9.29 BOROUGH OF MOUNTAIN LAKES

This section presents the jurisdictional annex for the Borough of Mountain Lakes. The annex includes a general overview of the Borough of Mountain Lakes; an assessment of the Borough of Mountain Lakes' risk, vulnerability, and mitigation capabilities; and a prioritized action plan to implement prior to a disaster to reduce future losses and achieve greater resilience to natural hazards.

9.29.1 Hazard Mitigation Planning Team

The following individuals are the Borough of Mountain Lakes' identified HMP update primary and alternate points of contact and NFIP Floodplain Administrator.

Table 9.29-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name / Title: Shawn Bennett, Chief of Police, OEM Coordinator Address: 400 Boulevard, Mountain Lakes, NJ 07046 Phone Number: 973-334-1507 Email: sbennett@mtnlakes.org	Name / Title: Mitchell Stern, Borough Manager Address: 400 Boulevard, Mountain Lakes, NJ 07046 Phone Number: 973-334-3131 Email: mstern@mtnlakes.org
NFIP Floodplain Administrator	
*The Borough of Mountain Lakes does not participate in the NFIP.	

9.29.2 Jurisdiction Profile

Mountain Lakes is located in north-central New Jersey where the rolling hills of the New Jersey's Piedmont region meet the rocky outcroppings of the Highlands. http://mtnlakes.org. The Borough is bordered by the Township of Denville to the west, Boonton Township to the north, and Parsippany Township to the south. According to the U.S. Census, the Borough has a total area of 2.89 square miles, of which 2.62 square miles is land and 0.27 square miles is water.

According to the U.S. Census, the 2010 population for the Borough of Mountain Lakes was 4,160. The estimated 2017 population was 4,309, a 3.6% increase from the 2010 Census. Data from the 2017 U.S. Census American Community Survey indicate that 4.2% of the population is 5 years of age or younger and 12.2% 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.

9.29.3 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.29-2 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development. Figures 9.29-1 and 9.29-2 at the end of this annex illustrate the geographically-delineated hazard areas and the location of potential new development.

Table 9.29-2. Recent and Expected Future Development

Type of Development	2014	2015	2016	2017	2018
Number of Building Permits for New Construction Issued Since the Previous HMP					
Single Family	14	12	3	3	12
Multi-Family	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	1	0	0
Property or Development Name	**Type of Development**	**# of Units / Structures**	**Location** (address and/or block and lot)	**Known Hazard Zone(s)***	**Description / Status of Development**
Recent Major Development and Infrastructure from 2015 to Present					
None identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
Sunrise Assisted Living	Residential	90 beds	23 Bloomfield Ave	None	In Progress
Enclave at Mountain Lakes	Residential	40	Albi Drive	None	In Progress

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

9.29.4 Capability Assessment

The Borough of Mountain Lakes performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Information on National Flood Insurance Program (NFIP) compliance.
- Classification under various community mitigation programs.
- The community's adaptive capacity for the impacts of climate change.

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, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized below. The Borough of Mountain Lakes identified specific integration activities that will be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal and Regulatory Capability

The table below summarizes the legal and regulatory tools that are available to the Borough of Mountain Lakes and where hazard mitigation has been integrated.

Table 9.29-3. Planning, Legal and Regulatory Capability

	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	State Mandated / Allowed	Has the HMP been integrated in the last 5 years? If yes- how?	
				If yes- how? Describe in comments	If no - can it be a mitigation action? If yes, add Mitigation Action #.
Codes, Ordinances, & Requirements					
Building Code	Yes	Local	Yes	No	-
Comment: *State mandated on local level under NJAC 5:23-3.14. International Building Code – New Jersey Edition, 2018, NJAC 5:24-3.14. Chapter 88 Building Construction. Administered by the Mountain Lakes Construction Office.*					
Zoning Code	Yes	Local	Yes	No	-
Comment: *Per State of NJ Municipal Land Use Law (MLUL) L. 1975, s. 2, eff Aug 1, 1976, 40-55D-62: 49. Power to zone, requires all jurisdictions to have current zoning and other land development ordinances after the planning board has adopted the land use element and master plan. Chapter 245 Zoning. Administered by Zoning.*					
Subdivisions	Yes	Local	Yes	No	-
Comment: *Chapter 208 Subdivision of Land and Site Plan Review.*					
Stormwater Management	Yes	Local	Yes	No	-
Comment: *Title 7 of the NJ Administrative Code (N.J.A.C. 7:8); Chapter 202 Stormwater Control. Administered by Administration.*					
Post-Disaster Recovery	No	-	-	-	-
Comment:					
Real Estate Disclosure	Yes	State – Division of Consumer Affairs	Yes	Yes	-
Comment: *N.J.A.C. 13:45A-29.1; Before signing a contract of sale, all purchasers must receive a New Jersey Public Offering Statement (POS) approved by the New Jersey Real Estate Commission. The POS provides information such as proximity to hospitals, schools, fire and police, as well as any hazards, risks or nuisances in or around the subdivision.*					
Growth Management	No	-	Yes	No	-
Comment: *State mandated at local level;*					
Shoreline Development	No	-	Yes	-	-
Comment: *NJ Coastal Area Facility Review Act (N.J.S.A. 13:19) or CAFRA regulates almost all development along the coast for activities including construction, relocation, and enlargement of buildings or structures, and excavation, grading, shore protection structures, and site preparation. This law is implemented through NJ's Coastal Zone Management Rules N.J.A.C. 7:7E-1 et seq.*					
Site Plan Review	Yes	Local	-	No	-
Comment: *Chapter 208 Subdivision of Land and Site Plan Review.*					
Environmental Protection	Yes	Local	Yes	No	-
Comment: *The rules that are utilized by the NJDEP and other environmental agencies are codified at Title 7 of the NJ Municipal Administrative Code. Chapter 102 Environmental Factors; Soils, Water, and Trees; Article II Environmental Impact Statement; Article III Soil Moving; Article IV Soil Erosion and Sedimentation Control; Article V Surface Water Management; Article VII Preservation and Protection of Trees.*					
Flood Damage Prevention	No	-	Yes	-	-
Comment*: The Borough does not participate in the NFIP.*					
Wellhead Protection	Yes	Local	-	Yes	-
Comment: *Chapter 102 Environmental Factors; Soils, Water, and Trees; Article VI Wellhead Protection Area Regulations. Amended 2014.*					
Emergency Management	Yes	Local	-	No	-
Comment: *Chapter 120 Fire Prevention.*					
Climate Change	No	-	-	-	-
Comment:					
Disaster Recovery Ordinance	No	-	-	-	-

