



9.26 TOWN OF MORRISTOWN

This section presents the jurisdictional annex for the Town of Morristown. The annex includes a general overview of the Town of Morristown; an assessment of the Town of Morristown’s 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.

9.26.1 Hazard Mitigation Planning Team

The following individuals are the Town of Morristown’s identified HMP update primary and alternate points of contact and NFIP Floodplain Administrator.

Table 9.26-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name / Title: Robert Flanagan, Fire Chief/OEM Coordinator Address: 161 Speedwell Ave, Morristown, NJ 07960 Phone Number:973-476-7878 Email:r-flanagan@townofmorristown.org	Name / Title: Darnell Richardson, Police Chief/Deputy OEM Coordinator Address: Phone Number:973-390-0481 Email: d-richardson@morristownpolice.org
NFIP Floodplain Administrator	
Name / Title: Anthony Devizio, Engineer Address: Phone Number: 973-703-1872 Email:a-devizio@townofmorristown.org	

9.26.2 Jurisdiction Profile

The Town of Morristown is the county seat of Morris County. It is located in the northeastern portion of the County, approximately 30 miles west of Manhattan. The Town is surrounded by the Township of Morris and has a total land area of 2.86 square miles. Morristown is home to the county government, federal-level government offices, major medical services through and supporting Morristown Medical Center, and numerous businesses. The Whippany River and Great Brook are the major waterbodies in Morristown.

According to the U.S. Census, the 2010 population for the Town of Morristown was 18,411. The estimated 2017 population was 18,787, a 2% increase from the 2010 Census. Data from the 2017 U.S. Census American Community Survey indicate that 4.5% of the population is 5 years of age or younger and 12.7% 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.

9.26.3 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. According to the Town’s Master Plan Re-Examination, a vast majority of buildable land in Morristown is developed or preserved as open space. There are several redevelopment areas in Morristown that have been identified as summarized in their Master Plan. Table 9.26-2 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development. Figures



9.26-1 and 9.26-2 at the end of this annex illustrates the geographically-delineated hazard areas and the location of potential new development.

Table 9.26-2. 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	11	4	10	2	0
Multi-Family	2	5	6	5	4
Other (commercial, mixed-use, etc.)	2	2	0	1	1
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					
CVS	Commercial	1	12 Speedwell	None	Complete
Office Building	Office	1	49 Market Street	None	Complete
Ford/Morris Development	Commercial	3 structures with 10 unites each, and addition/warehouse conversion to 47 apartments			Complete
Building	Apartments	11 units	9 Prospect	None	Complete
Apartments	Residential	185 apartment units	55 Prospect		
Apartments	Residential	28 apartment units	35 Turtle Road	None	
Apartments	Residential/Commercial	59 apartment units/business on first floor	11 Dehart	None	
Apartments	Residential	52 apartment units	110 Franklin	None	
Apartments	Residential/Commercial	54 apartment units/business on 1 st floor	35-37 Market	None	
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None identified at this time.					

* Only location-specific hazard zones or vulnerabilities identified.

9.26.4 Capability Assessment

The Town of Morristown 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 Town of Morristown 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 Town of Morristown and where hazard mitigation has been integrated.

Table 9.26-3. Planning, Legal and Regulatory Capability

	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	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	State & Local	Yes		
<p>Comment: State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.) <i>Chapter 12 Building and Construction: The Town of Morristown a State Uniform Construction Code Enforcing Agency to be known as the Division of Building and Enforcement of Uniform Construction Code, consisting of a Construction Official, Building Subcode Official, Plumbing Subcode Official, Fire Protection Subcode Official and such other subcode officials for such additional subcodes as the Commissioner of the Department of Community Affairs, State of New Jersey, shall hereafter adopt as part of the State Uniform Construction Code. The Construction Official shall be the chief administrator of the enforcing agency or his designee.</i></p>					
Zoning Code	Yes	Local	Yes		
<p>Comment: Zoning Office Chapter 30 (Land Use Regulations), Part 1 (Zoning); Planning Board <i>On July 10, 2018, the Town Council adopted the new Land Development Ordinance. The Ordinance takes effect as of August 1, 2018 and applies to all applications deemed complete on or after that date. The Zoning Code governs the use and design of buildings in Morristown and standards for the design of improvements such as parking, landscaping, fencing, signage and environmental standards. This new ordinance is the first comprehensive update to the Morristown Land Development Ordinance since the previous ordinance was adopted in 1979, 38 years ago. These concepts are rooted in the 2014 Morristown Moving Forward Master Plan, which focused on circulation and community form, and proposed a form-based land use code that respects the Town’s existing character and its historic assets.</i></p> <p><i>This code marks a shift forward in the future of zoning in Morristown. The provisions of this ordinance regulate use, intensity and bulk as in the previous ordinance, but provides further guidelines with respect to ensuring new development strengthens long-established neighborhood character. Further, this code governs development in Morristown, not only by district, but also by street frontage, to ensure that the nature of new uses and buildings are consistent with that of Morristown’s established neighborhoods.</i></p>					
Subdivisions	Yes	Local	Yes		
<p>Comment: Division of Building and Enforcement Chapter 12 Building and Construction; Refer to Land Development Ordinance, July 10, 2018 (Planning Board)</p>					
Stormwater Management	Yes	Local - Engineer			
<p>Comment: Department of Public Works Chapter 20 and Chapter 27; Ordinance O-4-06 “Stormwater Control Regulations” <i>Chapter 20 Water and Sewer; Chapter 27 Land Disturbance: The purpose of this chapter is to control the disturbance of land and related changes in grades, elevations or surface conditions by requiring adequate provisions for surface water retention and drainage in order to promote the safety, public health, convenience and general welfare of the community.</i></p>					
Post-Disaster Recovery	No				





