

### 10.2.21 Town of Monroe

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

#### 10.2.21.1 Contacts

Primary and secondary contacts regarding this plan are identified as follows:

- Anthony P. Cardone – Supervisor  
11 Stage Road  
Monroe, NY 10950  
(845) 783-1900 ext. 228
- Richard Colon – Acting Supervisor

#### 10.2.21.2 Municipal Profile

##### *Population*

The population of the Town of Monroe was thirty nine thousand, nine hundred twelve (39,912) during the 2010 census. This is a 27.1% increase over the thirty one thousand, four hundred eleven (31,411) reported in 2000.

##### *Location*

The Town of Monroe is located in the southeast portion of Orange County. The Town is bordered by the Town of Tuxedo to the southeast, Town of Woodbury to the east, Town of Blooming Grove to the north, Town of Chester to the west, and a small portion of the Town of Warwick to the southwest. Located within the Town are the Villages of Monroe, Village of Kiryas Joel, and part of the Village of Harriman.

##### *Brief History*

Originally settled by the Lenni-Lenape tribe who were pushed into Pennsylvania, colonial settlers first came to the area with a patent granted by Queen Anne in 1707. The first known settler, David Smith, constructed a grist mill on the Ramapo River and the area became known as “Smith’s Mill”. The Town was incorporated in 1799 as the Town of Monroe. By 1889, the Town lost portions to the Towns of Woodbury and Tuxedo.

##### *Governing Body*

The Town is served by the Town Supervisor and a four (4) member Town Council. The titles of Town Clerk and Highway Superintendent are also elected positions.

### *Future Growth*

Given consistent population gains within the Town of Monroe, future increases and development are inevitable. Upon review of Planning Board Meeting Minutes, several potential developments have been proposed prior to the moratorium, including the Shea Meadows conventional subdivision, are proceeding through normal Town rules and regulations. The Town currently has a building moratorium in place as of March 2018. The locations of already-approved developments are located in the portion of the Town to be relocated into the soon-to-be established Town of Palm Tree, no later than January 1, 2020.

Town Code and the Comprehensive Plan allow for conservation and open space while still pursuing smart growth.

### 10.2.21.3 Hazard Vulnerabilities and Ranking

#### *Risk Ranking*

The Town selected the following hazards to address, seen in Table 10.2.21a. Vulnerability was decided based on frequency of occurrence and severity of impact.

<b>Table 10.2.21a: Hazard Vulnerability by Event</b>	
<b>Hazard Event</b>	<b>Vulnerability</b>
Flood	Moderately High
Severe Storm/ Severe Thunderstorm	Moderately High
Extreme Temperatures	Moderately High
Hurricane	Moderately High
Earthquake	Moderately Low
Tornado	Moderately Low
Winter Storm	Moderately Low
Ice Storm	Moderately Low
Drought	Moderately Low
<i>Wildfire</i>	Low
<i>Ice Jam</i>	Low
<i>Landslide</i>	Low

#### *Critical Facilities*

A list of community Critical Facilities was generated to aid in mitigation planning. The table below summarizes the number of these facilities within the Town of Monroe which may be impacted by any of the previously noted hazards.

This information was used to identify potential needed improvements to existing Critical Facilities. Critical facilities were identified by the Town as meeting this definition: “Any structure(s) and/or infrastructure within a community whose incapacity or destruction would:

- Have a debilitating impact on the defense or economic security of that community.
- Significantly hinder a community’s ability to recover following a disaster.”

Discretion was left up to the participating jurisdiction to select these facilities.

<b>Table 10.2.21b: Critical Facility and Infrastructure Counts by Category</b>			
<b>Transportation</b>	<b>Government Services</b>	<b>Emergency Services</b>	<b>Educational /Shelter and Evacuation Facilities</b>
1	1	6	3

Locations of the government building, emergency services, and educational facilities are noted in the following table. None of these facilities are located within the 500-year floodplain.

<b>Table 10.2.21c: Location of CFI</b>	
<b>Facility Name</b>	<b>Address</b>
<b>Transportation</b>	
Dial-a-Bus	91 Mine Road
<b>Government</b>	
Town Hall	1465 Orange Turnpike
<b>Emergency Services</b>	
State Trooper Barracks	369 Nininger Road
Monroe Volunteer Ambulance	100 Ramapo Street
Mombasha Fire Company	526 NYS Route 17M
Harriman Engine Company	2 South Main Street (Harriman)
Lakeside Fire and Rescue	147 West Mombasha Road
Monroe Joint Fire District	406 North Main Street
<b>Educational</b>	
North Main Elementary	212 North Main Street
Pine Tree Elementary	156 Pine Tree Road
Monroe Senior Center	101 Mine Road
<b>Emergency Shelter</b>	
Lakeside Fire and Rescue	147 West Mombasha Road

The Town of Monroe has seven (7) critical facilities within the 500-year floodplain and zero (0) within the high hazard Landslide Rating<sup>1</sup> area. Below is a table that identifies the structures and hazard issues.