	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	State Mandated / Allowed	Has the HMP been integrated in the last 5 years? If yes- how?	
				If yes- how? Describe in comments	If no - can it be a mitigation action? If yes, add Mitigation Action #.
Comment:					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					
Planning Documents					
Comprehensive / Master Plan	Yes	Local	Yes	No	-
Comment: *Administered by the Planning Board.*					
Capital Improvement Plan	Yes	Local	Allowed	No	-
Comment: *Per NJSA 40:55D-29 the governing body is authorized to direct the planning board to prepare a CIP with at least a six year planning horizon. The Mountain Lakes Capital Improvement Plan is updated annually.*					
Disaster Debris Management Plan	No	-	No	No	2020-Mountain Lakes-006
Comment:					
Floodplain or Watershed Plan	No	-	No	-	-
Comment:					
Stormwater Management Plan	Yes	Local and State	Yes	No	-
Comment: *Per NJDEP Storm Water Management Rule (N.J.A.C. 7:8, et seq.). The Municipal Stormwater Regulation Program was developed in response to the U. S. Environmental Protection Agency's (USEPA) Phase II rules published in December 1999. The Department issued final stormwater rules on February 2, 2004 and four (4) NJPDES general permits authorizing stormwater discharges from Tier A and Tier B municipalities, as well as public complexes, and highway agencies that discharge stormwater from municipal separate storm sewers (MS4s).*					
Stormwater Pollution Prevention Plan	Yes/No		Yes		
Comment:					
Urban Water Management Plan	Yes/No		No		
Comment:					
Habitat Conservation Plan	Yes/No		No		
Comment:					
Economic Development Plan	Yes	Local	No		
Comment: *Administered by Planning and Administration.*					
Shoreline Management Plan	Yes/No		No		
Comment:					
Community Wildfire Protection Plan	Yes/No		No		
Comment:					
Community Forest Management Plan	Yes	Local	No		
Comment: *2011 Tree Canopy Resolution. Administered by the Shade Tree Commission.*					
Transportation Plan	Yes	Local	No		
Comment: *Administered by OEM.*					
Agriculture Plan	No		No		

	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	State Mandated / Allowed	Has the HMP been integrated in the last 5 years? If yes- how?	
				If yes- how? Describe in comments	If no - can it be a mitigation action? If yes, add Mitigation Action #.
Comment:					
Climate Action Plan	No		No		
Comment:					
Tourism Plan	No		No		
Comment:					
Business Development Plan	No		No		
Comment:					
Other					
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan (CEMP) / Emergency Operations Plan (EOP)	Yes	Local	Yes	No	No
Comment: *Per the NJ Civilian Defense and Disaster Control Act (App.A:9_43.2) Counties and municipalities must have written Emergency Operations Plans to be reviewed every 2 years. Comprehensive Emergency Management Plan. 2018. Administered by OEM.*					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment: *Complete smaller exercises with schools*					
Post-Disaster Recovery Plan	Yes	Local	No	No	No
Comment: *Updated in 2018. Administered by OEM.*					
Continuity of Operations Plan	Yes	Local	No	No	No
Comment: *Have a chain of command plan for continuity.*					
Public Health Plan	No				
Comment: *Will be initiated soon as a result of COVID-19 pandemic*					
Other	Yes	Local	No	Yes	No
Comment: *Standard operating procedures established within police department.*					

Table 9.29-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? - If no, who does? If yes, which department?	Yes, Building Department
Does your jurisdiction have the ability to track permits by hazard area?	Yes
Does your jurisdiction have a buildable lands inventory? -If yes, please describe briefly. -If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Borough of Mountain Lakes.

Table 9.29-5. Administrative and Technical Capabilities

Staff/Personnel Resource	Available?	Department/Agency/Position
Administrative Capability		
Planning Board	Yes	Council
Mitigation Planning Committee	Yes	Administration
Environmental Board / Commission	Yes	Council
Open Space Board / Committee	Yes	Open Space Committee
Economic Development Commission / Committee	Yes	Council
Warning Systems / Services (reverse 911, outdoor warning signals)	Yes	Fire sirens, Nixle, email blasts, social media
Maintenance program to reduce risk	Yes	Administration
Mutual aid agreements	Yes	Administration
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Administration/Council
Engineers or professionals trained in building or infrastructure construction practices	Yes	Administration
Planners or engineers with an understanding of natural hazards	Yes	Administration
Staff with training in benefit/cost analysis	Yes	Administration/Clerk
Staff with training in green infrastructure	Yes	Part time staff, contractors
Staff with education/knowledge/training in low impact development	Yes	Part time staff, contractors
Surveyor	No	-
Stormwater engineer	Yes	Engineer
Personnel skilled or trained in GIS applications	No	-
Local or state water quality professional	Yes	Water Department
Scientist familiar with natural hazards in local area	No	-
Emergency manager	Yes	Administration
Watershed planner	Yes	Volunteers on committee
Environmental specialist	Yes	Volunteers on committee
Grant writers	Yes	Administration
Resilience Officer	Yes	Volunteers on committee
Other	Yes	Many committees in the Borough are responsible for various aspects

Fiscal Capability

The table below summarizes financial resources available to the Borough of Mountain Lakes.

Table 9.29-6. Fiscal Capabilities

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants (CDBG, CDBG-DR)	Yes, in limited cases
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes

Financial Resource	Accessible or Eligible to Use?
User Fees for Water, Sewer, Gas or Electric Service	Yes
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
State-Sponsored Grant Programs	No
Development Impact Fees for Homebuyers or Developers	Yes
Clean Water Act 319 Grants (Nonpoint Source Pollution)	No
Other	

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Borough of Mountain Lakes.