	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	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:					
Real Estate Disclosure	No (State law only)	State			
Comment: Division of Consumer Affairs 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	Yes	Local			
Comment: Planning Board Ord. No. O-31-04					
Site Plan Review	Yes	Local			
Comment: Division of Building and Enforcement Chapter 12					
Environmental Protection	Yes	Local		Yes	
Comment: Chapter 17, Protection of Trees; Chapter 25 Health includes air pollution Town of Morristown Environmental Resource Inventory (ERI) Update 2011 – Environmental Commission – serves as the basis for plan use planning that protects resources; Discusses adverse impacts of increased stormwater runoff; steep slopes discussed (slopes greater than 15 percent, or rise of 1.5 feet or greater over a run of 10 feet and limiting the disturbance of steep slopes in preventing soil loss, erosion, excessive stormwater runoff and degradation of surface water. The ERI also discusses the Special Flood Hazard Areas including a map of the flood hazard areas in Town.					
Flood Damage Prevention	Yes	Local		Yes	
Comment: Division of Building and Enforcement Chapter 30 (Land Use Regulations), Part 3 (Flood Damage Prevention) NFIP: Freeboard – Yes, Local, State Division of Building and Enforcement / NJDEP N.J.A.C. 7:13					
Wellhead Protection	Yes				
Comment: Public water supply, wellhead protection and groundwater recharge areas in Morristown are discussed in the Environmental Resources Inventory					
Emergency Management	Yes	Local			
Comment: Chapter 3: Police Regulations; Chapter 16: Fire Prevention and Protection					
Climate Change					
Comment:					
Disaster Recovery Ordinance	No				
Comment:					
Disaster Reconstruction Ordinance	No				
Comment:					
Other	No				
Comment:					
<ul style="list-style-type: none"> Municipal Separate Storm Sewer System (MS4) – Yes, Local, Dept. of Public Works, Chapter 20 Chapter 25: Health which includes communicable diseases, foodborne illness 					
Planning Documents					
Comprehensive / Master Plan	Yes	Local	Yes	Yes	
Comment: Town of Morristown Master Plan Re-Examination, Amended May 31, 2018; Redevelopment areas subject to flooding are identified in the plan. Open Space and Recreation Plan Update October 27, 2011; Environmental Commission – maps high risk flood zones on mapping in the plan					
Capital Improvement Plan	Yes	Local			



	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	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 #.
<i>Comment: Planning Board, November 2014</i>					
Disaster Debris Management Plan	No				
<i>Comment:</i>					
Floodplain or Watershed Plan	Yes	Local			
<i>Comment: OEM work with all depts, Flood Acquisition Plan (with Morris County); The Environmental Resources Inventory discusses water resources including watershed management areas and watersheds in Morristown, aquifers (bedrock and surficial) in Morristown and groundwater recharge areas in Morristown</i>					
Stormwater Management Plan	Yes	Local			
<i>Comment: Construction Stormwater Management Plan, March 2005</i>					
Stormwater Pollution Prevention Plan	Yes	Local			
<i>Comment:</i>					
Urban Water Management Plan	No				
<i>Comment:</i>					
Habitat Conservation Plan	No				
<i>Comment: The Environmental Resource Inventory (2011) discusses land cover and critical habitat in Morristown, including a habitat rank.</i>					
Economic Development Plan	Yes	Local			
<i>Comment: Planning Board; there are numerous Redevelopment plans available on the Planning Division website. Complete Streets Policy adopted via Resolution R-105-12 in July 2012</i>					
Shoreline Management Plan	N/A				
<i>Comment:</i>					
Community Wildfire Protection Plan					
<i>Comment:</i>					
Community Forest Management Plan	Yes				
<i>Comment: Community Forestry Management Plan, 2010-2014. The Open Space and Recreation Plan (2011) was created in combination with Morristown's Environmental Resource Inventory and the Community Forestry Plan which together form the basis for the Town's visionary sustainable values, policies and goals.</i>					
Transportation Plan	No				
<i>Comment: In 2012, established and adopted its Complete Streets Policy. The 2014 Moving Morristown Forward - Mobility and Community Form Plan links transportation with the Town's Land Use and Community Form Plan. In 2016, the Town conducted a comprehensive mobility study to evaluate the Town's transportation network and interactions with regional transportation patterns and routes. The Master Plan Re-Examination 2018: Morristown Moving Forward, a Mobility and Community Form Plan) considered development and future land use patterns with the Town's transportation capacity and infrastructure. The Morristown Mobility Initiative- Comprehensive Pedestrian, Traffic and Bike Study (2018) was completed including an assessment of traffic patterns and volumes to serve as a basis for recommended improvements.</i>					
Agriculture Plan	No				
<i>Comment:</i>					
Climate Action Plan	Yes				
<i>Comment: The Environmental Resource Inventory (2011) discusses climate change. The Office of Sustainability inventories solar panels. Resolution R-138-2014 Resolution endorsing the adoption of green building practices for civic, commercial and residential buildings</i>					
Tourism Plan	No				
<i>Comment:</i>					



