existing	All Hazards	All Goals and Objectives	Municipality with support from Planning Partners, BCPD, NYSOEM, FEMA	High	Low – High (for 5 year update)	Municipal Budget, FEMA planning grants	On-going	High	PR	New
Flood-6	Support ongoing updates of County Comprehensive Emergency Management Plan	New and Existing	All Hazards	1-1 1-10 4-2	Municipality	Low	Low	Municipal Budget	On-going	High	PR	New
Flood-7	Create/Enhance/Maintain Mutual Aid agreements with neighboring communities for continuity of operations	N/A	All Hazards	3-1 3-3 4-5	Municipality with support from County, NYSOEM, FEMA and surrounding communities	Medium	Low	Municipal Budget	Short Term	High	PR, ES	New
Flood-8	Identify and develop agreements with entities that can provide support with FEMA/SOEM paperwork after disasters; qualified damage assessment personnel – Improve post-disaster capabilities – damage assessment; FEMA/SOEM paperwork compilation, submissions, record-keeping	N/A	All Hazards	1-4 1-5 2-2 3-1 4-1	Municipality with support from County, NYSOEM and FEMA	Medium	Medium	Municipal Budget	Short Term	Medium	PR, ES	New
Flood-9	Work with regional agencies (i.e. County and SOEM) to help develop damage assessment capabilities at the local level through such things as training	N/A	All Hazards	1-5 2-2 2-3 3-1 4-1 4-3	Municipality with support from County, NYSOEM and FEMA	Medium	Medium	Municipal Budget, FEMA HMA and HLS grant programs	Short-Long Term DOF	Medium	PR	New



Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	2007 Action Status
	programs, certification of qualified individuals (e.g. code officials, floodplain managers, engineers).											
Flood-10	Participate in local, county and/or state level projects and programs to develop improved structure and facility inventories and hazard datasets to support enhanced risk assessment efforts. Such programs may include developing a detailed inventory of critical facilities based upon FEMA's Comprehensive Data Management System (CDMS) which could be used for various planning and emergency management purposes including: <ul style="list-style-type: none"> <li>Support the performance of enhanced risk and vulnerability assessments for hazards of concern.</li> <li>Support state, county and local planning efforts including mitigation (including updates to the State HMP), comprehensive emergency management, debris management, and land use.</li> </ul> Improved structural and facility inventories could incorporate flood, wind and seismic-specific parameters (e.g. first floor elevations, roof types, structure types based on FEMA-154 "Rapid Visual Screening of Buildings for Potential Seismic Hazards" methodologies). It is recognized that these programs will need to be initiated and supported at the County and/or State level, and will require training, tools and funding provided at the county, state and/or federal level.											
	Please see above.	N/A	All Hazards	1-1 1-3 1-8 2-2 3-1 4-1	Hazard Mitigation Plan Coordinator	Medium-High	Medium-High	FEMA Mitigation Grant Programs with local match	Long Term DOF	Medium	PR	New
Severe Storm-1	Enhance the County/community resilience to severe storms (incl. severe winter storms) by joining the NOAA "Storm Ready" program and supporting communities in joining the program. "StormReady" communities are better prepared to save lives from the onslaught of severe weather through advanced planning, education and awareness. Participation in the NOAA "StormReady" program shall include providing information on the "StormReady" program, facilitating public outreach and awareness programs, and supporting community storm risk reduction activities as appropriate. Specific actions addressed by "StormReady" participation include establishing a 24 hour Warning Point, increase number of ways EOC receives NWS warnings, increase number of ways to disseminate warnings, monitoring hydrometeorological data, providing annual weather safety talks, train weather spotters, create a formal hazardous weather plan, host annual visits by NWS to communities, etc.											
	Please see above.	N/A	Severe Storm	1-1 1-2 2-1 2-2 2-6	Municipality with support from County, NYSOEM and FEMA	Medium	Low	Municipal Budget	Short Term DOF	Medium	PE	New
Earthquake-1	Obtain training and conduct rapid screening assessment of critical facilities for earthquake vulnerability.	N/A	Earthquake	1-1 4-2 4-3	Municipal Emergency Management, Fire, PD with support from County, NYSOEM	Medium	Medium	Municipal Budget, State and County grant opportunities	Long Term DOF	Low	PR, ES	New
Earthquake-2	Develop a post-earthquake management plan to address building safety inspections, gas leaks, and other	N/A	Earthquake	1-11 4-5 4-6	Municipal Emergency Management, Fire, PD with support from	Medium	Medium	Municipal Budget, State and County grant opportunities	Long Term DOF	Low	ES	New

