



9.24 BOROUGH OF MORRIS PLAINS

This section presents the jurisdictional annex for the Borough of Morris Plains. The annex includes a general overview of the Borough of Morris Plains; an assessment of the Borough of Morris Plains’ 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.

9.24.1 Hazard Mitigation Planning Team

The following individuals are the Borough of Morris Plains’ identified HMP update primary and alternate points of contact and NFIP Floodplain Administrator.

Table 9.24-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name / Title: Michael Koroski, Lieutenant/Deputy OEM Address: Phone Number: 973-538-2284x 106 Email: mkoroski@morrisplainsboro.org	Name / Title: Michael Rolph, Lieutenant/Deputy OEM Address: Phone Number: 973-538-2284 x 107 Email: mrolph@morrisplainsboro.org
NFIP Floodplain Administrator	
Name / Title: Leon Hall, Borough Engineer Address: Phone Number: 973-887-2270 Email: lhall@anderson-denzler.com	

9.24.2 Jurisdiction Profile

The Borough of Morris Plains is located in the central region of Morris County; it is border by Morris to the south, Parsippany-Troy Hills to the west and north, and Hanover to the east. Major waterways that flow through the Borough includes the North Branch Whippany River, Watnong Brook, Jaquis Brook, Malapardis Brook and smaller streams and tributaries. According to the U.S. Census, the 2010 population was 5,532, and the total land area is 2.594 square miles, 2.557 square miles of land and 0.037 square miles of water. The Borough does not have any unincorporated communities.

The Borough is also located in the New Jersey Highlands Region, one of the 88 municipalities protected by and subject to the provisions of the Highlands Water Protection and Planning Act. Nearly the entire Borough is located within the Highlands Planning Area (1,657 acres or 99.8%).

According to the U.S. Census, the 2010 population for the Borough of Morris Plains was 5,532. The estimated 2019 population was 5,912, a 6.8% increase from the 2010 Census. Data from the 2018 U.S. Census American Community Survey indicate that 5.1% of the population is 5 years of age or younger and 17.8% 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.

9.24.3 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 9.24-2 summarizes recent and expected future development trends, including major





residential/commercial development and major infrastructure development. Figures at the end of this annex illustrate the geographically-delineated hazard areas and the location of potential new development.

Table 9.24-2. 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 and Multi-Family	2	0	3	3	0
Other (commercial, mixed-use, etc.)	0	0	2	0	2
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					
Signature Place	Residential	197	240 Johnson Road	Flood	
Coventry Park	Residential	70	191 Littleton Road	Flood	
Arbor Terrace (Assisted Living)	Residential	82	361 Speedwell Ave		
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
The American	Residential	281	100 American Road		Approval only; construction has not started
M&M at Morris Plains	Mixed Use	434	200 Tabor Road	Flood	Approval only; construction has not started

* Only location-specific hazard zones or vulnerabilities identified.

9.24.4 Capability Assessment

The Borough of Morris Plains 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 Morris Plains 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 Morris Plains and where hazard mitigation has been integrated.