	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	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 #.
Business Development Plan	No				
<i>Comment:</i>					
Other					
<i>Comment:</i>					
Response/Recovery Planning					
Comprehensive Emergency Management Plan (CEMP) / Emergency Operations Plan (EOP)	Yes	Local			
<i>Comment: OEM</i>					
Threat & Hazard Identification & Risk Assessment (THIRA)	No				
<i>Comment:</i>					
Post-Disaster Recovery Plan	No				
<i>Comment:</i>					
Continuity of Operations Plan					
<i>Comment:</i>					
Public Health Plan					
<i>Comment:</i>					
Other					
<i>Comment:</i>					

Table 9.26-4. 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, Zoning Board reviews
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/No Decently built out, mostly redevelopment occurred

ADMINISTRATIVE AND TECHNICAL CAPABILITY

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





Table 9.26-5. Administrative and Technical Capabilities

Staff/Personnel Resource	Available?	Department/Agency/Position
Administrative Capability		
Planning Board	Yes	Municipal Planning Board
Mitigation Planning Committee	Yes	For Mitigation Plan Update and maintenance
Environmental Board / Commission	Yes	Environmental Commission
Open Space Board / Committee	No	
Economic Development Commission / Committee	No	
Warning Systems / Services (reverse 911, outdoor warning signals)	Yes	Nixle
Maintenance program to reduce risk	No	
Mutual aid agreements	Yes	Surrounding municipalities and county
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Town Engineer, Town Planner (Consultant), Business Administrator
Engineers or professionals trained in building or infrastructure construction practices	Yes	Town Engineer
Planners or engineers with an understanding of natural hazards	Yes	Town Engineer
Staff with training in benefit/cost analysis	Yes	Town Engineering
Staff with training in green infrastructure	No	Insert appropriate information
Staff with education/knowledge/training in low impact development	Yes	Town Planner (Consultant)
Surveyor	Yes	Town Engineer
Stormwater engineer	Yes	Town Engineer
Personnel skilled or trained in GIS applications	Yes	Engineering Department
Local or state water quality professional	No	Contract, as needed
Scientist familiar with natural hazards in local area	No	
Emergency manager	Yes	Fire Department
Watershed planner	No	Insert appropriate information
Environmental specialist	No	Insert appropriate information
Grant writers	Yes	Consultant: Millennium
Resilience Officer	No	
Other		

FISCAL CAPABILITY

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

Table 9.26-6. Fiscal Capabilities

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No





Financial Resource	Accessible or Eligible to Use?
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	No
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 Town of Morristown.

Table 9.26-7. Education and Outreach Capabilities

Criterion	Response
Do you have a public information officer or communications office?	Yes (Police Department)
Do you have personnel skilled or trained in website development?	Yes (Consultant)
Do you have hazard mitigation information available on your website? <ul style="list-style-type: none"> If yes, briefly describe. 	Yes
Do you use social media for hazard mitigation education and outreach? <ul style="list-style-type: none"> If yes, briefly describe. 	Yes Facebook, Municipal Website, Nixle/Rave, Local Newspaper
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <ul style="list-style-type: none"> If yes, briefly describe. 	Yes Shade Tree Commission
Do you have any other programs already in place that could be used to communicate hazard-related information? <ul style="list-style-type: none"> If yes, briefly describe. 	Yes Municipal Website, Local Newspaper, Nixle/Rave
Do you have any established warning systems for hazard events? <ul style="list-style-type: none"> If yes, briefly describe. 	Yes Nixle/Rave

COMMUNITY CLASSIFICATIONS

The table below summarizes the classifications for community programs available to the Town of Morristown.

Table 9.26-8. Community Classifications

Program	Participating?	Classification	Date Classified
Community Rating System	No		
Building Code Effectiveness Grading Schedule (BCEGS)			
Public Protection (Fire ISO Protection Class)	Yes	3	
Storm Ready Certification	No		
Firewise Community Classification	No		
Sustainable Jersey	Yes	Silver	



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
- Is the administrative supportive of integrating climate change in policies or actions?
 - Yes, the Environmental Resources Inventory (2011) discusses climate change. The Town has an Office of Sustainability and the wastewater treatment plant is currently undergoing a solar energy project.
- Is climate change already being integrated into current policies/plans or actions (projects/monitoring) within the municipality?
 - Yes, in May 2016 Morristown installed a series of public charging stations in the commercial district.
 - The wastewater treatment facility project had solar installed and a monitoring system that tracks energy production/consumption, money saving, system performance and the carbon footprint.
 - The Town promotes sustainable development and developed a Green Development Checklist.
 - The Town Planning Division led the sustainability-themed Master Plan.
 - A Green Building Policy Resolution was passed in 2014 endorsing the adoption of green building practices.