Table 10.2.21d Town of Monroe Critical Facilities and Infrastructure in Hazard Areas			
Critical Infrastructure	500-Yr Floodplain	Landslide Rating Area	Associated Mitigation Action
Blendale Lake Dam	Y	N	N/A
Greenwood Lake School Dam	Y	N	N/A
Lake Blythea Dam	Y	N	N/A
Lake Sapphire Dam	Y	N	N/A
Lake Winape Dam	Y	N	N/A
Mountain Lakes Dam	Y	N	N/A
Shadowmere Lake Dam	Y	N	N/A

As indicated in Section 2.8, participating municipalities did not wish to disclose the locations of public water systems facilities due to security concerns. However, they acknowledge the criticality of such facilities. While it is assumed that most municipal water systems facilities are not located within the floodplain, these jurisdictions will explore hardening/relocation opportunities for those that are located within the floodplain should such actions become necessary due to the incidence of flooding impacts.

By necessity, critical wastewater facilities are located within the 500-year floodplain due to discharge requirements and gravity-fed systems optimization. While relocation is neither desired nor feasible, participating municipalities will seek to harden these facilities where feasibly and fiscally possible.

Table 2.8a – Orange County NPDES Data lists all wastewater facilities in the County, including the Town of Monroe, with a NPDES (National Pollutant Discharge Elimination System) permit. In the case of New York State, NPDES permit listing match State Pollutant Discharge Elimination System (SPDES) permit listings.

### **Priority Hazard Events**

The following sections detail the priority hazard events identified by the jurisdiction. Additional information about each hazard including frequency, history, and severity within Orange County is included within Section 5.0 of the main body of the Hazard Mitigation Plan (Volume I).

The probability of climate-related hazard events is generally expected to increase in the future within the Town of Monroe. This anticipated increase results from the expected increase in weather volatility associated with climate change. The Ramapo River and Moodna Creek Watersheds also contribute to increased flooding occurrences.

<sup>1</sup> Areas with a landslide rating in of greater than 37 are considered hazardous. The data was derived from HAZUS software analysis.

Past occurrences of hazard events are indicated in their respective profiles below. Some hazards may not have locally available documentation of past occurrence, but are nonetheless profiled in this annex to instill future mitigation planning consideration.

*Flood*

The major hydrology influencing waterbody is the Ramapo River, which flows along the eastern edge of the limits of the Town. Several ponds and lakes, the largest being Mombasha Lake, are also present.

FEMA’s Flood Insurance Mapping Program designates areas that are at risk for flooding; low flood risk are areas unlikely to flood, moderate risk are areas within the 500-year floodplain (.2% likely to flood in any given year), and high risk are areas that frequently flood, up to the 100-year flood risk zone (1% likely to flood in any given year).

Table 10.2.21e: Summary of Land Areas in Flood Hazard Areas (Source: HAZUS, FEMA DFIRM Data)			
Total Land Area (Acres)	100-yr Flood Risk Area	500-yr Flood Risk Area	Low Risk Flood Area
10,278	357 (3%)	10 (0%)	9,911

Additionally, 2.5% of the Town’s improved value areas (defined as property that is either actively utilized or has been developed) are located within the high risk flood areas (97.5% is within low risk areas).

The following table illustrates the value of property in the Town of Monroe that is located within the 500-year floodplain and is categorized by land use type. This table was derived from FEMA floodplain mapping and parcel data from the Orange County Property Assessor.

Table 10.2.21f: Structures in the Town of Monroe Vulnerable to 500-year Flood Events and Their Estimated Values		
Type of Structure	# Structures in Hazard Area	Value of Structures (in Millions)
Residential	159	\$8.2
Commercial	2	\$0.7
Industrial	0	\$0
Agricultural	0	\$0
Religious/Non-profit	0	\$0
Government	0	\$0
Education	0	\$0
Utilities	0	\$0
Dams	7	Unknown
Parks	0	\$0

Table 10.2.21f: Structures in the Town of Monroe Vulnerable to 500-year Flood Events and Their Estimated Values		
Type of Structure	# Structures in Hazard Area	Value of Structures (in Millions)
Total	168	\$8.9M

#### Historical Occurrence:

According to NOAA’s Storm Events Database, two (2) events were recorded specifically for the Town of Monroe within the past ten (10) years.

- October 8, 2005- Heavy rain event caused spotters to note many small streams and brooks overflowed their banks.
- August 28, 2011- Tropical Storm Irene made landfall. A motorist was rescued after being stranded in high water on Larking Dr. in Harriman.

#### *Extreme Temperatures*

For a description of this hazard, please see section 5.1.

#### Historical Occurrence:

In the past ten (10) years there is no record of any extreme temperatures that have explicitly impacted the Town of Monroe. However, there have been a number of recorded occurrences within Orange County. The information can be found in the main body of the document.