Table 9.24-3. 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		
<i>Comment: Building Department, State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.) Chapter 23 adopted by the Borough of Morris Plains. The "Borough of Morris Plains State Uniform Construction Code Enforcing Agency," consisting of a Construction Official, Building Subcode Official, Plumbing Subcode Official, Electrical Subcode Official, Fire Protection Subcode Official, Elevator 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.</i>					
Zoning Code	Yes	Local	Yes	No	
<i>Comment: Chapter 13 (Land Development), Article 5 (Zoning Regulations). The zoning map for the Borough is dated May 2000. 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.</i>					
Subdivisions	Yes	Local	Yes	No	
<i>Comment: Chapter 13 (Land Development), Article 4 (Subdivision and Site Plan Review) administered by the Planning Board in accordance with Section 28 of Chapter 291, Laws of NJ 1975.</i>					
Stormwater Management	Yes	Local	Yes		
<i>Comment: Title 7 of the NJ Administrative Code (N.J.A.C. 7:8); Chapter 18C (Municipal Stormwater Management and Storm Sewer Systems). The provisions of this chapter shall be enforced by all police officers of the Borough, the Borough Engineer, the Superintendent of the Department of Public Works, the Health Officer, the Zoning Officer, the Borough Engineer and/or their duly authorized designees.</i>					
Post-Disaster Recovery	No		No		
<i>Comment:</i>					
Real Estate Disclosure	Yes	State			
<i>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.</i>					
Growth Management	Yes	Local			
<i>Comment: Zoning map. State Mandated on a municipal level. See Zoning Ordinance;</i>					
Site Plan Review	Yes	Local	Yes		
<i>Comment: Planning Board</i>					
Environmental Protection	No				
<i>Comment: Chapter 23A (Trees)</i>					
Flood Damage Prevention	Yes	Federal, State, Local	No	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: Chapter 11, the Construction Official is appointed to administer and implement the flood damage prevention ordinance by granting or denying development permit applications in accordance with its provisions. The Borough Engineer is designated the National Flood Insurance Program (NFIP) Floodplain Administrator.					
Wellhead Protection	No				
Comment:					
Emergency Management	Yes	Emergency manager			
Comment: Chapter 10 (Fire Department); Chapter 11 (Fire Prevention); Chapter 18 (Police Department)					
Climate Change	No				
Comment:					
Disaster Recovery Ordinance	No				
Comment:					
Disaster Reconstruction Ordinance	No				
Comment:					
Other					
Comment: <ul style="list-style-type: none">Chapter 19, Soil Disturbance, Soil Erosion – Borough EngineerChapter 19A Southeast Morris County Municipal Utilities Authority for Township of Hanover, Township of Morris, Borough of Morris Plains and Town of Morristown.					
Planning Documents					
Comprehensive / Master Plan	Yes	Local	Yes	Yes	
Comment: Per NJSA: Yes, if planning board (40:55D-28) and must be re-examined every ten years (40:55D-89.1); Updated Master Plan Reexamination Report; approved by the Planning Board; Adopted Dec 2018. Flooding locations are acknowledged including under the railroad bridge and the Borough has an agreement with New Jersey Transit to pump stormwater runoff from under the bridge. A recommendation is to monitor the effectiveness of flood prevention and mitigation measures in the Borough and make changes and enhancements to the existing and planned measures as necessary. Recommendation is to encourage green building measures in site plan review and low impact development to use or mimic natural processes that result in the infiltration, evapotranspiration or use of stormwater in order to protect water quality and associated aquatic habitat.					
Capital Improvement Plan	Yes	Local			
Comment: 5 Year Planning, but integrated into municipal budget					
Disaster Debris Management Plan	No				
Comment:					
Floodplain or Watershed Plan	No	Local			
Comment: FPA					
Stormwater Management Plan	Yes	Local			
Comment:					
Stormwater Pollution Prevention Plan	Yes	Local			
Comment: March 2005; Borough Engineer and Stormwater Pollution Prevention Team. The Borough ensures all residential development and redevelopment projects that are subject to Residential Site Improvement Standards for stormwater management, including NJDEP Stormwater Management Rules NJAC 7:8, are in compliance with those standards.					
Urban Water Management Plan	No				
Comment:					



	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 #.
Habitat Conservation Plan	Yes				
<i>Comment:</i>					
Economic Development Plan	Yes	Local			
<i>Comment:</i> Borough Council					
Shoreline Management Plan	No				
<i>Comment:</i> Not applicable					
Community Wildfire Protection Plan	No				
<i>Comment:</i>					
Community Forest Management Plan	No				
<i>Comment:</i> .					
Transportation Plan	Yes	Planning Board and Council			
<i>Comment:</i> Circulation Plan is discussed in the Master Plan (2018).					
Agriculture Plan	No				
<i>Comment:</i>					
Climate Action Plan	No				
<i>Comment:</i>					
Tourism Plan	No				
<i>Comment:</i>					
Business Development Plan	Yes	Planning Board and Council			
<i>Comment:</i> Part of Master Plan					
Other					
<i>Comment:</i> Open Space Plan – Yes, Local, Borough Council					
Response/Recovery Planning					
Comprehensive Emergency Management Plan (CEMP) / Emergency Operations Plan (EOP)	Yes	Local	Yes		
<i>Comment:</i> 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. The plan was last updated April 2016. The identified hazards include hazards in the hazard mitigation plan.					
Threat & Hazard Identification & Risk Assessment (THIRA)	No				
<i>Comment:</i>					
Post-Disaster Recovery Plan	No				
<i>Comment:</i>					
Continuity of Operations Plan	Yes				
<i>Comment:</i> Refer to the Emergency Operations Plan.					