Table 9.29-7. Education and Outreach Capabilities

Criterion	Response
Do you have a public information officer or communications office?	Manager if Borough specific, Chief of Police/OEM for emergencies
Do you have personnel skilled or trained in website development?	Contracted out.
Do you have hazard mitigation information available on your website? • If yes, briefly describe.	Yes; FEMA CERT information, sheltering information
Do you use social media for hazard mitigation education and outreach? • If yes, briefly describe.	Yes, The Borough recently started outreach programs with Police, Fire and CERT presents to the public quarterly – advertised through social media and email.
Do you have any citizen boards or commissions that address issues related to hazard mitigation? • If yes, briefly describe.	CERT
Do you have any other programs already in place that could be used to communicate hazard-related information? • If yes, briefly describe.	Various committees in the Borough could be utilized to communicate and educate.
Do you have any established warning systems for hazard events? • If yes, briefly describe.	Fire sirens, Nixle, email blasts, social media

Community Classifications

The table below summarizes the classifications for community programs available to the Borough of Mountain Lakes.

Table 9.29-8. Community Classifications

Program	Participating?	Classification	Date Classified
Community Rating System	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (Fire ISO Protection Class)	Yes	4	October 2014
Storm Ready Certification	No	-	-
Firewise Community Classification	No	-	-
Sustainable Jersey	Yes	Silver	October 17, 2017

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current ability to adjust to, protect from, or withstand a hazard event. This term is often discussed in reference to climate change; however, adaptive capacity also includes an understanding of local capacity for adapting to current and future risks and changing conditions. The table below summarizes the adaptive capacity for each hazard and the jurisdiction's rating.

- Does the municipality have access to resources to determine the possible impacts of climate change upon the municipality? Yes, there are many discussions regarding natural hazard impacts and sources of information can be readily identified.
- Is the administrative supportive of integrating climate change in policies or actions? Yes
- Is climate change already being integrated into current policies/plans or actions (projects/monitoring) within the municipality? Sustainable Jersey Green Team undertakes many climate related initiatives.

Table 9.29-9. Adaptive Capacity

Hazard	Adaptive Capacity (Capabilities) - High/Medium/Low
Dam Failure	High
Drought	High
Earthquake	Medium
Extreme Temperatures	High
Flood	High
Geological Hazard	Medium
Harmful Algal Bloom	High
Severe Storm	High
Severe Winter Storm	High
Wildfire	Medium
Hazardous Substances	Medium
Disease Outbreak	High

National Flood Insurance Program

The Borough of Mountain Lakes does not participate in the National Flood Insurance Program.

Table 9.29-10. National Flood Insurance Program Compliance

Criterion	Response
The Borough of Mountain Lakes does not participate in the National Flood Insurance Program	

**According to FEMA statistics as of 9/30/2018*

Additional Areas of Existing Integration

Environmental Commission: The Environmental Commission is established for the protection, development or use of natural resources, including water resources, located within the territorial limits of the Borough. Its mission is to advise and educate the municipal government, the planning and zoning boards, and the residents about environmental issues that impact the Borough.

Health Commission: The Commission has the following duties: To make recommendations to the Manager concerning or relating to the operation and administration of the health function, to make recommendations to the Council concerning or touching upon matters of policy or ordinances affecting the health function, and to render advisory opinions, if requested, to the Council on appeal from an administrative ruling concerning health matters.

Shade Tree Commission: The Shade Tree Commission of the Borough of Mountain Lakes is committed to the development, maintenance and promotion of a sustainable, safe and productive shade tree resource that benefits the physical, environmental and social well-being of the community, and preserves the historical climate and character of the Borough.

Economic Development Advisory Committee: The Economic Development Advisory Committee works to attract businesses to Mountain Lakes; make efforts to assist and retain businesses that reside in the Borough; promote, as it relates to development, opportunities in sound, environmentally friendly appropriate housing; and consider smart approaches to development in areas of the community that are appropriate, such as re-use of existing spaces and overlay zoning.

Finance Advisory Committee: The Finance Advisory Committee works to:

- Assist the Borough Council in its annual review and approval of all Municipal Budgets.
- Assist and advise the Borough Council regarding major capital expenditure projects and financing (including borrowings).
- Develop longer term (3 year plus) financial projections and budgets for Borough Council guidance and planning.
- Assist and advise the Borough Administration and Council regarding major capital expenditures, long term projections and financing plans for the Borough.
- Assist and advise the Borough Administration and Council with regard to financial and accounting policies, procedures and internal reporting systems.
- Assist and advise the Borough Council and Administration in establishing Utility fee structures and rates.
- Assist and advise the Borough Council in the selection of the Borough Auditor. Review all Audit reports and meet at least annually with the Auditor and report all findings to the Borough Council.
- Conduct training seminars on Borough financial affairs for all new Council Members, committee and Commission Heads.

Lakes Management Advisory Committee: The Advisory committee works to advise and assist the Borough government in matters pertaining to the maintenance and restoration of the quality of the watersheds, lakebeds and waters of the Lakes of Mountain Lakes, including tributaries and estuaries. The Committee consists of nine members that are appointed annually. The Committee studies methods of Lake maintenance and restoration to develop a Management Plan for lake and watershed protection and improvement. This Plan will include a program for monitoring existing lake and watershed conditions and a system of record keeping which will enable year-to-year comparison of the quality of the Borough lakes and streams.

Traffic and Safety Committee: The Borough of Mountain Lakes Traffic and Safety Committee is committed to the promotion and long term reduction of unsafe vehicular traffic, providing a pedestrian friendly environment and lessening the impact of traffic on the community. The committee is appointed annually and consists of seven members.

Woodlands Committee: The mission of the Woodlands Committee is to consider and recommend to the Council such actions as may be appropriate to monitor, maintain and improve the health of the Borough's woodlands. This committee is appointed annually.

Sheltering Facilities: Sheltering in the Borough is supported by the High School (backup power, does not accept pets), and the Lake Drive School (backup power, may accept pets). Further, the Mountain Lakes Club has provided comfort station support, working off backup power from the Lake Drive School. The Borough Hall complex on The Boulevard (includes police and fire) has backup power.