#### *Severe Storm/Severe Thunderstorm*

The National Weather Service (NWS) defines a severe storm as one with a tornado and/or surface hail  $\frac{3}{4}$ " or greater and/or wind gusts fifty (50) knots (kts) (58 mph) or greater. Such storms can cause damage from wind, hail, heavy rainfall, and/or lightning strikes.

#### Historical Occurrence:

Searching NOAA’s Storm Events Database with the queries “Thunderstorm Wind”, “High Wind”, and “Hail” yielded four (4) events within and around the Town of Monroe.

- May 27, 2005 – As an area of heavy showers and thunderstorms swept east across the region at about forty (40) mph, it produced damaging wind gusts and heavy rain. Law enforcement reported downed trees and wires along Harriman Heights Road between Post and Pine Roads in the Town of Monroe.
- December 1, 2006 – High winds downed trees and power lines in Port Jervis and Monroe in Orange County and in Ossining in Westchester County.
- July 21, 2010 – A stationary front, coupled with an approaching upper level trough caused severe thunderstorms across the Lower Hudson Valley and Long Island. Nickle size hail was reported in Monroe.

- August 28, 2011 – Copious amounts of tropical moisture within the storm produced extended periods of heavy rainfall, which resulted in widespread moderate to major flooding across the area. Route 208 near Monroe was closed due to flooding.

It is important to note that these events generally affect large geographic areas and reports specific to municipalities aren't often recorded.

### *Hurricane/Coastal Storms*

For a description of these hazards, please see section 5.3.

#### Historical Occurrence:

In the past ten (10) years there is no record of any hurricanes that have explicitly impacted the Town of Monroe. However, there have been a number of recorded occurrences within Orange County. The information can be found in the main body of the document. It is of note that hurricane threats could potential increase due to climate change trends.

### *Drought*

For a description of this hazard, please see section 5.5.

#### Historical Occurrence:

In the past ten (10) years there is no record of any droughts that have explicitly impacted the Town of Monroe. However, there have been a number of recorded occurrences within Orange County. The information can be found in the main body of the document.

### *Earthquake*

For a description of this hazard, please see section 5.7.

#### Historical Occurrence:

In the past ten (10) years there is no record of any earthquakes that have explicitly impacted the Town of Monroe. However, there have been a number of recorded occurrences within Orange County. The information can be found in the main body of the document.

### *Tornadoes*

For a description of this hazard, please see section 5.2.

#### Historical Occurrence:

In the past ten (10) years there is no record of any tornados that have explicitly impacted the Town of Monroe. However, there have been a number of recorded occurrences within Orange County. The information can be found in the main body of the document.

### Winter Storm

Winter storms create damage due to snowfall and winds, with occasional sleet, freezing rain, or hail occurring. Snowfall impairs visibility, obstructs roadways and facilities, and cause tree limbs to fall and roofs to collapse due to weight. It also creates slick roadways which can be compounded further by sleet or freezing rain events.

#### Historical Occurrence:

Searching the NCDC Storm Events Database with the queries “Blizzard”, “Heavy Snow”, “Sleet”, “Winter Storm”, and “Winter Weather” yielded ninety-seven (97) events that impacted Orange County (1/1/1950-12/31/2015). Damages were not reported for these storm events. However, one (1) death and one (1) injury are attributed to these severe winter storm events. Specific damages for the Town of Monroe were not identified within the NCDC Storm Events database. However, storm totals referring specifically to Monroe are listed below:

- February 5, 2001 – A developing low pressure system off the North Carolina coast moved northeast to a position off eastern Long Island, sending several bands of snow across central and eastern Long Island and portions of the lower Hudson Valley. This second band of snow then moved east and produced additional snow across portions of the New York City area and Long Island. Due to the rapid rate at which the snow fell, hazardous travel resulted across much of the New York City region. Specific snowfall totals for this snow event in Orange County ranged from twelve (12) inches at Walden and Newburgh to twenty-two (22) inches at Monroe.
- February 25, 2010 – Orange County was hit by a winter storm which deposited record amounts of snowfall across the County. OCDES staff reported thirty-four (34) inches of snow in some parts of the County, while the National Weather Service reported thirty-two (32) inches of snow in Monroe, and twenty-nine (29) inches in both Goshen and Tuxedo. In the northeast US region as a whole, the storm was held responsible for three (3) deaths and more than seven hundred thousand (700,000) homes and businesses were without power for significant periods, including more than twenty-one hundred thousand (21,000) customers of Orange and Rockland Utilities. Approximately two hundred thousand (200,000) customers of Central Hudson Gas and Electric lost power over their full operating territory, including forty-eight thousand (48,000) in Orange County. The County Executive declared a state of emergency on February 26 as per the following statement:

*The County has determined that road conditions are dangerous and pose a real and substantial risk to vehicular traffic and the public safety is imperiled thereby, and the presence of non-essential vehicles on the roads will impede snow removal equipment and other essential services. Accordingly, I do hereby find that the County of Orange public safety to be imperiled by the said winter storm and, consequently, to safeguard the health and welfare of the public, I declare a County state of emergency for the entire County of Orange, pursuant, inter alia, to New York State Executive Law Section 24, beginning at 6:00 p.m., February*



*25, 2010 and continuing until 7:00 a.m., February 26, 2010, unless extended by a subsequent Executive Order.*

As a result of this declaration of a County state of emergency all non-essential vehicular traffic was prohibited from all highways and roads within the County between the hours of 6:00 p.m., February 25, 2010 and 7:00 a.m., February 26, 2010. This prohibition did not apply to vehicles engaged in snow removal, sanding, salting and clearing operations.

On March 3, The Orange County Executive issued a request to the State Governor to declare the County a disaster area, giving the following justification:

*The recent storms that severely impacted Orange County and the surrounding areas left in their wake a trail of devastation that is only now being calculated. Initial estimates for Orange County in material and manpower are in excess of \$270,000. The Towns of New Windsor and Newburgh have initial estimates of over \$200,000 in clean up and labor costs; the Town of Wallkill over \$62,000.00; the City of Middletown has initial estimates of just over \$100,000.00 in overtime, sand/salt costs and damage to property. These are just preliminary examples from across the County, not to mention the ongoing recovery to local infrastructure as issues become apparent once the snow is gone.*

### *Ice Storm*

For a description of this hazard, please see section 5.8.

#### Historical Occurrence:

In the past ten (10) years there is no record of any ice storms that have explicitly impacted the Town of Monroe. However, there have been a number of recorded occurrences within Orange County. The information can be found in the main body of the document.

### *Wildfire*

Wildfires can be caused by natural hazards (lightning) but are much more often manmade, either accidental in cause or arson. These most often occur during the summer, associated with the drier conditions which allow vegetation and brush to readily burn.

According to the 2011 Orange County Hazard Mitigation Plan, the Town of Monroe wildfire risk zone is sixty-three (63) percent. No historical occurrences are noted with the Town.

While the affected areas are usually uninhabited, these events can have long term implications on the Town's resources as well as discourage the tourism industry.

### 10.2.21.4 Capability Assessment

#### *Planning and Regulatory Capability*

<b>Table 10.2.21g: Legal and Regulatory Capabilities for Town of Monroe</b>		
<b>Regulatory Tools for Hazard Mitigation</b>	<b>Description</b>	<b>Responsible Department/Agency</b>
Codes and/or Ordinances	<ul style="list-style-type: none"> <li>• 2010 Residential Code of NYS</li> <li>• 2010 Fire Code of NYS</li> <li>• 2010 Building Code of NYS</li> <li>• 2010 Exiting Building Code of NYS</li> <li>• 2010 Energy Conservation Construction Code of NYS</li> <li>• 2010 Plumbing Code of NYS</li> <li>• 2010 Mechanical Code of NYS</li> <li>• 2010 Fuel Gas Code of NYS</li> </ul>	Building Department
	<ul style="list-style-type: none"> <li>• Zoning Ordinance</li> <li>• Subdivision Ordinance</li> <li>• Floodplain Ordinance</li> </ul>	Planning Board
Plans, Manuals, and/or Guidelines	<ul style="list-style-type: none"> <li>• Stormwater Management</li> <li>• Comprehensive Plan (2008)</li> <li>• Local Emergency Operations Plan</li> <li>• Transportation Plan</li> <li>• Aquatic Protection Plan</li> </ul>	Planning Board
Studies	<ul style="list-style-type: none"> <li>• FIRM Flood Insurance Rate Maps, 2009</li> </ul>	Town Board/Building Department

#### *Administrative and Technical*

<b>Table 10.2.21h: Summary of Administrative and Technical Staff Capabilities for Town of Monroe</b>		
<b>Staff/Resources</b>	<input checked="" type="checkbox"/>	<b>Notes</b>
Chief Building Official	<input checked="" type="checkbox"/>	Building Inspector
Floodplain Administrator	<input checked="" type="checkbox"/>	Building Inspector
Emergency Manager	<input checked="" type="checkbox"/>	Town Supervisor
Community Planner	<input checked="" type="checkbox"/>	Town Consultant Planner
Civil Engineer	<input checked="" type="checkbox"/>	Town Consultant Engineer
GIS Coordinator/HAZUS	<input checked="" type="checkbox"/>	Town Consultant Engineer
Grant Writer	-	-
Maintenance Programs to Reduce Risk (tree trimming, etc.)	<input checked="" type="checkbox"/>	Snow/Ice Agreement (O.C. Public Works)
Mutual Aid Agreements	-	