	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 #.
Public Health Plan	Yes				
<i>Comment: Refer to the Emergency Operations Plan.</i>					
Other					
<i>Comment:</i>					

Table 9.24-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? - If no, who does? If yes, which department?	Yes Building/Zoning after approval
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.	No 85% Built Out

ADMINISTRATIVE AND TECHNICAL CAPABILITY

The table below summarizes potential staff and personnel resources available to the Borough of Morris Plains.

Table 9.24-5. Administrative and Technical Capabilities

Staff/Personnel Resource	Available ?	Department/Agency/Position
Administrative Capability		
Planning Board	Yes	Planning Board
Mitigation Planning Committee	No	
Environmental Board / Commission	No	
Open Space Board / Committee	No	Subcommittee to the Planning Board
Economic Development Commission / Committee	No	
Warning Systems / Services (reverse 911, outdoor warning signals)	Yes	Rave, Facebook (PD), Instagram, Next Door, Municipal Website, Weekly Email Blast
Maintenance program to reduce risk	Yes	Road Department
Mutual aid agreements	Yes	Police Department
Technical/Staffing Capability		



Staff/Personnel Resource	Available ?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Professional Contractors
Engineers or professionals trained in building or infrastructure construction practices	Yes	Consultant
Planners or engineers with an understanding of natural hazards	Yes	Professional Contractors
Staff with training in benefit/cost analysis	Yes	Borough Planner
Staff with training in green infrastructure	Yes	Consulting Engineer
Staff with education/knowledge/training in low impact development	Yes	Planner
Surveyor	Yes	Professional Contractors
Stormwater engineer		
Personnel skilled or trained in GIS applications	Yes	
Local or state water quality professional		
Scientist familiar with natural hazards in local area	Yes	LSRP
Emergency manager	Yes	Chief of Police
Watershed planner	No	Insert appropriate information
Environmental specialist	Yes	Insert appropriate information
Grant writers	Yes	Professional Contractors
Resilience Officer	No	
Other		

FISCAL CAPABILITY

The table below summarizes financial resources available to the Borough of Morris Plains.

Table 9.24-6. 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	No
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	No
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No



Financial Resource	Accessible or Eligible to Use?
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 Borough of Morris Plains.

Table 9.24-7. Education and Outreach Capabilities

Criterion	Response
Do you have a public information officer or communications office?	Yes (Police Department/ Clerk's Office)
Do you have personnel skilled or trained in website development?	Yes
Do you have hazard mitigation information available on your website? • If yes, briefly describe.	Yes Department Website
Do you use social media for hazard mitigation education and outreach? • If yes, briefly describe.	Yes Facebook, Instagram, Municipal Website, Email Alerts
Do you have any citizen boards or commissions that address issues related to hazard mitigation? • If yes, briefly describe.	Yes LEPC
Do you have any other programs already in place that could be used to communicate hazard-related information? • If yes, briefly describe.	Rave, Next Door, Social Media, Municipal Website
Do you have any established warning systems for hazard events? • If yes, briefly describe.	

COMMUNITY CLASSIFICATIONS

The table below summarizes the classifications for community programs available to the Borough of Morris Plains.

Table 9.24-8. 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-May 2015
Storm Ready Certification	No		
Firewise Community Classification	No		
Sustainable Jersey	Yes	Bronze	

**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.

Table 9.24-9. Adaptive Capacity

Criterion	Response
Does the municipality have access to resources to determine the possible impacts of climate change upon the municipality?	No
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?	Yes

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

NATIONAL FLOOD INSURANCE PROGRAM

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

Table 9.24-10. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	Engineering
Who is your floodplain administrator? (name, department/position)	Leon Hall – Borough Engineer
Are any certified floodplain managers on staff in your jurisdiction?	No