Hazard	Adaptive Capacity (Capabilities) - High/Medium/Low
Dam Failure	Medium
Disease Outbreak	High
Drought	Medium
Earthquake	Medium
Extreme Temperature	Medium
Flood	Medium
Geologic	Medium
Harmful Algal Bloom	Low
Hazardous Substances	High
Infestation	Medium
Severe Weather	High
Severe Winter Weather	High
Wildfire	Low



NATIONAL FLOOD INSURANCE PROGRAM

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

Table 9.26-9. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	Yes
Who is your floodplain administrator? (name, department/position)	Town Engineer
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date that your flood damage prevention ordinance was last amended?	
Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? 	Meets
When was the most recent Community Assistance Visit or Community Assistance Contact?	Date not available in list provided by NJDEP
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state what they are. 	No
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what they are. 	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If no, state why. 	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program?	Yes
<input type="checkbox"/> If so, what type of assistance/training is needed?	CFM Certification
Does your jurisdiction participate in the Community Rating System (CRS)? <ul style="list-style-type: none"> If yes, is your jurisdiction interested in improving its CRS Classification? If no, is your jurisdiction interested in joining the CRS program? 	No
How many flood insurance policies are in force in your jurisdiction?*	10 NFIP Policies; 36 Write-Your-Own Policies
How many total loss claims have been filed in your jurisdiction?*	8 NFIP Claims; \$510,072 14 WYO Claims: \$108,123
Do you maintain a list of properties that have been damaged by flooding?	No
Do you maintain a list of property owners interested in flood mitigation?	No

*According to FEMA statistics as of September 2019

ADDITIONAL AREAS OF EXISTING INTEGRATION

Planning

The Planning Division provides general planning and landscape design services to the Planning Board and Board of Adjustment, any committees of either Board and the Town Council. The Planning Division also works closely with other municipal officials and entities, such as the Environmental Commission; as well as with Morristown based, non-municipal organizations, such as the Morristown Partnership and the Trustees of the Green. It is the primary responsibility of the division to keep abreast of Planning and Land Use related issues at the federal, state, regional, county and local levels that may affect the future of the Town and help develop Morristown’s response to those issues.





The Town Planning Division led the sustainability-themed Master Plan Re-Examination (2018). Morristown is committed to maintaining its historic urban fabric, traditional urban form and character of its historic neighborhoods while pursuing redevelopment and smart growth that reinforces Morristown’s role as a walkable, active mixed-use urban center. The Re-Examination recommends that the Town’s Land Use Regulations be re-written and includes a map to serve as the zoning district map for the proposed zoning ordinance.

In July 2018, Town Council adopted the new Land Development Ordinance, a comprehensive update to the previous 1979 ordinance, to guide future development in Morristown. The Flood Damage Prevention ordinance, steep slopes and stormwater control regulations are contained within.

The Town passed Resolution R-139-2014 endorsing the adoption of a sustainable land use pledge regarding land use decisions including considering regional impacts, transportation choices, natural resource protection and green design.

In 2012, the Town was awarded funding through North Jersey Transportation Planning Authority to develop a Mobility and Community Form Plan to provide a framework for analyzing and designing smart, feasible strategies to promote responsible development and growth, while preserving and strengthening existing neighborhoods.

The Environmental Commission was established for the protection, development or use of natural resources, including water resources, located within the territorial limits of the Town of Morristown. The Commission has power to conduct research into the use and possible use of the open land areas of the Town. It keeps an index of all open areas publicly or privately owned, including open marshland, swamps, and other wetlands, in order to obtain information on the proper use of such areas and may from time to time recommend to the Planning Board plans and programs for inclusion in the Master Plan and the development and use of such areas. Morristown has a very active Environmental Commission which regularly participates in planning and zoning application reviews and assessments. In addition to facilitating updates to the Town's ERI and OSRP - the Commission led the charge to protect a sizable parcel of open space which has a critical impact on aquifer recharge.

The Town has participated in the County's Flood Mitigation Program (FMP) and has an approved Flood Acquisition Plan (FLAP). The Morris County FMP is the first dedicated, county-level flood acquisition program in the State of New Jersey. The FMP allows Morris County to assist municipalities in moving people out of harm’s way, lowering municipal costs due to intense flooding episodes, and create natural flood capture and storage areas which protect the remaining homes and businesses. The FMP is funded by the Morris County Open Space tax and provides grant monies for municipalities to purchase flood-prone residential properties.

The Town of Morristown has applied for and received over \$1 million in funding through the Morris County Open Space Preservation Trust Fund for a variety of open space projects. In 2011 the Town of Morristown received \$100,000 as a matching grant award from the State of New Jersey’s Green Acres program of open space preservation. This matching grant supported the acquisition of the pending Hillcrest Park project which received funding in 2010 to preserve existing woodlands and spectacular view sheds and create picnic, play areas, and benches. This property was also partially funded through the State’s Standard Acquisition program.

Education and Outreach

The Town of Morristown Office of Emergency Management (OEM) proactively plans for hazards, works to reduce threats and prepares Morristown citizens to respond to and recover from a disaster. OEM has a dedicated page with information for regarding emergency management, including a Safety and Preparedness page for





residents including general disaster information and power loss. Social media platforms, Facebook and Twitter, are used to post relevant and emergency information for public viewing.