Sustainable Jersey: The Borough of Mountain Lakes participates in the Sustainable Jersey program and is a silver certified community. The Borough's Green Team focuses on reaching out and working with all the groups in town who want to green the environment – The Borough Council, Departments, Commissions, Committees, clubs and schools – to help Mountain Lakes become more environmentally sustainable. Using the program Sustainable Jersey, the Green Team completes actions for certification. Certification actions relating to hazard mitigation include the following:

- Environmental Commission: The Mountain Lakes Environmental Commission (MLEC) was established in 1975.
- Environmental Commission Site Plan Review: The Environmental Commission of Mountain Lakes has previously been asked to respond to a developer's application before the Planning Board.
- Tree Protection Ordinance: In 2000 Mountain Lakes passed Ordinance No. 13-2000 to protect and preserve street trees and shrubs in right of ways and to preserve trees within residential setback areas. Fees and penalties were established.
- Tree Hazard Inventory: The Shade Tree Commission (STC) annually assess the street trees for hazard. The Commissioners are all CORE trained and use the database of all the trees in the Borough right-of-way. The database was first created in 2001 and has been updated every year since by the STC. The database indicates the condition of the trees ranging from Good, Fair, Poor, and Gone.

9.29.5 Hazard Event History Specific to the Jurisdiction

Morris County has a history of hazard events, as detailed in Section 4 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles in Section 4.4 (Hazard Profiles) and includes a chronology of events that affected Morris County and its jurisdictions. The Borough of Mountain Lakes' history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Morris County. Table 9.29-11 provides details regarding municipal-specific loss and damages the Borough experienced during hazard events. Information provided in the table below is based on reference material or local sources.

Table 9.29-11. Hazard Event History

Date(s) of Event	Event Type (disaster declaration if applicable)	Morris County Designated?	Summary of Event	Summary of Local Damages and Losses
January 21-24, 2016	Severe Winter Storm and Snowstorm (DR-4264)	Yes	Wind gusts up to 60 MPH produced blizzard conditions as visibilities dropped to one-quarter mile or less in spots. Snow began during the evening hours on the	Overtime for cleanup and snow removal.

Date(s) of Event	Event Type (disaster declaration if applicable)	Morris County Designated?	Summary of Event	Summary of Local Damages and Losses
			22nd, then continued, heavy at times through the 23rd before ending early on the 24th. Snowfall totals included 30.0 inches in Long Valley, 29.0 inches in Madison, 26.0 inches in Budd Lake, 25.3 inches in Green Pond, 22.5 inches in Butler, 21.0 inches in Chatham, and 18.0 inches in Marcella	
March 6-7, 2018	Severe Winter Storm and Snowstorm (DR-4368)	Yes	12 to 24 inches was observed across large parts of Somerset, Hunterdon, Morris, and Sussex Counties. The snow contained large amounts of liquid, making it heavy and wet. This resulted in downed trees, limbs, and wires, leading to numerous power outages.	Overtime for cleanup and snow removal.

9.29.6 Jurisdiction-Specific Vulnerabilities and Hazard ranking

The hazard profiles in Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Table 9.29-12 summarizes the Borough of Mountain Lakes risk assessment results and data used to determine the hazard ranking.

A gradient of certainty was developed to summarize the confidence level regarding the input used to populate the hazard ranking. A certainty factor of high, medium or low was selected and assigned to each hazard to provide a level of transparency and create increased understanding of the data used to support the resulting ranking. The following scale was used to assign a certainty factor to each hazard:

- High—Defined scenario/event to evaluate; probability calculated; evidenced-based/quantitative assessment to estimate potential impacts through hazard modeling.
- Moderate—Defined scenario/event or only a hazard area to evaluate; estimated probability; combination of quantitative (exposure analysis, no hazard modeling) and qualitative data to estimate potential impacts.
- Low—Scenario or hazard area is undefined; there is a degree of uncertainty regarding event probability; majority of potential impacts are qualitative.

Table 9.29-12. Summary of Risk Assessment Results

Hazard of Concern	Hazard/ Scenario Area Evaluated	Population		Buildings		Economy (Loss)		Certainty Factor
Dam Failure	Partial or complete failure of a dam There are 6 dams in the Borough, according to NJDEP.	Population impacted is dependent on the capacity of the dam, the extent of the dam failure inundation area and the severity of the failure.		The number of building impacted is dependent on the capacity of the dam, the extent of the dam failure inundation area and the severity of the failure.		Economic impacts include dam/building/infrastructure repairs; debris removal/disposal; utility impacts.		Low
Disease Outbreak	Disease Outbreaks which include: Mosquito-Borne Diseases, Tick-Borne Diseases, Campylobacteriosis, Influenza, Mumps, Ebola	Population impacted is dependent on the disease and severity of the outbreak; in some cases immuno-compromised persons are more vulnerable.		Structural impacts due to disease outbreak would be limited.		Economic losses can include County financial impacts to monitor/address outbreaks; lost wages or commercial interruptions; depends on the severity and type of disease outbreak. .		Low
Drought	Prolonged drought event - The County is serviced by water supplies who primarily get water from groundwater sources; some surface water sources.	Entire population exposed. Population on surface water supplies may be impacted first; water restrictions/contamination; increased wildfire risk.		Droughts are not expected to cause direct damage to buildings.		Losses include aesthetic, landscape/nursery/agricultural industry impacts.		Low
Earthquake	100, 500-, 2,500-Year Mean Return Period (MRP) Events evaluated NEHRP Soils D&E (soft soils that amplify ground shaking are present in the County	NEHRP D&E:	0	NEHRP D&E:	0	100-year Loss:	$0	High
		Liquefaction Class 4:	0	Liquefaction Class 4:	0	500-year Loss:	$760,021	
						2,500-year Loss:	$12,590,675	
Extreme Temperature	Extreme temperature event (heat or cold)	Over 65 Population:	525	Physical impacts due to extreme temperatures would be limited.		Loss of business function is possible due to unexpected repairs (i.e. pipes bursting) or power failures.		Low
		Population Below Poverty Level:	151					
Flood	100- and 500-Year Mean Return Period Event	100-year	0	100-year	0	100-year Loss:	$0	High
		500-year	0	500-year	0			