Criterion	Response
What is the date that your flood damage prevention ordinance was last amended?	2000
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Meets
When was the most recent Community Assistance Visit or Community Assistance Contact?	December 1994
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state what they are.	No
Are any RiskMAP projects currently underway in your jurisdiction? • If so, state what they are.	Yes, preliminary maps under FEMA review
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If no, state why.	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program?	No
<input type="checkbox"/> If so, what type of assistance/training is needed?	
Does your jurisdiction participate in the Community Rating System (CRS)? • 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?*	2 NFIP Policies; 17 WYO Policies
How many total loss claims have been filed in your jurisdiction?*	6 NFIP Claims; 9 WYO Claims
• How many claims are still open or were closed without payment?	Total Payments (NFIP + WYO) =
• What were the total payments for losses?	\$107,493
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 July 2019

ADDITIONAL AREAS OF EXISTING INTEGRATION

Planning

The Borough adopted their Master Reexamination Report in December 2018. Flooding locations are acknowledged including under the railroad bridge and the Borough has an agreement with New Jersey Transit to pump stormwater runoff from under the bridge. Recommendations in the plan include the following:

- Monitor the effectiveness of flood prevention and mitigation measures in the Borough and make changes and enhancements to the existing and planned measures as necessary.;
- Encourage green building measures in site plan review;
- Encourage low impact development to use or mimic natural processes that result in the infiltration, evapotranspiration or use of stormwater in order to protect water quality and associated aquatic habitat;
- Research preparing a Green Building and Environmental Sustainability Element of the Master Plan;
- Consider preparing a renewable energy ordinance



An updated Open Space Plan map (2014) is included in the Master Reexamination Report (2018). A recommendation is to pursue the acquisition and/or conservation of open space when it becomes available, link existing open spaces through the trail system connections and provide recreational activities.

Regulatory and Enforcement

The Borough has multiple ordinances pertaining to the mitigation of hazards. These ordinances include the NFIP Flood Damage Prevention Ordinance, a stormwater management ordinance and ordinances for soil disturbance and soil erosion. The Borough is aware that when updated FEMA DFIRMs become effective, the Flood Damage Prevention Ordinance will need to be updated at this time.

When reviewing plans for new development, either the Construction Code Official or designated Floodplain Administrator look at the individual building footprints to determine if located in the floodplain and measures to mitigate.

The Public Works Department conducts, at minimum, annual catch basin cleaning and inspection, and checks the storm drain inlet labeling during this time. In high-risk areas, preventative maintenance is performed on stormwater facilities to ensure they do not begin to fail.

The Borough has plans to map the end of all outfall pipes operated by the Borough and develop a pipe displaying these outfall pipe locations; Watnong Brook and other waterbodies receiving outfall pipe discharges will also be identified on the map.

The Borough is currently looking into drafting an ordinance regarding incorporating green infrastructure for future development.

Operational and Administration

The Borough has implemented maintenance programs in order to reduce risk, and has administrative and police mutual aid agreements that allow surrounding communities to provide and receive additional support during an emergency event.

Fiscal

The Borough has access to a Capital Improvement budget in order to pay for mitigation actions and projects.

Education and Outreach

The residents of Morris Plains are able to register for the Everbridge Emergency Alert System on the Borough's website; residents can choose to receive emergency alerts by phone, text or email. According to the Stormwater Prevention Plan, the Borough will distribute stormwater management education materials at the annual Morris Plains Day Celebration. Stormwater information is posted on the Borough's website. In addition, the Borough is currently posting on our website homepage information regarding the current COVID-19 pandemic.

9.24.5 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 Morris Plains' 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 9.24-11 provides details regarding municipal-specific loss and damages the Borough of Morris Plains experienced during hazard events. Information provided in the table below is based on reference material or local sources.