*Fiscal Capabilities*

<b>Table 10.2.21i: Fiscal Opportunities for the Town of Monroe</b>		
<b>Financial Resources</b>	<b>Accessible or Eligible to Use (Yes, No, Don't Know)</b>	<b>Comments</b>
Community Development Block Grants	Yes	Elevator for senior citizens center
Capital Improvements Project funding	Yes	Various projects
Authority to levy taxes for specific purposes	Yes	Various projects
Fees for water, sewer, gas, or electric service	No	-
Impact fees for homebuyers or new developments/homes	Yes	Recreation
Incur debt through general obligation bonds	Yes	Various projects
Federal/State Funding	Yes	Various projects

*NFIP: Administrator, Vulnerability, Resources, Compliance*

The Town (ID 360621) joined NFIP on June 28, 1974. As of January 31, 2018, there are a total of twenty-six (26) active policies, representing \$6,653,600 in value. According to Table 8.2c, there are two (2) repetitive flood loss residential properties, both of which qualify as severe repetitive loss properties. More NFIP data can be found in Section 8.2.

The NFIP Administrator is the Building Inspector and the Town is considered to be in compliance. The Town has been maintaining NFIP participation by performing the duties and actions that were listed in the local laws that their municipal boards adopted. (Local Law #1 of 2009) The Town Floodplain Administrator has been provided an NFIP best practices guidance package and will be using it to improve local participation in NFIP standards going forward. This package of documents was provided by NYSDHSES and can be found in Appendix F - NFIP Floodplain Administrator Guidance Package.

*Hazard Mitigation: Existing and Planning Mechanisms*Emergency Communications, Routes, and Shelters:

Orange County utilizes the CodeRED system for emergency notifications. Residents can also visit the Town's website to sign up to receive text alerts regarding news from the Town of Monroe about closings, refuse schedule changes, police department notices, and like.

The Town of Monroe took over the broadcasting of Channel 22 on cable television, broadcasting municipal board meetings, hearings, and special events. The Town will also be broadcasting emergency messages from local officials on any local or weather issues in the Town of Monroe.

The Town follows emergency route rules set by Orange County. The Town has one (1) designated emergency shelter: Lakeside Firehouse (147 West Mombasha Rd., Monroe, NY 10950). More information on these sites can be found in Attachment III.

Comprehensive Plan:

The Town of Monroe Comprehensive Plan is currently being updated. The most recent existing plan update, prior to the current effort, was in 2008.

Planning Mechanisms:

While this annex has provided a summary and description of existing plans, policies, and regulatory mechanisms that support hazard mitigation, the 2018 Orange County Hazard Mitigation Plan Update is intended to allow for the integration of its recommendations and data into local plans. Listed below are several planning and policy mechanisms that lend themselves to the integration of materials and objectives from this hazard mitigation plan. Columns to the right indicate whether the municipality has utilized hazard mitigation planning elements in the past (as in the aftermath of a previous local hazard mitigation plan) and whether they intend to be utilized in the future (which most, if not all, do).

<b>Table 10.2.21j: Incorporation of Hazard Mitigation Planning into Existing and Future Planning Mechanisms</b>		
<b>Planning Mechanism</b>	<b>Has been Utilized</b>	<b>May be Utilized</b>
<b>Capital Improvement Budget:</b> Hazard Mitigation Actions to be considered during the development of annual capital improvement plans. Compliance with Hazard Mitigation goals and objectives as well as the hazard vulnerability of site will be a consideration during the evaluation of infrastructure and facilities projects.		X
<b>Operating Budget:</b> Hazard Mitigation Actions to be considered within day-to-day operating budgets as funding permits.		X
<b>Building &amp; Zoning Ordinances:</b> Review of the hazard mitigation plan and hazard analyses are part of the evaluation of land use, zoning, and development review ordinances and permitted processes.		X
<b>Comprehensive Land Use Plan:</b> Elements such as hazard vulnerability and hazard area extents will be considered during the development of future land use maps and other elements of comprehensive planning.		X
<b>Human Resource Manual:</b> Employee job descriptions may contain elements related to hazard mitigation planning and associated recommendations.		X
<b>Grant Applications:</b> Support for funding requests in the form of data, maps, and priority recommendations will be drawn from the hazard mitigation plan.		X
<b>Fire Plan:</b> Fire Plans for the municipality and local fire departments can utilize data and mapping in the hazard mitigation plan.		X
<b>Local School Service Projects:</b> Municipal officials and staff can explore the possibility of collaboration with local school districts to provide avenues for student community service projects as well as educational opportunities.		X
<b>Economic Development:</b> Local chambers of commerce and other economic development agencies can utilize the hazard mitigation plan to better inform new/expanding businesses in finding a location.		X

### Summary

This Plan will be used to inform the Town’s Comprehensive Plan, Town Codes, and provide guidance on actions moving forward.

### 10.2.21.5 Mitigation Strategy and Prioritization

#### *Past, Completed, and Ongoing Initiatives*

The Town has not identified any past, completed, and ongoing initiatives.