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	2007 Action Status
	elements to protect public safety.				County, NYSOEM							

Note some of the identified mitigation 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.

**Notes:**

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

**Acronyms**

ARC	American Red Cross
BCDSS	Broome County Department of Social Services
BCOES	Broome County Office of Emergency Services
BCPD	Broome County Planning Department and Economic Development
BCSWCD	Broome County Soil and Water Conservation District
DPW	Department of Public Works
FEMA	Federal Emergency Management Agency
NFIP	National Flood Insurance Program
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	New York State Department of Transportation
NYSEG	New York State Electric and Gas
NYSFSMA	New York State Floodplain and Stormwater Managers Association
NYSOEM	New York State Office of Emergency Management
USACE	United States Army Corp of Engineers
USGS	United States Geological Survey

**Costs:**

Where actual project costs have been reasonably estimated:

Low = < \$10,000

Medium = \$10,000 to \$100,000

High = > \$100,000

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

Low = Possible to fund under existing budget. Project is part of, or can be part of an existing on-going program.

Medium = Could budget for under existing work-plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.

High = Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.

**Benefits:**

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

Low = < \$10,000



Medium = \$10,000 to \$100,000

High = > \$100,000

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

Low = Long term benefits of the project are difficult to quantify in the short term.

Medium = Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.

High = Project will have an immediate impact on the reduction of risk exposure to life and property.

**Potential FEMA HMA Funding Sources:**

PDM = Pre-Disaster Mitigation Grant Program

FMA = Flood Mitigation Assistance Grant Program

RFC = Repetitive Flood Claims Grant Program

SRL = Severe Repetitive Loss Grant Program

HMGP = Hazard Mitigation Grant Program

**Timeline:**

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

DOF = Depending on funding.

**Notes (for Mitigation Type):**

1. PR=Prevention: Government, administrative or regulatory actions or processes that influence the way land and buildings are developed and built Examples of these are acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
2. PP= Property Protection: These actions also 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 planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
3. PE=Public Education and Awareness: 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 school-age and adult education programs.
4. NR=Natural Resource Protection: 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.
5. SP=Structural Projects: 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.
6. ES=Emergency Services: 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.

**G.) PRIORITIZATION OF MITIGATION INITIATIVES**

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits equal or exceed Costs? (Yes or No)	Is project Grant eligible? (Yes or No)	Can Project be funded under existing programs/budgets? (Yes or No)	Priority (High, Med., Low)
1	3	H	L	Y	N	Y	M
2	3	H	L	Y	N	Y	H
3	3	H	M	Y	N	Y	M
4	3	H	L	Y	N	Y	H
5	2	M	M	Y	Y	N	M
6	3	L	L	Y	N	Y	H
7	2	H	H	Y	Y	N	H
Flood 1	5	H	H	Y	Y	N	M
Flood 2	9	H	M	Y	N	Y	H
Flood 3	8	M	M	Y	Y	Y	M
Flood 4	5	M	L	Y	N	Y	H
Flood 5	ALL	H	H	Y	Y	Y	H
Flood 6	3	L	L	Y	N	Y	H
Flood 7	2	L	L	Y	N	Y	H
Flood 8	5	M	M	Y	N	Y	M
Flood 9	6	M	M	Y	Y	Y	M
Flood 10	6	M	M	Y	Y	N	M
Sever Storm	5	M	L	Y	N	Y	M
Earthquake 1	3	M	M	Y	N	Y	L
Earthquake 2	3	M	M	Y	N	Y	L

Notes: H = High. L = Low. M = Medium. N = No. N/A = Not applicable. Y = Yes.