Table 9.24-11. 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	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
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, 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.	Snow clearing; debris removal

9.24.6 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 9.24-12 summarizes the Borough of Morris Plains' 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 9.24-12. 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 4 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:	630	NEHRP D&E:	298	100-year Loss:	\$0	High
						500-year Loss:	\$3,144,264	
		Liquefaction Class 4:	0	Liquefaction Class 4:	0	2,500-year Loss:	\$46,054,870	
Extreme Temperature	Extreme temperature event (heat or cold)	Over 65 Population:	932	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:	62					
Flood	100- and 500-Year Mean Return Period Event	100-year	14	100-year	8	100-year Loss:	\$13,017,966	High
		500-year	20	500-year	11			



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:	\$21,127	High
						100 -Year Loss:	\$404,347	
						500-year Loss:	\$2,168,112	
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 Borough of Morris Plains.

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

Source: FEMA BureauNet, 2019

CRITICAL FACILITIES

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

Table 9.24-13. Potential Flood Losses to Critical Facilities and Lifelines

Name	Type	Exposure		Status of Mitigation
		1% Event	0.2% Event	
JCP&L Substation	Utility	X		This critical asset is not within the Borough's jurisdiction to mitigate. This is a backup substation for a substation in Randolph and is not used day to day. The substation itself is located above the base-flood elevation however portions of the access drive are in the floodplain. The Borough, DEP and nearby new developer (M&M) have already notified JCP&L that the access drive is partly located in the floodplain. There is no further action at this time that is within the Borough's jurisdiction.
Helipad	Transportation	X		This privately-owned helipad is used by the Borough during major emergencies. According to the Borough engineer the helipad is above the base flood elevation and there is access to the helipad from Route 53 (northbound). There is no further mitigation action at this time.

ADDITIONAL IDENTIFIED VULNERABILITIES

The jurisdiction has identified the following vulnerabilities within their community:

According to the 2010 preliminary FEMA Flood Insurance Study (FIS), in the Borough of Morris Plains, flooding along Watnong Brook and Jaquis Brook is caused by heavy rain, usually associated with localized thunderstorms and hurricanes during the summer and fall months. Areas in the Borough along Watnong Brook near Mountain Way and Jaquis Pond near Hanover Avenue have all experienced flooding during severe rainstorms. The underpass at the junction of State Highway 202 and 53 is prone to flooding as well (FEMA FIS 2010).



HAZARD AREA EXTENT AND LOCATION

Hazard area extent and location maps were generated for the Borough of Morris Plains 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 Morris Plains has significant exposure. A map of the Borough of Morris Plains 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 Borough of Morris Plains. The Borough of Morris Plains 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. During the review of the draft hazard ranking, the Borough of Morris Plains reduced the rankings from medium to low for drought and earthquake, increased flood hazards from medium to high, and reduced hazardous materials from high to medium.

Table 9.24-14. Borough of Morris Plains Hazard Ranking Input

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

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

9.24.7 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 9.24-15. 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 #
Backup power (generator) for Community Center (shelter).	DPW	Completed (2017)		
Develop all-hazards public education and outreach program for hazard mitigation and preparedness.	County OEM	Discontinue; this is a current capability that the Borough handles		
Create/Enhance/Maintain Mutual Aid agreements with neighboring communities for continuity of operations	County OEM	Completed this effort		
Support participation in the NFIP Community Rating System (CRS) program by attending CRS workshop(s) if offered within the county. Join the CRS program if adequate resources to support long term participation can be dedicated.	NFIP FPA	Discontinue; the Borough is not interested in joining at this time.		

The Borough of Morris Plains did not identify additional mitigation projects/activities that were completed and not documented in the 2015 HMP.

PROPOSED HAZARD MITIGATION INITIATIVES FOR THE PLAN UPDATE

The Borough of Morris Plains 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 Morris Plains 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 9.24-16 summarizes the comprehensive-range of specific mitigation initiatives the Borough of Morris Plains 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 9.24-17 summarizes the evaluation of each mitigation initiative and the resulting priority, listed by Action Number.