#### *Proposed Initiatives*

<b>Table 10.2.21k: Mitigation Actions/Projects Identified by Town of Monroe</b>			
<b>Action</b>	<b>Description</b>	<b>Involved Agency(ies)</b>	<b>Funding Source(s)</b>
MT-1	Acquisition of repetitive loss (RL) and severe repetitive loss (SRL) properties within municipal limits.	Town Highway Department, Orange County Real Property	FEMA, NYS DHSES, Orange County
MT-2	Emergency generator for Monroe Senior Center	Supervisor’s Office, Monroe Senior Center, Orange County Office of Emergency Management	FEMA (HMGP, HMA), NYSDHSES, Orange County
MT-3	Emergency generator for Town Hall	Supervisor’s Office, Monroe Senior Center, Orange County Office of Emergency Management	FEMA (HMGP, HMA), NYSDHSES, Orange County

STAPLEE forms were completed for each of these actions across the whole plan. A table with these evaluations can be found in Attachment II of this jurisdictional annex.

“STAPLEE” refers to the following lenses of evaluation: social, technological, administrative, political, legal, economic, and environmental.

#### *Future Needs*

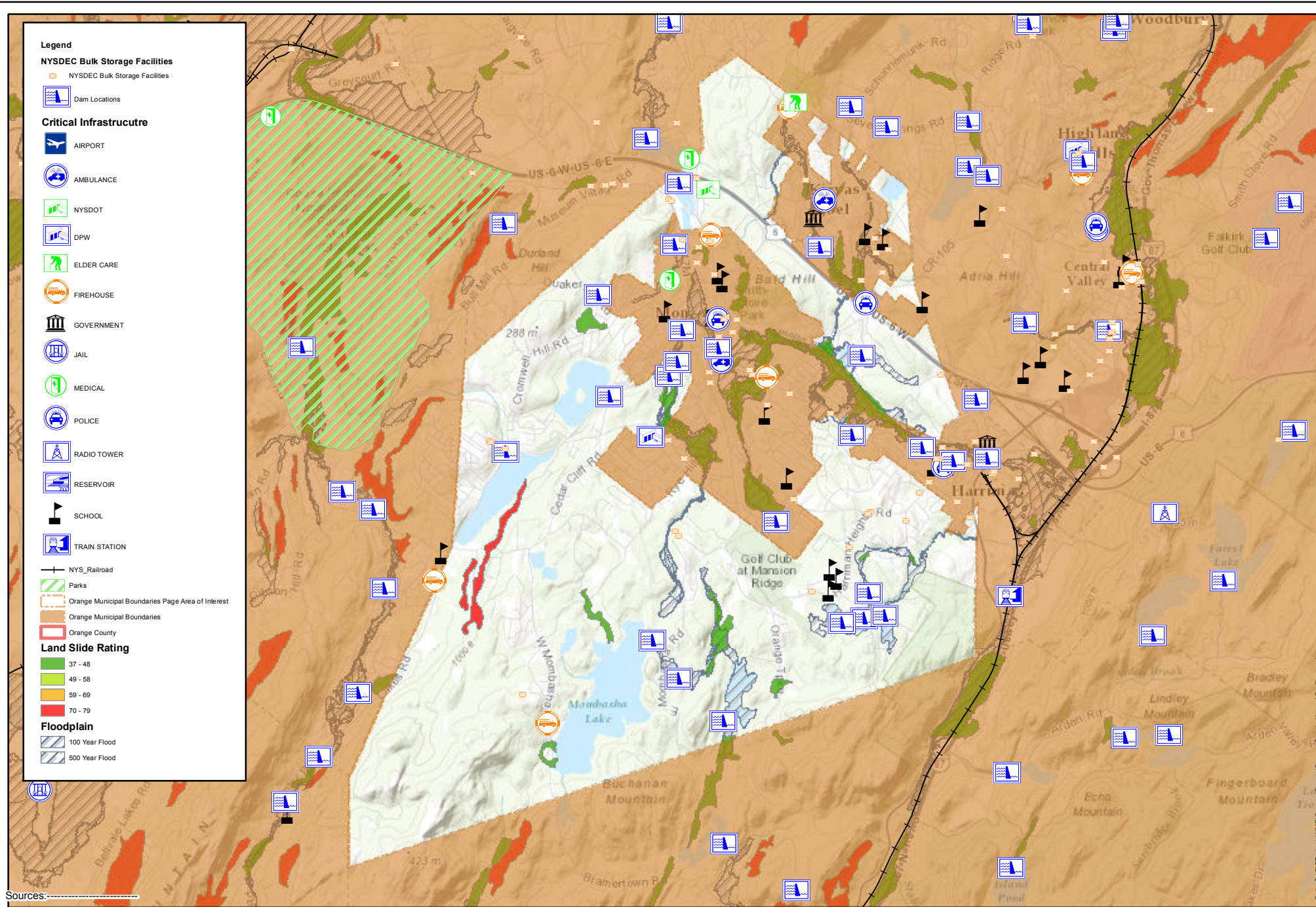
The Town has not identified any future needs.