- Morristown also has a Community Emergency Response Team (CERT). This team of volunteers receives free training in a variety of required courses to include Disaster Preparedness, Life Safety and Terrorism. The CERT team is a resource for Morristown’s Emergency Services community. For additional information about the Morristown CERT team, contact the Morristown Office of Emergency Management at 973-292-6631.
- Coronavirus COVID-19 information is posted on a dedicated page on the Town’s website

9.26.5 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 Town of Morristown’s 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 9.26-10 provides details regarding municipal-specific loss and damages the Town of Morristown experienced during hazard events. Information provided in the table below is based on reference material or local sources.

Table 9.26-10. 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	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 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. At one point during the storm, up to 270,000 customers were without power.	Snow clearing, debris removal, power outages
March 6-7, 2018	Severe Winter Storm and Snowstorm	Yes	12 to 24 inches of snow was observed across large parts of Morris County. 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 across portions of New Jersey,	Snow clearing, debris removal, power outages



Date(s) of Event	Event Type (disaster declaration if applicable)	Morris County Designated?	Summary of Event	Summary of Local Damages and Losses
			<p>especially where the heaviest snow was reported. Many customers were still without power from the previous storm when this storm struck. Governor Murphy estimated about 350,000 customers state-wide lost power as a result of this second storm. Governor Phil Murphy declared a state of emergency which went into effect at 8 PM Tuesday March 6th.</p>	

9.26.6 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 9.26-12 summarizes the Town of Morristown 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 9.26-11. 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 5 dams in the Town, 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:	11,365	NEHRP D&E:	2,314	100-year Loss:	\$0	High
		Liquefaction Class 4:	160	Liquefaction Class 4:	52	500-year Loss:	\$5,504,925	
						2,500-year Loss:	\$83,733,716	
Extreme Temperature	Extreme temperature event (heat or cold)	Over 65 Population:	2,397	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:	1,394						
Flood	100- and 500-Year Mean Return Period Event	100-year	6	100-year	9	100-year Loss:	\$4,663,192	High
		500-year	6	500-year	25			





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:	150	Class A:	25	Class A:	7711229.186	Moderate
		Class B:	60	Class B:	14	Class B:	\$22,927,023	
		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:	\$35,752	High
						100 -Year Loss:	\$584,535	
						500-year Loss:	\$3,130,215	
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 following summarizes the repetitive and severe repetitive flood losses in the Town of Morristown

- Number of repetitive loss (RL) properties: 0
- Number of severe repetitive loss (SRL) properties: 1
- Number of RL/SRL properties that have been mitigated: 0

The Town Engineer indicated that the updated preliminary DFIRMs reduce the flood hazard area in Town. There are many properties in Morris Township with a Morristown mailing address. The SRL property listed as located in the Town, is physically located in the Township according to the street address provided in BureauNet. The Township Engineer will investigate further and notify the State and FEMA.

Source: FEMA BureauNet, 2019

Note: RL and SRL as of 04/26/2019; The number of SRL properties excludes RL properties and includes properties that have been verified only (SRL_Indicator = V).

CRITICAL FACILITIES

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

Table 9.26-12. Potential Flood Losses to Critical Facilities and Lifelines

Name	Type	Exposure		Mitigation Status
		1% Event	0.2% Event	
JCP&L Morristown	Electric Power		X	Enhanced flood wall around the compound; The Town attends quarterly meeting with JCP&L to review transformer, responses, weak points in the circuit, outside of day-to-day contact. No further action needed.

ADDITIONAL IDENTIFIED VULNERABILITIES

The jurisdiction has identified the following vulnerabilities within their community:

Morristown is a highly developed urban community with buildings and paved areas covering most of the land area. With the amount of impervious surface in the Town, the land availability to absorb precipitation is effectively reduced and the amount of runoff is increased. The hilly topography of the Town further increases the rate of runoff and could result in flooding where there is inadequate drainage. The Whippany River has been responsible for flooding in Morristown since the late 1920s. Other areas in the Town that have become increasingly prone to flooding and flood damage due to the Great Brook. Continued development of the upstream floodplains and watershed areas in Morristown has created a condition which results in flooding or threats of flooding more frequently (FEMA FIS 2010).

HAZARD AREA EXTENT AND LOCATION

Hazard area extent and location maps were generated for the Town of Morristown 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 Town of Morristown has significant exposure. A map of the Town of Morristown hazard area extent and location is provided on the



following page. This map indicates the location of the regulatory floodplain, as well as identified critical facilities within the municipality.

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 Town of Morristown. The Town of Morristown 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. The Town of Morristown agreed with the calculated hazard rankings.