Table 9.24-16. 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-Morris Plains-001	Mitigate flooded roadways	Problem: There are several roadways in the Borough that flood during heavy rain events. Solution: The Borough will determine the cause of flooding and associated stormwater system capacity needs to identify mitigation alternatives to alleviate roadway flooding. Locations known at this time: 1. Rt 10 and Johnson Road (East Bound Lane) 2. Speedwell Avenue Extension by Municipal Parking Lot 3 floods		Existing	Flood, Severe Storm	2, 6	<u>Borough Engineer</u>	FEMA HMA, Borough match	High	High	Short	High	SIP	PP
2020-Morris Plains-002	Increase shelter capacity	Problem: There is only one shelter in the Borough (Community Center). There is a lot of new development taking place increasing the Borough's population by 30% in the near future (>1,000 units). The Borough needs additional sheltering capacity to accommodate the growing population. Solution: The Borough will identify a secondary shelter and enhance the facility as needed. At this time, the school may serve this role. The Borough will need to coordinate with the school and enhance the facility with upgraded facilities (i.e., shower) and purchase a generator.		Existing	All	1, 6	Borough Council	FEMA HMA, Borough match	High	High	Short	High	SIP	ES
2020-Morris Plains-003	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	Borough Council	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 9.24-17. Summary of Evaluation and Action Priority

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-Morris Plains-001	Mitigate flooded roadways	1	1	1	1	1	1	0	0	1	1	1	1	1	1	12	High
2020-Morris Plains-002	Increase shelter capacity	1	0	1	1	1	1	0	0	1	1	1	1	1	1	11	High
2020-Morris Plains-003	Purchase sterilization equipment	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High

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



Table 9.24-18. 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								-002
Disease Outbreak	-003				-003			-002, -003
Drought								-002
Earthquake								-002
Extreme Temperature								-002
Flood		-001				-001		-002
Geologic								-002
Harmful Algal Bloom								
Hazardous Substances								-002
Infestation								
Severe Weather		-001				-001		-002
Severe Winter Weather		-001				-001		-002
Wildfire								-002

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

9.24.8 Staff and Local Stakeholder Involvement in Annex Development

The Borough of Morris Plains 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 9.24-19. Contributors to the Annex

Entity	Title	Method of Participation
Michael Koroski	Acting Director of OEM	Attended meetings; contributed to drafting the annex including mitigation strategy, hazard ranking and review of the draft
Michael Rolph	Deputy OEM	Attended meetings; contributed to the adaptive capacity and hazard ranking
Jason Kohn	Police Chief - Retired	Attended meetings; contributed to the adaptive capacity and hazard ranking
Leon Hall	NFIP Floodplain Administrator	Contributed to the annex



