



9.22 Township of Mine Hill

This section presents the jurisdictional annex for the Township of Mine Hill.

9.22.1 Hazard Mitigation Plan Point of Contact

The following individuals have been identified as the hazard mitigation plan’s primary and alternate points of contact.

Primary Point of Contact	Alternate Point of Contact
Sam Morris, Mayor 973-479-6874 mayorsammorris@minehill.com	Katelyn Wild, Finance and Community Programs 973-366-9031 kwild@minehill.com

9.22.2 Municipal Profile

The Township of Mine Hill is located in northwest Morris County between Interstate 80 and State Highway 10 along U.S. Route 46. The Township is located along a ridge to the west of the Town of Dover in an upstream section of the Rockaway River watershed. The Township is bordered by Roxbury Township to the west, the Borough of Wharton to the north, the Town of Dover to the east, and Randolph Township to the south. The Township main commercial corridor is located along U. S. Route 46 that runs through the center of the Township east to west. The Township includes a number of preserves including the Dickerson Mine Preserve. The remainder of the land uses is a mix of residential and industrial uses. According to the U.S. Census, the 2010 population for the Township of Mine Hill was 3,651. According to the U.S. Census, the Township has a total area of 3.03 square miles, of which 2.94 square miles is land and 0.09 square miles is water.

Growth/Development Trends

Township of Mine Hill did not note any major residential or commercial development, or major infrastructure development planned for the next 5 years in the municipality.

9.22.3 Natural Hazard Event History Specific to the Municipality

Morris County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. For the purpose of this plan update, events that have occurred in the County from 2008 to present were summarized to indicate the range and impact of hazard events in the community. Information regarding specific damages is included, if available, based on reference material or local sources. This information is presented in the table below. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.22-1. Hazard Event History

Dates of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
December 26-27, 2010	Severe Winter Storm and Snowstorm	DR-1954	Yes	Transportation interruption
August 26 – September 5, 2011	Hurricane Irene	EM-3332 DR-4021	Yes Yes	Flooding along Shaw’s Brook at Frank Street.
October 29, 2011	Severe Storm	DR-4048	Yes	Power outages, downed debris, and transportation interruption.





Dates of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
October 26 – November 8, 2012	Hurricane Sandy	EM-3354 DR-4086	Yes Yes	Power outages lasting between 5-14 days, downed debris, including wires. PA approximately \$16k-\$17k

9.22.4 Hazard Vulnerabilities and Ranking

The hazard profiles in Section 5.0 of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the hazard vulnerabilities and their ranking in the Township of Mine Hill. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

Hazard Risk/Vulnerability Risk Ranking

The table below summarizes the hazard risk/vulnerability rankings of potential hazards for the Township of Mine Hill.

Table 9.22-2. Hazard Risk/Vulnerability Risk Ranking

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{a, c}	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking ^b
Drought	Damage estimate not available	Frequent	27	Medium
Dam Failure	Damage estimate not available	Occasional	24	Medium
Earthquake	500-year MRP: \$513,682 2,500-year MRP: \$10,390,839	Occasional	24	Medium
Extreme Temperature	Damage estimate not available	Frequent	27	Medium
Flood	1% Annual Chance: \$60,526	Rare	6	Low
Geological Hazards	Exposed to Class A and Class B: \$0	Rare	6	Low
Severe Storm	100-Year MRP: \$415,487 500-year MRP: \$3,901,278 Annualized: \$28,266	Frequent	48	High
Winter Storm	1% GBS: \$9,683,024 5% GBS: \$48,415,118	Frequent	54	High
Wildfire	Estimated Value Exposed to Extreme, Very High and High: \$354,058	Rare	6	Low
Disease Outbreak	Damage estimate not available	Frequent	36	High
Hazardous Materials	Damage estimate not available	Frequent	36	High
Infestation	Damage estimate not available	Frequent	18	Medium

Notes:

- a. Building damage ratio estimates based on FEMA 386-2 (August 2001)
- b. The valuation of general building stock and loss estimates was based on custom inventory for the municipality.
High = Total hazard priority risk ranking score of 31 and above
Medium = Total hazard priority risk ranking of 20-30+
Low = Total hazard risk ranking below 20
- c. Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the value of contents.
- d. Loss estimates for the flood and earthquake hazards represent both structure and contents.
- e. The HAZUS-MH earthquake model results are reported by Census Tract.





National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Township of Mine Hill.

Table 9.22-3. NFIP Summary

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 100-year Boundary (3)
Township of Mine Hill	7	1	\$0.00	0	0	1

Source: FEMA Region 2, 2014

(1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 2, and are current as of 9/30/2014. Please note the total number of repetitive loss properties includes the severe repetitive loss properties. The number of claims represents claims closed by 9/30/14.

(2) Total building and content losses from the claims file provided by FEMA Region 2.

(3) The policies inside and outside of the flood zones is based on the latitude and longitude provided by FEMA Region 2 in the policy file.

Notes: FEMA noted that where there is more than one entry for a property, there may be more than one policy in force or more than one GIS possibility.

A zero percentage denotes less than 1/100th percentage and not zero damages or vulnerability as may be the case.

Number of policies and claims and claims total exclude properties located outside County boundary, based on provided latitude and longitude.

Critical Facilities

The Township does not have any critical facilities located in the FEMA 1% or 0.2% flood hazard areas.

Other Vulnerabilities Identified

The history of flooding in the Township of Mine Hill indicates that flooding of various origins may be experienced in any season of the year. The most extensive floods have occurred primarily in the late summer and early fall and are usually associated with tropical disturbances moving north along the Atlantic coast. The streams and rivers in the Township contribute to the South Branch Raritan River basin, the Musconetcong River basin, or the Lamington River basin. Floods also occurred downstream on Drakes Brook (FEMA FIS 2010).