Hazard of Concern	Hazard/ Scenario Area Evaluated	Population		Buildings		Economy (Loss)		Certainty Factor
Geological	High Landslide Susceptibility Areas and Areas developed over carbonate rock	Class A:	0	Class A:	0	Class A:	0	Moderate
		Class B:	0	Class B:	0	Class B:	$0	
		Carbonate Bedrock:	0	Carbonate Bedrock:	0	Carbonate Bedrock:	$0	
Harmful Algal Bloom	Any body of water or area adjacent that is susceptible to harmful algal bloom.	Population in contact (e.g., swimming) or drinking water from surface water impacted can result in a range of health effects		General building stock impacts due to harmful algal bloom are not anticipated. Critical facilities (i.e., water treatment plants) could lead to plant closures.		Economic impacts range from recreational closure of impacted waterbodies; cost to sample/monitor/remediate.		Low
Hazardous Substance	Release of a hazardous substance from a fixed site.	Population impacted will depend on the type of material and scale of the incident. May include population within small radii of site.		The degree of damages to a building depends on the scale of the incident.		The degree of damages depends on the scale of the incident.		Low
Infestation	Infestation including: Insects [e.g. Gypsy Moth, Mosquitoes, Spotted Lanternfly, Emerald Ash Borer], White-Tailed Deer, Rodents	Population impacted will depend on the type and severity of infestation and may cause an increased risk for disease outbreak.		Physical impacts will be limited to indirect impacts from invasive species which affect crops and vegetation.		Economic impact will depend on the type and severity of infestation and may cause an increased risk for disease outbreak.		Low
Severe Weather	Severe Weather Event	Entire population exposed; The degree of impact to the population depends on the scale of the incident.		Entire building stock is exposed; The degree of impact depends on the scale of the incident.		Annualized Loss:	$18,587	High
						100 -Year Loss:	$290,372	
						500-year Loss:	$1,823,888	
Severe Winter Weather	Severe Winter Weather Event	All residents/commuters/visitors are exposed; socially-vulnerable populations may be at increased risk.		All buildings are exposed; the degree of impact depends on the scale of the incident.		The cost of snow and ice removal and repair of roads/infrastructure can impact operating budgets.		Low
Wildfire	Wildfire Fuel Hazard areas (High, Very High, Extreme)	Wildfire:	0	Wildfire:	0	Wildfire:	$0	Moderate

Repetitive Flood Losses

The Borough of Mountain Lakes does not participate in the National Flood Insurance Program. Repetitive flood losses are not tracked.

Critical Facilities

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain.

Table 9.29-13. Potential Flood Losses to Critical Facilities and Lifelines

Name	Type	Exposure		Potential Loss from 1% Flood Event		Status of Mitigation
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
None identified						

Additional Identified Vulnerabilities

The jurisdiction has identified the following vulnerabilities within their community:

- Backup power is needed at EOC/Municipal Hall
- NJ DEP changed their calculations and dam ranking for Sunset Lake Dam. The dam is now high hazard dam.
- Frequent debris cleaning is needed in the canal between Mountain Lake and Wildwood Lake; debris collects from drainage of upstream waters/lakes.

Hazard Area Extent and Location

Hazard area extent and location maps were generated for the Borough of Mountain Lakes 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 have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Borough of Mountain Lakes has significant exposure. Refer to Figure 9.29-1 and 9.29-2.

Hazard 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; its potential impacts on people, property, and the economy; 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 4.3 (Hazard Ranking), each plan participant may have differing degrees of risk exposure and vulnerability compared to Morris County as a whole. Therefore, each jurisdiction ranked the degree of risk to each hazard as it pertains to their community factoring in their capabilities to withstand impacts and rebound after the event. The table below summarizes the hazard rankings of potential natural hazards for the Borough of Mountain Lakes. The Borough of Mountain Lakes has reviewed the Morris County hazard ranking table, as well as its individual results, to reflect the relative risk of the hazards of concern to the community.

Table 9.29-14. Borough of Mountain Lakes Hazard Ranking Input

Dam Failure	Drought	Earthquake	Extreme Temperature	Flood	Geological Hazard
Medium	Medium	Medium	Medium	Low	Low

Harmful Algal Bloom	Severe Storm	Severe Winter Storm	Wildfire	Hazardous Substances	Disease Outbreak	Infestation
Low	High	High	Low	High	High	Medium

9.29.7 Mitigation Strategy and Prioritization

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

PAST MITIGATION INITIATIVE STATUS

The following table summarizes the jurisdiction's progress on their mitigation strategy identified in the 2015 HMP. 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 can also be found under 'Capability Assessment' presented previously in this annex.

Table 9.29-15. Status of Previous HMP Mitigation Actions

2015 Action Number Action Description	Responsible Party	Status (In Progress, No Progress, Ongoing Capability, or Completed)	Include in the 2020 HMP Update?	
			Check if Yes	Enter 2020 HMP Action #
Mountain Lakes 1: Backup power (generator) for School Facilities (shelter) (two).	Borough Administrator working with OEM and DPW	Complete		
Mountain Lakes 2: Backup power (generator) for municipal wells (four).	Borough Administrator working with OEM and DPW	In progress - Portable generators for two of wells	X	2020-Mountain Lakes-001
Mountain Lakes 3: Storm water runoff system upgrade on Intervale Road.	Borough Administrator working with OEM and DPW	No Progress - discontinue		

In addition to the above progress, the Borough of Mountain Lakes identified the following mitigation projects/activities that were completed but not identified in the 2015 HMP mitigation strategy:

- Routine tree maintenance, working with JCP&L and a private contractor.

PROPOSED HAZARD MITIGATION INITIATIVES FOR THE PLAN UPDATE

The Borough of Mountain Lakes participated in a risk assessment workshop in November 2019 in which detailed information was provided about assets exposed and vulnerable to the identified hazards of concern. The Borough of Mountain Lakes participated in a mitigation action workshop in March 2020 and was provided a Mitigation Toolbox that included a mitigation catalog developed specifically for Morris County and its hazards of concerns; challenges and opportunities identified during the capability and risk assessments; and 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). Section 6 (Mitigation Strategy) and Appendix F (Mitigation Strategy Supplement) provide a more complete description of the Mitigation Toolbox and its resources.