Table 9.26-13. Town of Morristown Hazard Ranking Input

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

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

9.26.7 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 9.26-14. 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 #
Stream stabilization and river bank augmentation of the Whippany River to protect: Martin Luther King Avenue, Coal Avenue, Flagly Street, Clyde Potts Drive, Abbet Avenue.	Engineer	No progress. This project is to develop a riverwalk trail; streambank stabilization was noted but not as a flood control measure.		
Clean River Bed along Whippany River to increase flow.	Engineer	No Progress. This was not a flood-control project and related to improving quality of life along the riverfront. Remove from the plan.		
Backup power for Morristown High School (shelter) on Early Street.	OEM	Discontinue - Pursued HMA Grant for stationary generator for Morristown High School, but later amended application for two mobile generators. Two trailer mounted units are being purchased by the end of 2019.		
Develop all-hazards public education and outreach program for hazard mitigation and preparedness.	OEM	Leverages social media to increase awareness, use of NIXEL; considered a capability		
Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) Phase 1: Identify appropriate candidates Phase 2: Coordinate/meet with the property owners to provide information on appropriate mitigation measures/resources available	OEM	Center St and Coal Avenue, acquired. Mostly done through acquired through County Funded Grants. There is one SRL property in FEMA’s database that the Town Engineer will look into further.	Yes	2020-Morristown-001

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

- Generator upgrade at Town Hall - Replaced control panel and transfer switch
- Two mobile generators (FEMA) funding – almost completed
- Nearly every year, the Town issues an annual curb, sidewalk and drainage project at various locations and address drainage issues as they come; compile a list of problem areas, tally the complaints that come in, identify the work needs to be done, design as necessary, bid/award the job and do the spot improvements (inlets, piping) (17+ years and ongoing)

PROPOSED HAZARD MITIGATION INITIATIVES FOR THE PLAN UPDATE

The Town of Morristown 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 Town of Morristown 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 9.26-16 summarizes the comprehensive-range of specific mitigation initiatives the Town of Morristown 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 4 FEMA mitigation action categories and the 6 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 9.26-17 summarizes the evaluation of each mitigation initiative and the resulting priority, listed by Action Number.



Table 9.26-15. Proposed Hazard Mitigation Initiatives

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-Morristown-001	Reduce repetitive loss flooding	Problem: The Bureau Net lists one Severe Repetitive Loss Property in the Town.	Solution: The Town Engineer is uncertain this property is located in Morristown because many properties located in Morris Township that have Morristown zip codes and mailing addresses. The Engineer will investigate this further by contacting NJDEP and FEMA and will either notify Morris Township this is a repetitive loss property in their community, or, if located in Morristown, contact the property owner directly to discuss mitigation actions. If within the Town’s jurisdiction, the Town will apply for grant funding to implement the selected mitigation measure.	Existing	Flood, Severe Weather	1, 5	<u>Engineer</u> , NJDEP and FEMA	Local and FEMA HMA	High	Medium	Short	High	SIP	PP
2020-Morristown-002	Park Facility	Problem: George Gramby is located in the floodplain with an old bathroom structure vulnerable to flooding; impacted in 2011.	Solution: Construct a new bathroom facility by the street and parking lot outside of the floodplain	Existing	Flood, Severe Weather	1	<u>Engineer</u>	Local	High	Medium	Short	Medium	SIP	PP
2020-Morristown-003	Columbus Ave – increase stormwater drainage capacity	Problem: Columbus Street – the inlet is at a low spot and results in roadway flooding.	Solution: Add seepage pits up the road with an overflow pipe; this will perc water into the ground and the water will go into the storm system to reduce downstream flows and roadway flooding	Existing	Flood, Severe Weather	1	<u>Engineer</u>	Local – Capital Budget	High	High	Short	High	SIP	PP
	Western Ave – increase	Problem: Western Ave is a long stretch of road with no inlets and		Existing		1	<u>Engineer</u>		High	High	Short	High	SIP	PP



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-Morristown-004	stormwater drainage capacity	water goes down to Searing Ave in the Township Solution: Install seepage pits turning into the storm drain system to catch water earlier, reduce velocity and heavy flow, perc water into ground; mitigate adverse effects of erosion			Flood, Severe Weather			Local – Capital Budget						
2020-Morristown-005	Purchase sterilization equipment	Problem: The COVID-19 pandemic has presented challenges for the Borough to ensure continuity of operations of essential services (e.g., emergency services, government personnel, DPW) because the Borough does not have adequate supplies or equipment to ensure sterilized workspaces and vehicles. Solution: Purchase equipment for sterilization to keep essential services coming to work (clean trucks/ambulances, government work spaces clean)		Existing	Disease Outbreak	1	Mayor	FEMA	High	Medium	Short	High	SIP	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 9.26-16. Summary of Prioritization of Actions

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-Morristown-001	Reduce repetitive loss flooding	1	1	1	1	0	0	0	0	1	1	1	1	0	0	8	High
2020-Morristown-002	Park Facility	0	1	1	1	1	1	0	0	1	1	1	1	0	0	9	Medium
2020-Morristown-003	Columbus Ave – increase stormwater drainage capacity	1	1	1	1	1	1	1	0	0	1	1	1	1	1	12	High
2020-Morristown-004	Western Ave – increase stormwater drainage capacity	1	1	1	1	1	1	1	0	0	1	1	1	1	1	12	High
2020-Morristown-005	Purchase sterilization equipment	1	0	1	1	0	1	0	0	1	1	0	1	1	0	8	High