Figure 9.24-1. Borough of Morris Plains Hazard Area Extent and Location Map 1

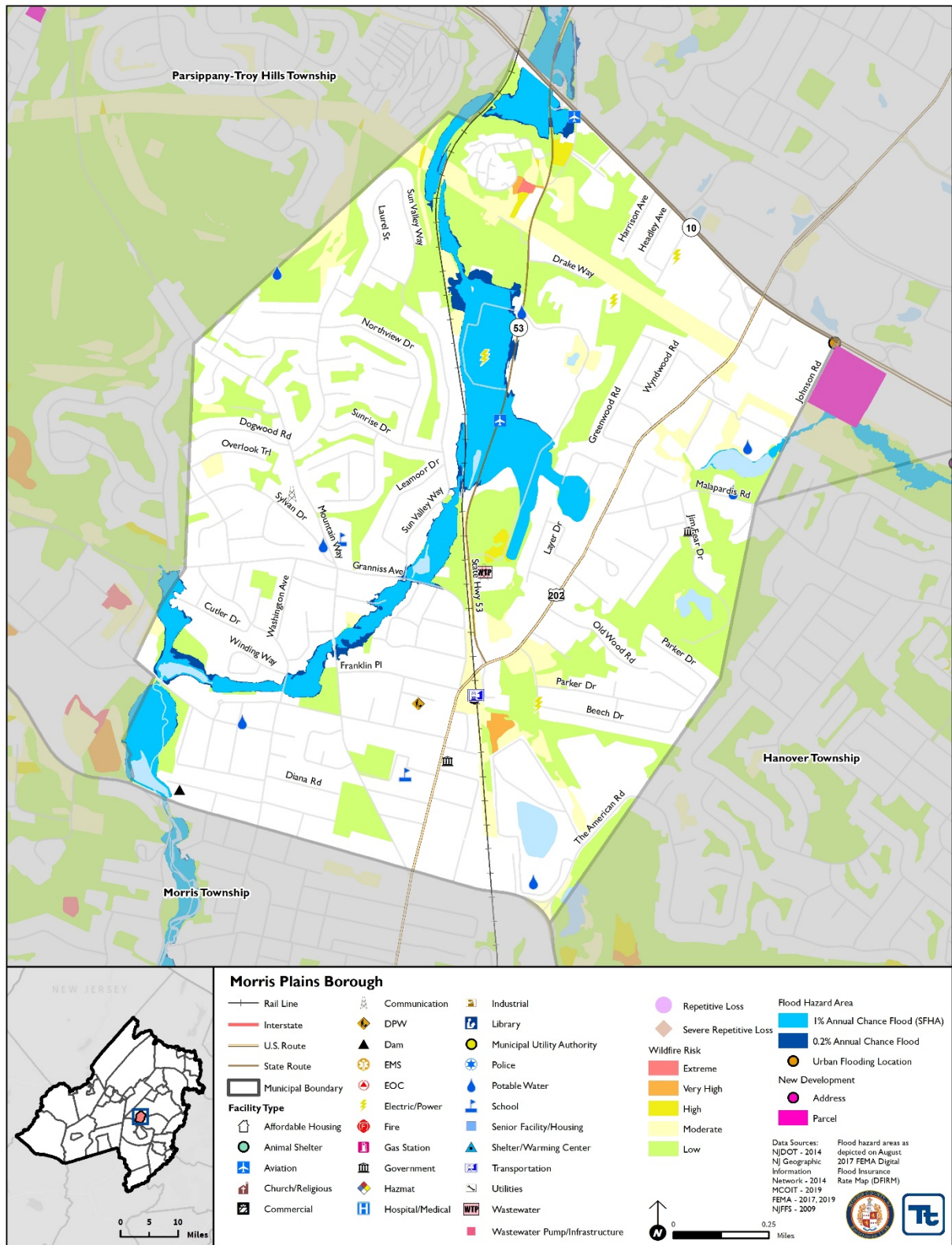
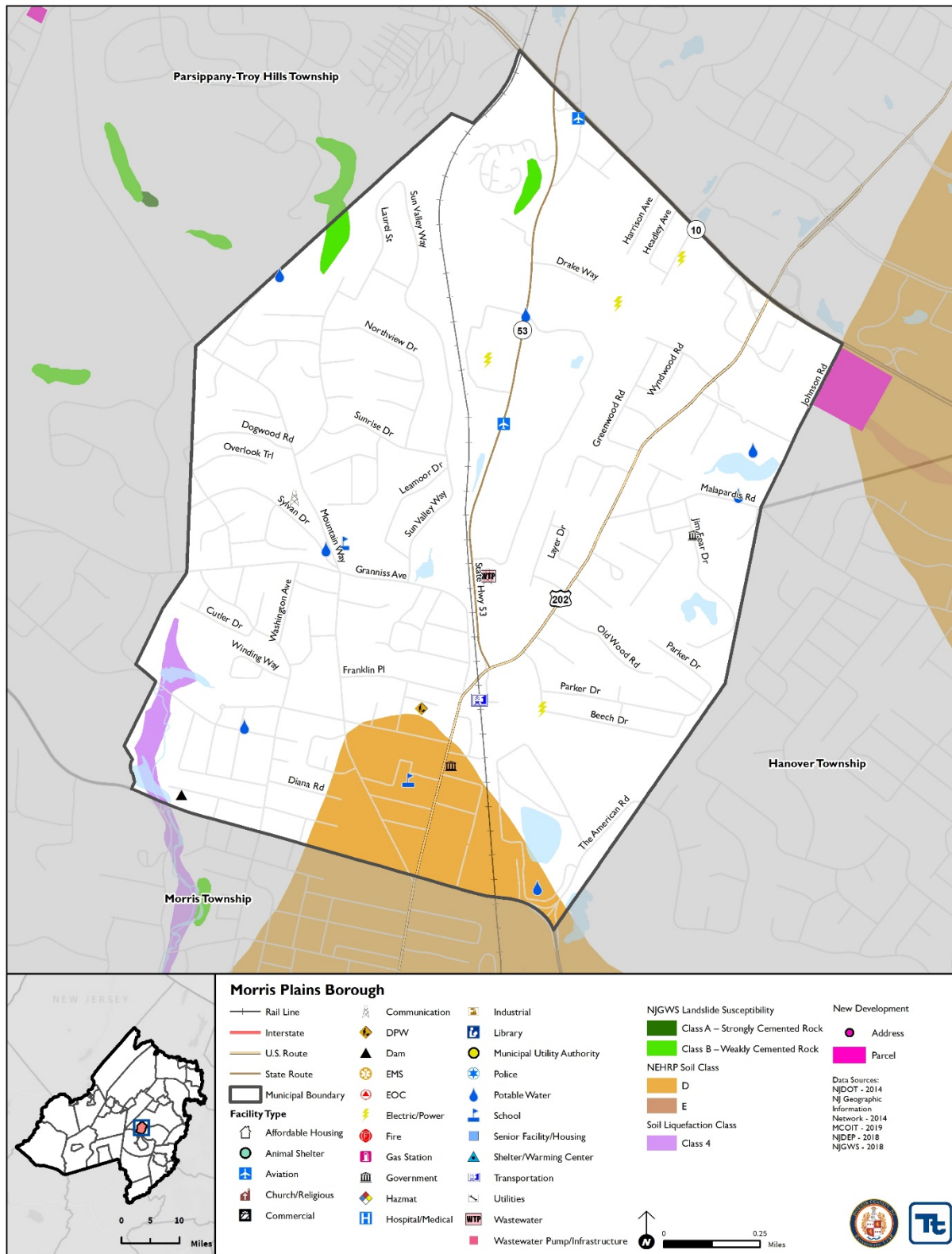