Table 9.29-16 summarizes the comprehensive-range of specific mitigation initiatives the Borough of Mountain Lakes would like to pursue in the future to reduce the effects of hazards. Some of these initiatives might be previous actions carried forward for this HMP update. Initiatives are dependent upon available funding (grants and local match availability) and can 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 (Mitigation Strategy), 14 criteria were used to evaluate each action, including an evaluation of the benefits and costs. For each new mitigation action, a numeric rank was assigned (-1, 0, or 1) for each of the 14 evaluation criteria. The results of this evaluation, in addition to input from the jurisdiction, were then used to prioritize the mitigation initiatives as 'High', 'Medium', or 'Low.' Table 9.29-17 summarizes the evaluation of each mitigation initiative and the resulting priority, listed by Action Number.

Table 9.29-16. Proposed Hazard Mitigation Initiatives and Associated Priority

Initiative Number	Mitigation Initiative Name	Description of the Problem	Description of the Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Cost	Timeline	Priority	Mitigation Category	CRS Category
2020-Mountain Lakes-001	Backup power for municipal wells	Four municipal wells lack backup power. Without power, the wells will not function properly, and the Borough will be without potable water.	Purchase portable generators to use during a power outage to keep the municipal-owned wells operational.	Existing	All hazards	3	Borough Administrator, working OEM and DPW	Borough budget/ bonding	Continuity of water service	$25K	Within 2 year	High	SIP	PP, ES
2020-Mountain Lakes-002	EOC backup power	The Borough is looking to rebuild their current municipal hall/police department/fire department. A new generator will need to be installed as part of the reconstruction.	When new municipal complex is constructed, purchase and install a new generator to power the EOC.	New	All hazards	3	OEM	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	Ensures continuity of operations	$40,000	Within 5 years	High	SIP	PP, ES
2020-Mountain Lakes-003	Enhance hazard outreach	The Borough recently started outreach programs with Police, Fire and CERT presents to the public quarterly – advertised	Enhance the current public outreach and education program to include high ranked hazards.	New, Existing	Severe Storm, Severe Winter Storm, Hazardous Substances, and	1	OEM	Municipal budget	Increased public awareness and preparation	$5K	Within 1 year	High	EAP	PI

Initiative Number	Mitigation Initiative Name	Description of the Problem	Description of the Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Cost	Timeline	Priority	Mitigation Category	CRS Category
		through social media and email			Disease Outbreak									
2020-Mountain Lakes-004	Maintenance procedures for canal between Mountain Lake and Wildwood Lake	Frequent debris cleaning is needed in the canal between Mountain Lake and Wildwood Lake; debris collects from drainage of upstream waters/lakes	Develop maintenance procedures to keep the canal clear and helps with the lake from backing up. Allows the lake to continue to drain properly.	Existing	Flood	3	Public Works	Municipal budget	Canal kept clear, flood risk reduced	Staff time	Within 1 year	High	LPR	PR, NR
2020-Mountain Lakes-005	Sunset Lake Dam	NJ DEP changed their calculations and dam ranking for Sunset Lake Dam. The dam is now high hazard dam	Rebuild the dam. After the dam is rebuilt, the Borough will develop an EAP and submit to NJDEP.	Existing	Dam Failure	3	Engineering	HMGP, PDM, FMA, Municipal budget	Dam failure avoided, meet safety requirements	$400,000	2 years	High	SIP	PP, SP
2020-Mountain Lakes-006	Develop a Disaster Debris Management Plan	The Borough lacks a formal Disaster Debris Management Plan.	The Borough will develop a formal plan.	New, Existing	All Hazards	3	Administration	Municipal budget	Formal plan established	$1,000	1 year	High	LPR	ES

Notes:

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 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. 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 preserve or restore the functions of natural systems. 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. Structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.*

Table 9.29-17. Summary of Evaluation and Action Priorities

Initiative Number	Mitigation Initiative Name	Life Safety	Property Protection	Cost Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2020-Mountain Lakes-001	Backup power for municipal wells	1	0	1	1	1	1	0	0	1	0	1	1	1	1	10	High
2020-Mountain Lakes-002	EOC backup power	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2020-Mountain Lakes-003	Enhance hazard outreach	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2020-Mountain Lakes-004	Maintenance procedures for canal between Mountain Lake and Wildwood Lake	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High

Initiative Number	Mitigation Initiative Name	Life Safety	Property Protection	Cost Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2020-Mountain Lakes-005	Sunset Lake Dam	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2020-Mountain Lakes-006	Develop a Disaster Debris Management Plan	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13	High

Notes: Section 6 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions.

Table 9.29-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building
Dam Failure		2020-Mountain Lakes-001, 2020-Mountain Lakes-002, 2020-Mountain Lakes-005			2020-Mountain Lakes-001, 2020-Mountain Lakes-002, 2020-Mountain Lakes-006	2020-Mountain Lakes-005		2020-Mountain Lakes-006
Drought		2020-Mountain Lakes-001, 2020-Mountain Lakes-002			2020-Mountain Lakes-001, 2020-Mountain Lakes-002, 2020-Mountain Lakes-006			2020-Mountain Lakes-006
Earthquake		2020-Mountain Lakes-001, 2020-Mountain Lakes-002			2020-Mountain Lakes-001, 2020-Mountain Lakes-002, 2020-Mountain Lakes-006			2020-Mountain Lakes-006
Extreme Temperatures		2020-Mountain Lakes-001, 2020-Mountain Lakes-002			2020-Mountain Lakes-001, 2020-Mountain Lakes-002, 2020-Mountain Lakes-006			2020-Mountain Lakes-006
Flood	2020-Mountain Lakes-004	2020-Mountain Lakes-001, 2020-Mountain Lakes-002		2020-Mountain Lakes-004	2020-Mountain Lakes-001, 2020-Mountain Lakes-002, 2020-Mountain Lakes-006			2020-Mountain Lakes-006
Geological Hazard		2020-Mountain Lakes-001, 2020-Mountain Lakes-002			2020-Mountain Lakes-001, 2020-Mountain Lakes-002, 2020-Mountain Lakes-006			2020-Mountain Lakes-006
Harmful Algal Bloom		2020-Mountain Lakes-001, 2020-Mountain Lakes-002			2020-Mountain Lakes-001, 2020-Mountain Lakes-002, 2020-Mountain Lakes-006			2020-Mountain Lakes-006