### **Explanation of Priorities**

High Priority = A project that meets multiple objectives (i.e., multiple hazards), benefits exceeds cost, has funding secured or is an on-going project and project meets eligibility requirements for the Hazard Mitigation Grant Program (HMGP) or Pre-Disaster Mitigation Grant Program (PDM) programs. High priority projects can be completed in the short term (1 to 5 years).

Medium Priority = A project that meets goals and objectives, benefits exceeds costs, funding has not been secured but project is grant eligible under, HMGP, PDM or other grant programs. Project can be completed in the short term, once funding is completed. Medium priority projects will become high priority projects once funding is secured.

Low Priority = Any project that will mitigate the risk of a hazard, benefits do not exceed the costs or are difficult to quantify, funding has not been secured and project is not eligible for HMGP or PDM grant funding, and time line for completion is considered long term (1 to 10 years). Low priority projects may be eligible other sources of grant funding from other programs. A low priority project could become a high priority project once funding is secured as long as it could be completed in the short term.

Prioritization of initiatives was based on above definitions: Yes

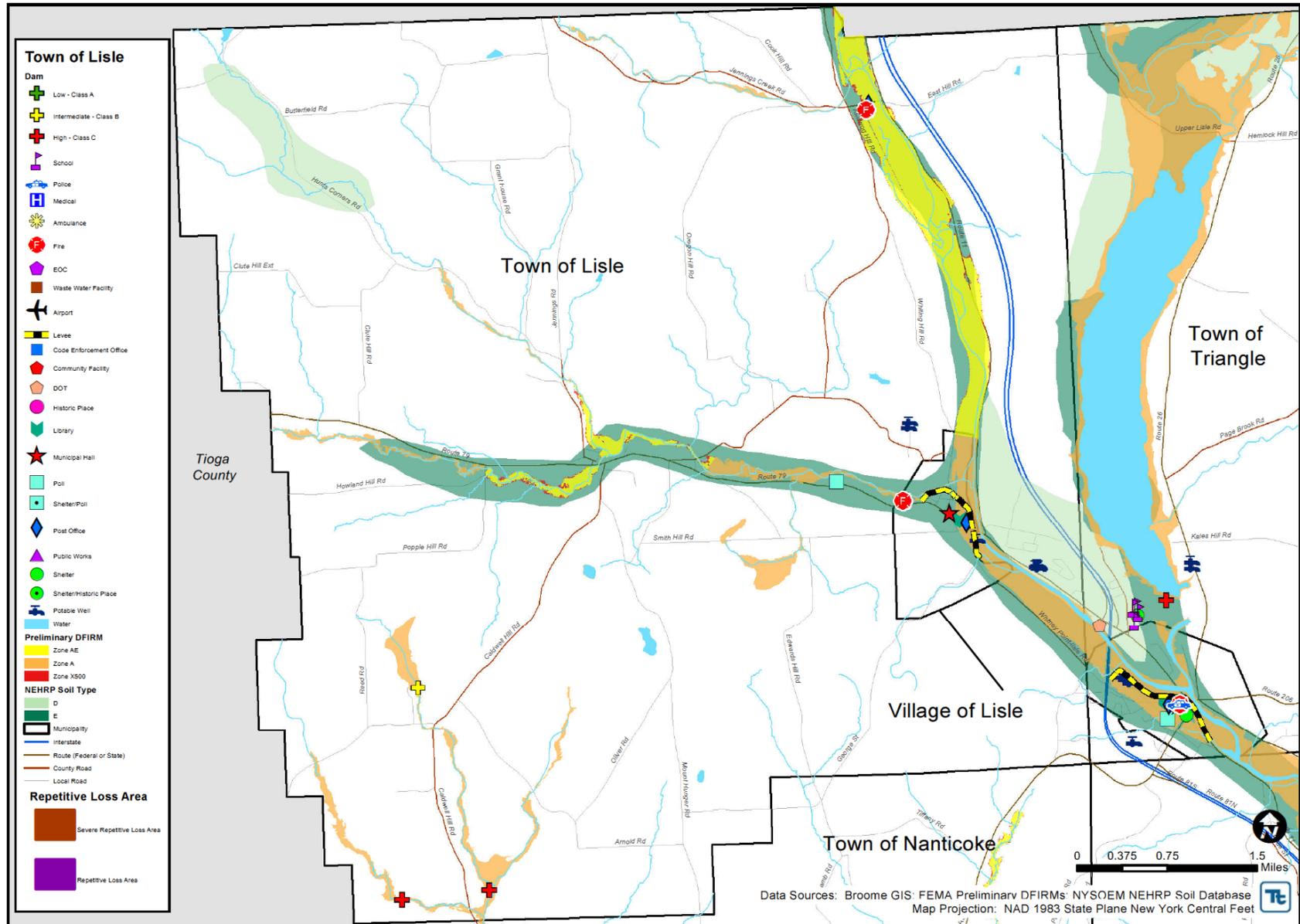
Prioritization of initiatives was based on parameters other than stated above: Not applicable.