### 10.2.21.6 Hazard Area Extent and Location

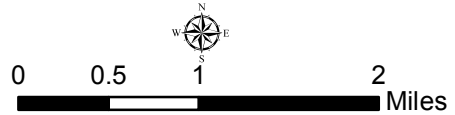
A map demonstrating the location of certain hazard areas is attached as Attachment I.

**Attachment I**

**Hazard Area Extent and Location Map -  
Town of Monroe**



Sources:-----



Path: C:\Projects\Orange County\Orange County Hazard Mitigation Plan

## **Attachment II**

# **STAPLEE Mitigation Action Cost/Benefit Analysis - Town of Monroe**



**STAPLEE Criteria Consideration Tables**  
**Mitigation Action Prioritization and Comparison**

Jurisdiction: Town of Monroe

Action ID	Action	S	T	A	P	L	E	E	Can action be easily implemented?	Does action achieve multiple plan objectives?	Can action be quickly implemented?	Level of action benefits	Level of action overall costs	Priority ranking
		+ = benefit (favorable), - = cost (unfavorable), 0 = neutral or N/A											Levels = high, medium, or low	
MT-1	Acquisition of repetitive loss and severe repetitive loss properties within municipal limits	0	+	0	0	+	0	+	0	+	0	High	Medium	High
MT-2	Emergency generator for Monroe Senior Center	+	+	0	+	+	0	0	+	+	+	High	Medium	High
MT-3	Emergency generator for Town Hall	+	+	0	+	+	0	0	+	+	+	High	Medium	High

**Attachment III**

**Hazard Mitigation Worksheets -  
Town of Monroe**

## Mitigation Actions and Strategy Detail Worksheet

Action Worksheet	
Name of Jurisdiction	Town of Monroe
Name of Hazard Mitigation Plan	Orange County Multi-Jurisdictional Hazard Mitigation Plan
Potential Actions/Projects (not being implemented at this time)	
Action/Project Number	Town of Monroe #1
Name of Action/Project	Acquisition of repetitive loss (RL) and severe repetitive loss (SRL) properties within municipal limits
Summary of Evaluation: Benefits (losses avoided), estimated costs, and other factors considered	Continued loss and damage to existing structures and belongings would be resolved at repetitive loss locations. No action alternative would result in additional and repeat damages from flood events and storms. Cost would depend on assessed value of the properties in question. Town commits in-kind services to the project but no cash from municipal funds.
Plan for Implementation	
Responsible Organization	Town Highway Department, Orange County Real Property
Action/Project Priority	High priority – high success at moderate cost
Potential Funding Sources	FEMA, NYS OEM, Orange County
Other assisting organizations, entities, etc.	FEMA, NYS OEM
Local planning mechanisms to be used in project/ action implementation, if any	Resources used: FEMA flood mapping, NYS OEM/FEMA records of RL and SRL
Progress Report	
Date of status report	Being reviewed
Report of progress	
Evaluation of effectiveness	

## Mitigation Actions and Strategy Detail Worksheet

Action Worksheet	
Name of Jurisdiction	Town of Monroe
Name of Hazard Mitigation Plan	Orange County Multi-Jurisdictional Hazard Mitigation Plan
Potential Actions/Projects (not being implemented at this time)	
Action/Project Number	Town of Monroe #2
Name of Action/Project	Acquisition of Emergency Generator for Monroe Senior Center
Summary of Evaluation: Benefits (losses avoided), estimated costs, and other factors considered	In the event of a weather related or localized emergency, the Monroe Senior Center would serve as an Emergency Shelter for residents with the benefit of providing a safe haven for those residents without electricity or access to water, food, and bathroom facilities. The installation of a generator would enable the above mentioned services to be provided for those residents who are displaced due to a local, County or State emergency. The estimated cost of the installation of a generator to power the entire Senior Center building is \$10,800.
Plan for Implementation	
Responsible Organization	Supervisor's Office, Monroe Senior Center, Orange County Office of Emergency Management, Vendor Chosen to Install the Generator after the Bid Process
Action/Project Priority	High Priority
Potential Funding Sources	FEMA, NYS OEM, Orange County
Other assisting organizations, entities, etc.	FEMA, NYS OEM

<p>Local planning mechanisms to be used in project/action implementation, if any</p>	<p>Local planning will start with the Town Supervisor, Mayors of the Villages of Monroe and Harriman as well as respective Highway Superintendents and Highway personnel to assess the need to implement the Senior Center as an Emergency Shelter. Additional information regarding the localized emergency may be obtained through Office of Emergency Services &amp; the County Executive's Office in conjunction with localized Utility Companies. In the event of a known weather-related emergency, the Director of the Senior Center will work with the Town Supervisor's office to detail the opening/closing of the emergency shelter, along with needed supplies and staffing.</p>
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<h2 style="margin: 0;">Progress Report</h2>	
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<p>Date of status report</p>	<p>Being reviewed</p>
<p>Report of progress</p>	
<p>Evaluation of effectiveness</p>	