Hazard	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building
Severe Storm		2020-Mountain Lakes-001, 2020-Mountain Lakes-002	2020-Mountain Lakes-003		2020-Mountain Lakes-001, 2020-Mountain Lakes-002, 2020-Mountain Lakes-006			2020-Mountain Lakes-006
Severe Winter Storm		2020-Mountain Lakes-001, 2020-Mountain Lakes-002	2020-Mountain Lakes-003		2020-Mountain Lakes-001, 2020-Mountain Lakes-002, 2020-Mountain Lakes-006			2020-Mountain Lakes-006
Wildfire		2020-Mountain Lakes-001, 2020-Mountain Lakes-002			2020-Mountain Lakes-001, 2020-Mountain Lakes-002, 2020-Mountain Lakes-006			2020-Mountain Lakes-006
Hazardous Substances		2020-Mountain Lakes-001, 2020-Mountain Lakes-002	2020-Mountain Lakes-003		2020-Mountain Lakes-001, 2020-Mountain Lakes-002, 2020-Mountain Lakes-006			2020-Mountain Lakes-006
Infestation					2020-Mountain Lakes-006			
Disease Outbreak		2020-Mountain Lakes-001, 2020-Mountain Lakes-002	2020-Mountain Lakes-003		2020-Mountain Lakes-001, 2020-Mountain Lakes-002, 2020-Mountain Lakes-006			2020-Mountain Lakes-006

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.
RED = high ranked hazard
ORANGE = medium ranked hazard
YELLOW = low ranked hazard

9.29.8 Staff and Local Stakeholder Involvement in Annex Development

The Borough of Mountain Lakes followed the planning process described in Section 2 (Planning Process). This annex was developed over the course of several months with input from many jurisdiction representatives. 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. The following table summarizes who participated and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.29-19. Contributors to the Annex

Entity	Title	Method of Participation
Shawn Bennett	Chief of Police, OEM Coordinator	Primary POC, attended plan participant meetings, provided impact data, contributed to the mitigation strategy.
Mitchell Stern	Borough Manager	Secondary POC, attended plan participant meetings, provided impact data, contributed to the mitigation strategy.

Figure 9.29-1. Borough of Mountain Lakes Hazard Area Extent and Location Map 1

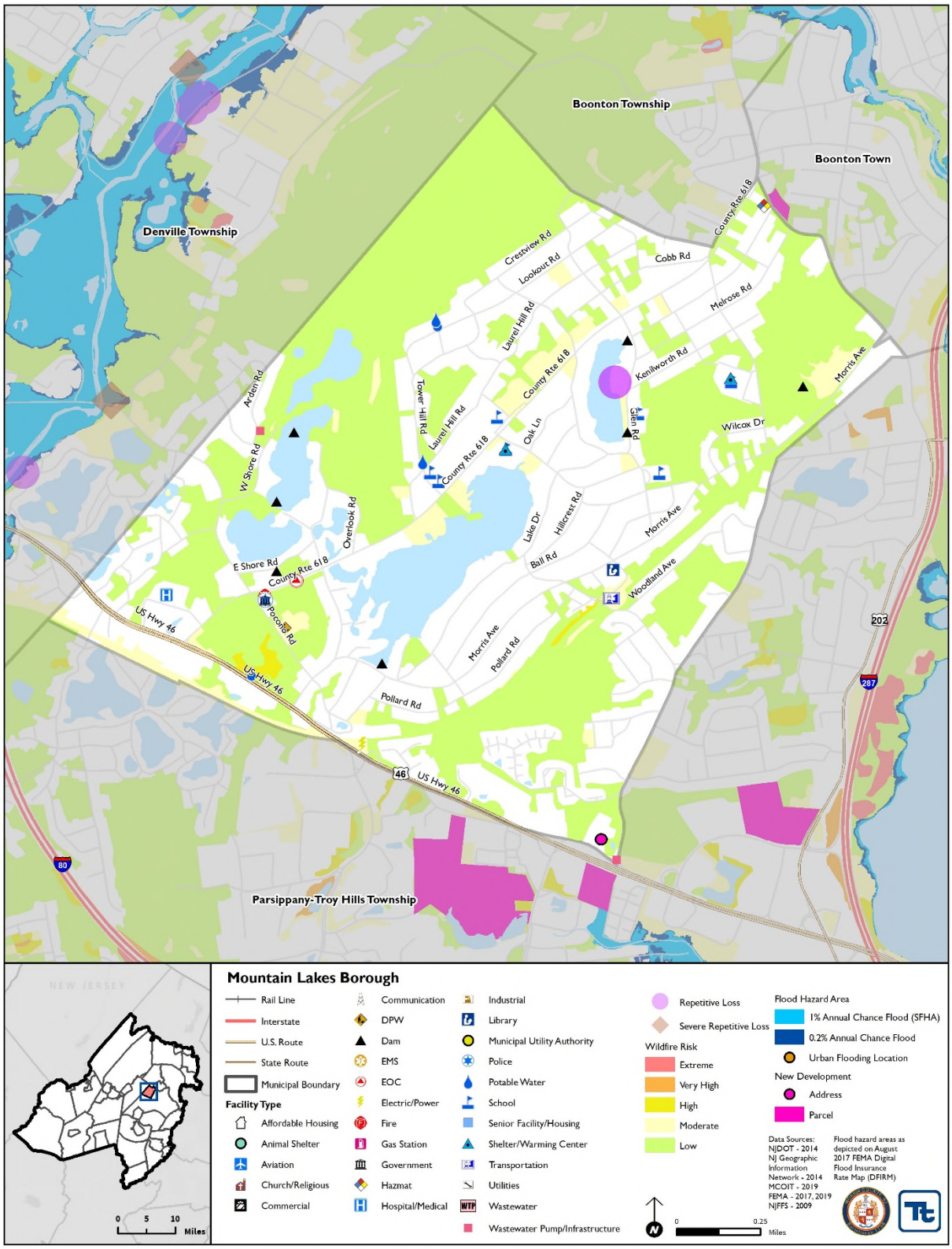
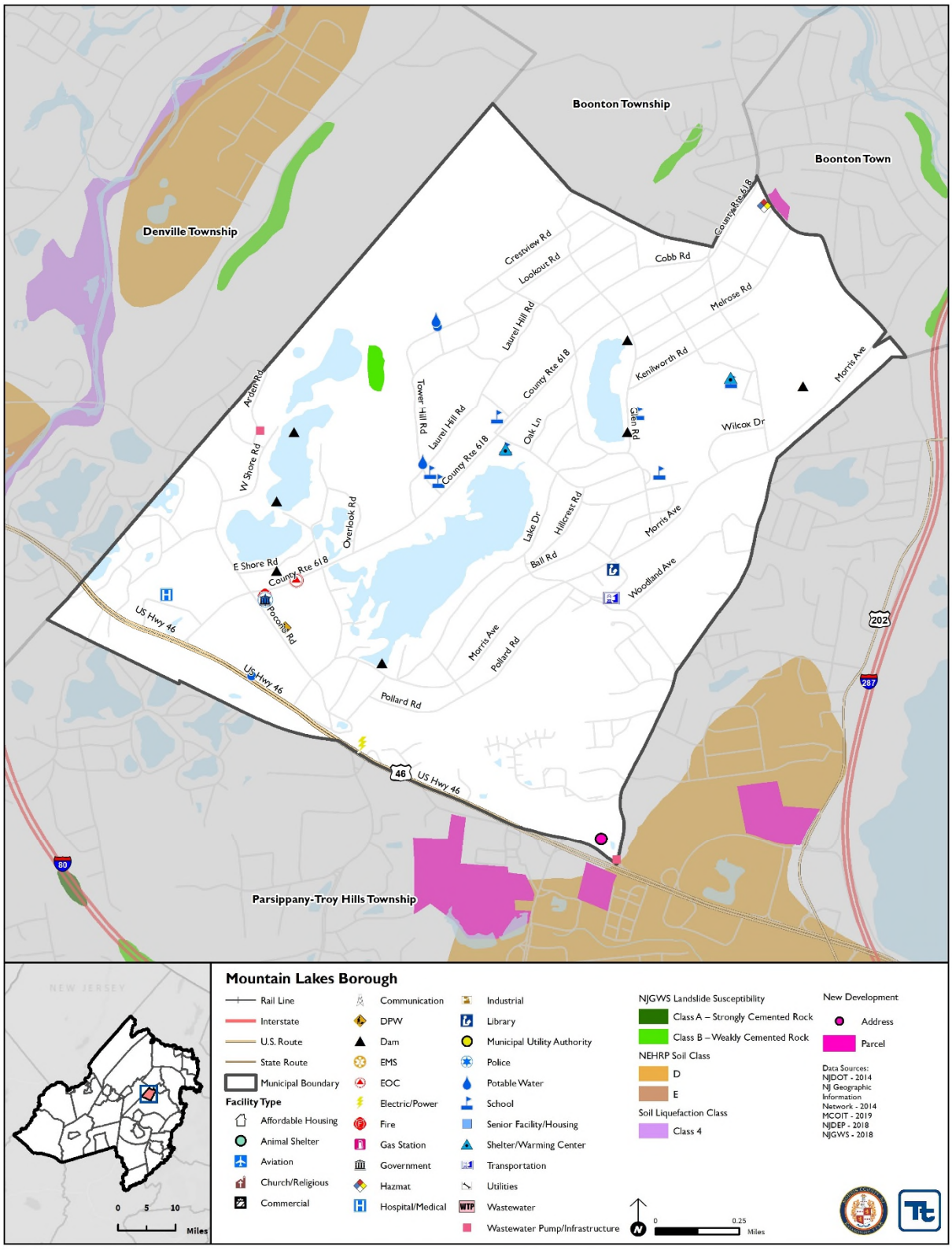