### **H.) FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY**

None at this time.

### **I.) HAZARD AREA EXTENT AND LOCATION**

A hazard area extent and location map has been generated for the Town of Lisle to illustrate the probable areas impacted within the Town of Lisle and is provided on the next page. This map is based on the best available data at the time of the preparation of this Plan, and is 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 Lisle has significant exposure. The Planning Area maps are provided in the hazard profiles within Section 5.4, Volume I of this Plan.



## J.) STATUS OF INCORPORATION OF MITIGATION PLANNING INTO EXISTING AND FUTURE PLANNING MECHANISMS

It is the intention of this municipality to incorporate mitigation planning as an integral component of daily municipal operations. Below is a list of planning mechanisms that have been/will be incorporated into municipal procedures.

Planning Mechanisms	Has Been Utilized	Will Be Utilized
<b>Operating Budget</b> When constructing upcoming budgets, Hazard Mitigation Actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the Hazard Mitigation goals and objectives.		x
<b>Capital Improvement Budget</b> When constructing upcoming budgets, Hazard Mitigation Actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the Hazard Mitigation goals and objectives.		x
<b>Human Resource Manual</b> Employee job descriptions may contain Hazard Mitigation Actions.	x	
<b>Building and Zoning Ordinances</b> A variety of building and zoning regulations are used to restrict the uses of land and establish building specifications. Prior to land use, zoning changes or development permitting the town will review the hazard mitigation plan and other hazard analysis to ensure consistent and compatible land use.		x
<b>Comprehensive Land Use Plan</b> A land use plan is intended to identify land use issues and to make recommendations on how to address these issues. When applicable the town will incorporate Hazard Mitigation Actions in the development and extent of the regulations.	x	
<b>Grant Applications</b> Data and maps will be used as supporting documentation in grant applications		x
<b>Municipal Ordinances</b> When updating municipal ordinances Hazard Mitigation will be a priority.		x
<b>Fire Plan</b> The Hazard Mitigation Plan will be used as a resource for the development of future Fire Plans.	x	
<b>Capital Improvement Planning</b> The municipality will establish a protocol to review current and future projects for hazard vulnerability. The will incorporate hazard resistant construction standards into the design and location of projects.		x
<b>Day to Day Operations</b> Incorporate Hazard Mitigation Actions in daily operations and all projects will be a goal of the municipality.	x	
<b>Local School Service Projects</b> The municipality to work closely with the local school district and assist with community service projects for the service organizations. Several of the town's Hazard Mitigation Actions can be implemented as a joint project with the school district.	x	
<b>Municipal Budget-</b> Adopted annually Municipality will look at Mitigation Actions when allocating funding.		x
<b>Economic Development-</b> The local economic development group will utilize the identification of hazard areas when assisting new business in finding a location.	x	

**K.) ADDITIONAL COMMENTS**

No additional comments at this time.