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





Table 9.26-17. 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								
Disease Outbreak	-005				-005			
Drought								
Earthquake								
Extreme Temperature								
Flood		-001, -002, -003, -004	-001			-001, -002, -003, -004		-001
Geologic								
Harmful Algal Bloom								
Hazardous Substances								
Infestation								
Severe Weather		-001, -002, -003, -004				-001, -002, -003, -004		
Severe Winter Weather								
Wildfire								

RED = high ranked hazard

ORANGE = medium ranked hazard

YELLOW = low ranked hazard

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

9.26.8 Staff and Local Stakeholder Involvement in Annex Development

The Town of Morristown 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 9.26-18. Contributors to the Annex

Entity	Title	Method of Participation
Michael Geary	Morristown OEM	Attended meetings and provided information to update the annex
Robert Flanagan	Fire Chief OEM Coordinator	Attended meetings and provided information to update the annex
Anthony Devizio	Town Engineer	Attended an annex support meeting; provided information for the annex update
Fritz Reuss	Building Department	Provided information for the annex update



Figure 9.26-1. Town of Morristown Hazard Area Extent and Location Map 1

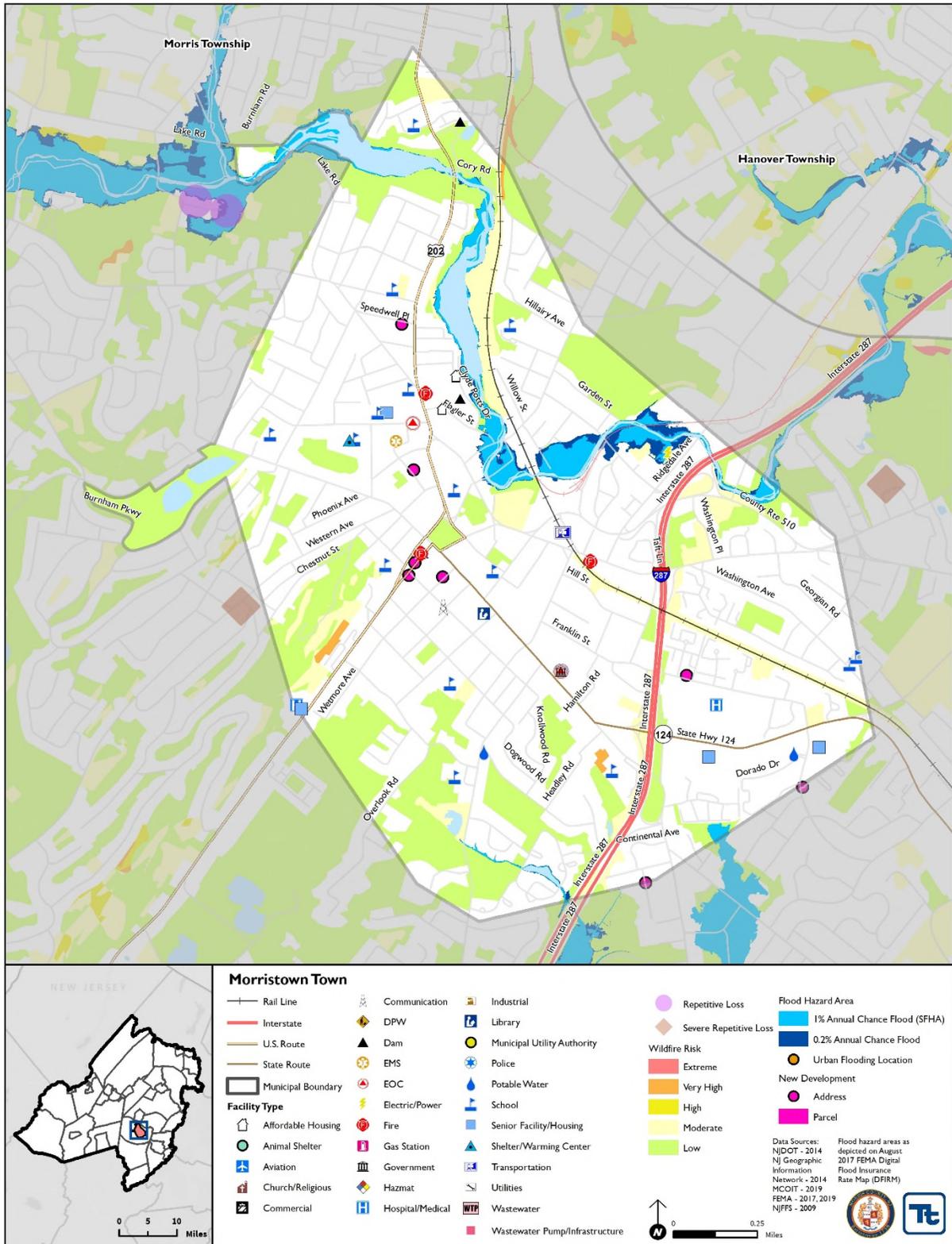
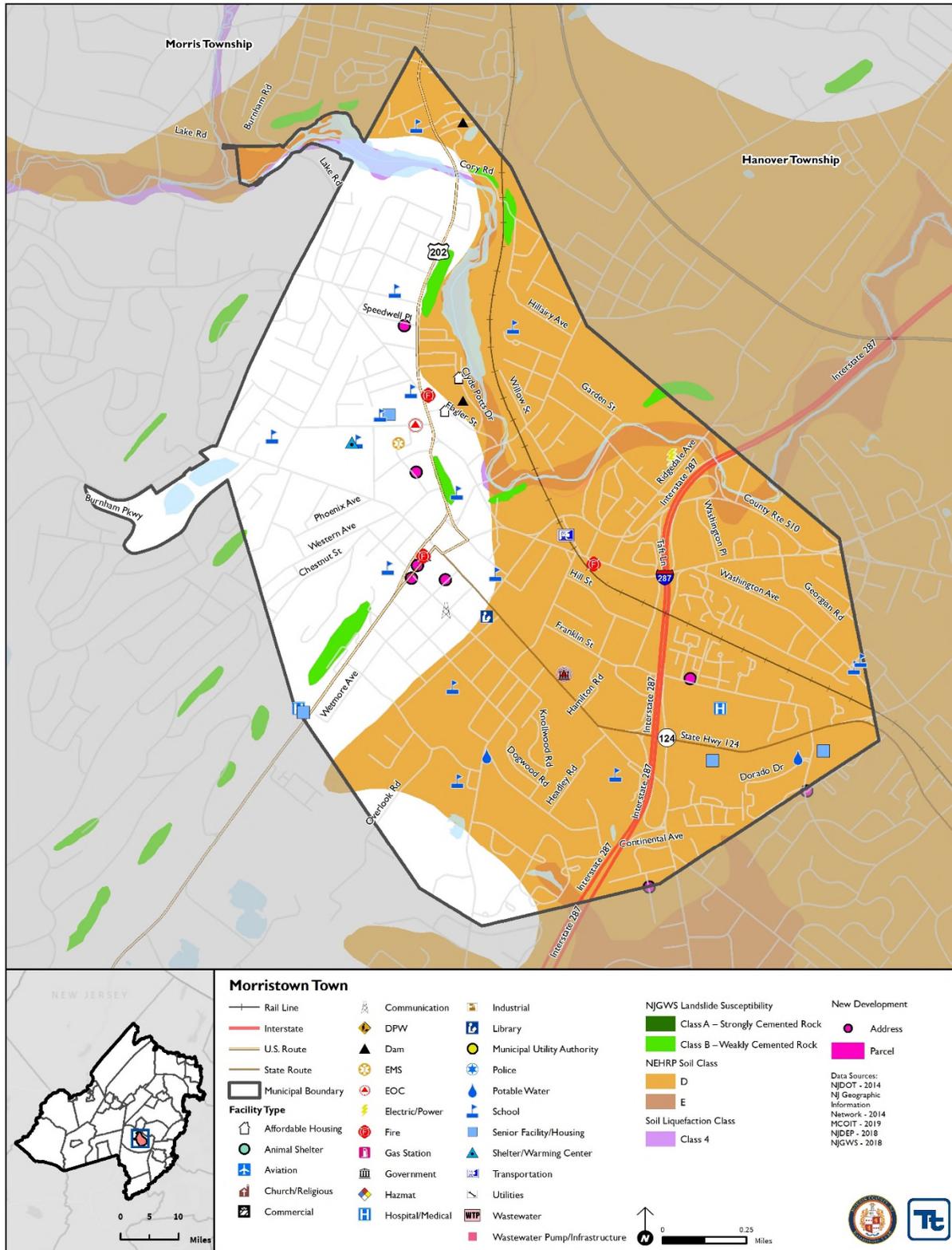