Figure 9.29-2. Borough of Mountain Lakes Hazard Area Extent and Location Map 2



Action Worksheet			
Project Name:	EOC backup power		
Project Number:	2020-Mountain Lakes-002		
Risk / Vulnerability			
Hazard(s) of Concern:	All hazards		
Description of the Problem:	The Borough is looking to rebuild the current municipal hall/police department/fire department. A new generator will need to be installed as part of the reconstruction to keep the Emergency Operations Center functional during power outages from hazard events. The current generator has had a history of failure and has led to damages of municipal computers.		
Action or Project Intended for Implementation			
Description of the Solution:	When new municipal complex is constructed, purchase and install a new generator to power the EOC.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	Ensures continuity of operations
Useful Life:	20 years	**Goals Met:**	3
Estimated Cost:	$40,000	**Mitigation Action Type:**	Structure and Infrastructure Projects (SIP)
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Immediately after funding received
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	OEM	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Install solar panels	$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Action Worksheet		
Project Name:	EOC backup power	
Project Number:	2020-Mountain Lakes-002	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services of EOC.
Property Protection	1	Project will protect EOC from power loss.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The Borough has the legal authority to complete the project.
Fiscal	0	Project requires funding support.
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	0	Within 5 years, as new municipal complex is constructed.
Agency Champion	1	OEM
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	

Action Worksheet

Project Name:	Sunset Lake Dam		
Project Number:	2020-Mountain Lakes-005		
Risk / Vulnerability			
Hazard(s) of Concern:	Dam Failure, Flood		
Description of the Problem:	Barbour Pond Dam is in need of substantial repairs and upgrades to provide protection from dam failure. The Dam does not currently meet dam safety requirements.		
Action or Project Intended for Implementation			
Description of the Solution:	Rebuild the dam. After the dam is rebuilt, the Borough will develop an EAP and submit to NJDEP.		
Is this project related to a Critical Facility or Lifeline?	Yes ☒	No ☐	
Level of Protection:	500-year flood	**Estimated Benefits (losses avoided):**	Dam failure avoided, meet safety requirements
Useful Life:	50 years	**Goals Met:**	3
Estimated Cost:	$400,000	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	1 year
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	HMGP, PDM, FMA, Municipal budget
Responsible Organization:	Engineering	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Repair Only	$100,000	Will not meet Dam Safety requirements
	Remove Dam	$1.5 million	Dam cannot be removed for safety reason.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Action Worksheet

Project Name:	Sunset Lake Dam	
Project Number:	2020-Mountain Lakes-005	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project protects life from dam failure
Property Protection	1	Project protects property from dam failure
Cost-Effectiveness	1	
Technical	1	
Political	1	There is public support for the project
Legal	1	The Borough has the legal authority to complete the project
Fiscal	0	The project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Dam Failure, Flood
Timeline	0	1-2 years
Agency Champion	1	Engineering
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	