## Mitigation Actions and Strategy Detail Worksheet

Action Worksheet	
Name of Jurisdiction	Town of Monroe
Name of Hazard Mitigation Plan	Orange County Multi-Jurisdictional Hazard Mitigation Plan
Potential Actions/Projects (not being implemented at this time)	
Action/Project Number	Town of Monroe #3
Name of Action/Project	Acquisition of Emergency Generator for Town Hall
Summary of Evaluation: Benefits (losses avoided), estimated costs, and other factors considered	By acquiring a generator, The Town Hall would be able to serve as a secondary Emergency Shelter (after the Monroe Senior Center) for residents in the event of a weather related or localized emergency. This would provide a safe haven for those residents without electricity or access to water, food, and bathroom facilities. The installation of a generator would enable the above mentioned services to be provided for those residents who are displaced due to a local, County or State emergency. The estimated cost of the installation of a generator to power the entire Town Hall building is \$42,000.
Plan for Implementation	
Responsible Organization	Supervisor's Office, Orange County Office of Emergency Management, Vendor Chosen to Install the Generator after the Bid Process

Action/Project Priority	High Priority
Potential Funding Sources	FEMA, NYS OEM, Orange County
Other assisting organizations, entities, etc.	FEMA, NYS OEM
Local planning mechanisms to be used in project/action implementation, if any	Local planning will start with the Town Supervisor, Mayors of the Villages of Monroe and Harriman as well as respective Highway Superintendents and Highway personnel to assess the need to open the Town Hall as a secondary Emergency Shelter. Additional information regarding the localized emergency may be obtained through Office of Emergency Services & the County Executive's Office in conjunction with localized Utility Companies. In the event of a known weather-related emergency, the Town Supervisor's office will detail the opening/closing of the emergency shelter, along with needed supplies and staffing.
<b>Progress Report</b>	
Date of status report	Being reviewed
Report of progress	
Evaluation of effectiveness	

Orange County  
Multi-Jurisdictional All Natural Hazard Mitigation Plan  
Emergency Shelter Questionnaire

This Emergency Shelters serves the residents of the Town of Monroe that  
Do not reside within the boundaries of the Villages of Harriman, Kiryas Joel or Monroe

Name of Your Municipality:	<u>Town of Monroe</u>
Common Name of Your Emergency Shelter:	<u>Lakeside Firehouse</u>
Street Address of Your Emergency Shelter:	<u>147 West Mombasha Road</u>
	<u>Monroe, NY 10950</u>
Name of the Owner of Your Emergency Shelter:	<u>Lakeside Fire - Rescue Inc.</u>
Name of the Regular Occupant of Your Emergency Shelter:	<u>Lakeside Fire - Rescue Inc.</u>
	<u>Monroe Joint Fire District</u>



Name of Jurisdiction: \_\_\_\_\_

**RESOLUTION  
TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE  
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE FOR  
ORANGE COUNTY, NEW YORK**

**WHEREAS**, the Orange County Department of Emergency Services, with the assistance from Barton & Loguidice, D.P.C., has gathered information and prepared the Multi-Jurisdictional Hazard Mitigation Plan Update for Orange County, New York; and

**WHEREAS**, the Multi-Jurisdictional Hazard Mitigation Plan Update for Orange County, New York has been prepared in accordance with the Disaster Mitigation Act of 2000 and Title 44 Code of Federal Regulations (CFR), Part 201; and

**WHEREAS**, Title 44 CFR, Chapter 1, Part 201.6(c)(5) requires each local government participating in the preparation of a Multi-Jurisdictional Mitigation Plan or Plan Update to accept and adopt such plan; and

**WHEREAS**, the Town of Monroe, has reviewed the 2016 Multi-Jurisdictional Hazard Mitigation Plan Update for Orange County, has found the document to be acceptable, and as a local unit of government, has afforded its citizens an opportunity to comment and provide input regarding the Plan Update and the actions included in the Plan;

**WHEREAS**, the Town of Monroe, will consider the Multi-Jurisdictional Hazard Mitigation Plan Update for Orange County during the implementation and updating of local planning mechanisms, and will incorporate the hazard assessment data, hazard vulnerabilities, and mitigation actions in these mechanisms, where applicable;

**NOW THEREFORE, BE IT RESOLVED**, that the Town of Monroe, as a participating jurisdiction, adopts the Multi-Jurisdictional Hazard Mitigation Plan Update for Orange County, New York, dated May 2016.

This resolution was thereupon declared duly adopted on \_\_\_\_\_.

\_\_\_\_\_  
(Supervisor)

\_\_\_\_\_  
(Clerk)