Figure 9.26-2. Town of Morristown Hazard Area Extent and Location Map 2





Action Worksheet			
Project Name:	Reduce repetitive flooded properties		
Project Number:	2020-Morristown-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Bureau Net indicates there is one SRL property in Town. The Engineer is uncertain this is physically located in Morristown and may be in Morris Township.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town Engineer is uncertain this property is located in Morristown because many properties located in Morris Township have Morristown zip codes and mailing addresses. The Engineer will investigate this further by contacting NJDEP and FEMA and will either notify Morris Township, or contact the property owner directly to discuss mitigation actions. If within the Town's jurisdiction, the Town will apply for grant funding to implement the selected mitigation measure.		
Is this project related to a Critical Facility or Lifeline?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Level of Protection:	To be determined what is feasible and cost-effective	Estimated Benefits (losses avoided):	Property protection
Useful Life:	Depends on mitigation action selected	Goals Met:	1
Estimated Cost:	High	Mitigation Action Type:	SIP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Short
Estimated Time Required for Project Implementation:	Short, when funding is secured	Potential Funding Sources:	FEMA HMA; Local match
Responsible Organization:	Borough Engineer/NFIP Floodplain Administrator	Local Planning Mechanisms to be Used in Implementation if any:	
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Elevate roadway	High	Not feasible
	Elevate mechanicals	High	This is a lower cost solution but will not reduce/eliminate structural damages
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Reduce repetitive flooded properties	
Project Number:	2020-Morristown-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	SRL elevation and acquisitions are cost-effective if the budget is within the national threshold
Technical	1	
Political	0	
Legal	0	Voluntary program – property owner needs to want to participate
Fiscal	0	
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
Total	8	
Priority (High/Med/Low)	High	