Figure 9.24-2. Borough of Morris Plains Hazard Area Extent and Location Map 2





Action Worksheet			
Project Name:	Mitigate flooded roadways		
Project Number:	2020-Morris Plains-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	There are several roadways that flood in the Borough as a result of heavy rain events; stormwater infrastructure is old and may be inadequate in terms of size/capacity		
Action or Project Intended for Implementation			
Description of the Solution:	The Borough will determine the cause of flooding and associated stormwater system capacity needs to identify mitigation alternatives to alleviate roadway flooding. Locations known at this time: <ol style="list-style-type: none"> 1. Rt 10 and Johnson Road (East Bound Lane) 2. Speedwell Avenue Extension by Municipal Parking Lot 3 floods 		
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; alleviate roadway flooding
Useful Life:	30 years	Goals Met:	1, 2, 6
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; Borough match
Responsible Organization:	Borough engineer	Local Planning Mechanisms to be Used in Implementation if any:	Capital
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Elevate roadway	High	Not feasible
	Acquire properties along roadways and divert traffic	High	Not feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Mitigate flooded roadways	
Project Number:	2020-Morris Plains-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	0	
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Increase shelter capacity		
Project Number:	2020-Morris Plains-002		
Risk / Vulnerability			
Hazard(s) of Concern:	All hazards		
Description of the Problem:	There is only one shelter in the Borough (Community Center). There is a lot of new development taking place increasing the Borough's population by 30% in the near future (>1,000 units). The Borough needs additional sheltering capacity to accommodate the growing population.		
Action or Project Intended for Implementation			
Description of the Solution:	The Borough will identify a secondary shelter and enhance the facility as needed. At this time, the school may serve this role. The Borough will need to coordinate with the school and enhance the facility with upgraded facilities (i.e., shower) and purchase a generator.		
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	Estimated Benefits (losses avoided):	Increase shelter capacity for growing Borough population
Useful Life:	To be determined	Goals Met:	1, 6
Estimated Cost:	High	Mitigation Action Type:	SIP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Short, depends on funding
Estimated Time Required for Project Implementation:	Short, once funding is secured	Potential Funding Sources:	FEMA HMA, Borough match
Responsible Organization:	Borough Council	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
	Identify additional shelter outside of Borough		To be considered upon evaluation and cost-effectiveness
	Notify residents they can only shelter-in-place, or go to family/friends/hotels		This may not be feasible for all residents impacted by an event
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Increase shelter capacity	
Project Number:	2020-Morris Plains-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	0	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	0	
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	