9.22.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification
- National Flood Insurance Program
- Integration of Mitigation Planning into Existing and Future Planning Mechanisms

Planning and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Township of Mine Hill.



Table 9.22-4. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No)	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Planning Capability				
Master Plan	Yes, July 2015 (pending)	Local	Planning	Economic Development component
Capital Improvements Plan	Yes	Local	Administration	2014
Floodplain Management / Basin Plan	Yes	County	OEM	Morris County Hazard Mitigation Plan
Stormwater Management Plan	No	State	NJ DEP	N.J.A.C. 7:14A-25.1
Open Space Plan	Yes	Local	Planning	No active open space applications
Stream Corridor Management Plan	No			
Watershed Management or Protection Plan	No			
Economic Development Plan	Yes	Local	Planning	Part of the Mine Hill Master Plan
Comprehensive Emergency Management Plan	Yes	Local	OEM	
Emergency Response Plan	Yes	Local	OEM	
Post-Disaster Recovery Plan	No			
Transportation Plan	No			
Strategic Recovery Planning Report	No			
Other Plans:				
Regulatory Capability				
Building Code	Yes	State & Local		State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.)
Zoning Ordinance	Yes	Local	Planning	Planning/Zoning Board
Subdivision Ordinance	Yes	Local	Planning	Planning/Zoning Board
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local		
NFIP: Cumulative Substantial Damages	No			
NFIP: Freeboard	Yes	State, Local	DPW	
Growth Management Ordinances	No			
Site Plan Review Requirements	No			
Stormwater Management Ordinance	No			
Municipal Separate Storm Sewer System (MS4)	No			
Natural Hazard Ordinance	No			
Post-Disaster Recovery Ordinance	No			
Real Estate Disclosure Requirement	Yes	State	Division of Consumer Affairs	N.J.A.C. 13:45A-29.1



Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No)	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Other [Special Purpose Ordinances (i.e., sensitive areas, steep slope)]	No			

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Mine Hill.

Table 9.22-5. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Planning Board
Mitigation Planning Committee	No	
Environmental Board/Commission	Yes	Planning Board
Open Space Board/Committee	Yes	Planning Board
Economic Development Commission/Committee	No	
Maintenance Programs to Reduce Risk	Yes	Public Works
Mutual Aid Agreements	Yes	Roxbury Township, Wharton, Randolph, Dover
Technical/Staffing Capability		
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Yes	Maser Engineering
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Maser Engineering
Planners or engineers with an understanding of natural hazards	Yes	Maser Engineering
NFIP Floodplain Administrator	Yes	Mayor
Surveyor(s)	Yes	Maser Engineering
Personnel skilled or trained in GIS and/or HAZUS-MH applications	Yes	Maser Engineering
Scientist familiar with natural hazards	No	
Emergency Manager	Yes	Mayor
Grant Writer(s)	Yes	Mayor
Staff with expertise or training in benefit/cost analysis	Yes	Mayor
Professionals trained in conducting damage assessments	No	

Fiscal Capability

The table below summarizes financial resources available to the Township of Mine Hill.

Table 9.22-6. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No/Don't Know)
Community development Block Grants (CDBG, CDBG-DR)	Ineligible – Mayor to investigate for next year’s funding
Capital Improvements Project Funding	Yes



Financial Resources	Accessible or Eligible to Use (Yes/No/Don't Know)
Authority to Levy Taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes – Water and Sewer
Impact Fees for homebuyers or developers of new development/homes	No
Stormwater Utility Fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other Federal or State Funding Programs	No
Open Space Acquisition Funding Programs	No
Other	No

Community Classifications

The table below summarizes classifications for community program available to the Township of Mine Hill.

Table 9.22-7. Community Classifications

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	NP	N/A
Building Code Effectiveness Grading Schedule (BCEGS)	TBD		
Public Protection (ISO Fire Protection Classes 1 to 10)	TBD		
Storm Ready	No	NP	N/A
Firewise	No	NP	N/A
Disaster/Safety Programs in/for Schools	No		
Organizations with Mitigation Focus (advocacy group, non-government)	No		
Public Education Program/Outreach (through website, social media)	Yes		
Public-Private Partnerships	No		

N/A = Not applicable. NP = Not participating. - = Unavailable. TBD = To be determined.

The classifications listed above relate to the community’s ability to provide effective services to lessen its vulnerability to the hazards identified. These classifications can be viewed as a gauge of the community’s capabilities in all phases of emergency management (preparedness, response, recovery and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS class applies to flood insurance while the BCEGS and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with class 1 being the best possible classification, and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1000 feet of a creditable fire hydrant and is within 5 road miles of a recognized Fire Station.

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual





- The Building Code Effectiveness Grading Schedule
- The ISO Mitigation online ISO’s Public Protection website at <http://www.isomitigation.com/ppc/0000/ppc0001.html>
- The National Weather Service Storm Ready website at <http://www.weather.gov/stormready/howto.htm>
- The National Firewise Communities website at <http://firewise.org/>

Self-Assessment of Capability

The table below provides an approximate measure of Mine Hill’s capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

Table 9.22-8. Self-Assessment Capability for the Municipality

Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)*	Moderate	High
Planning and Regulatory Capability		X	
Administrative and Technical Capability			X
Fiscal Capability			X
Community Political Capability			X
Community Resiliency Capability			X
Capability to Integrate Mitigation into Municipal Processes and Activities.			X

National Flood Insurance Program

NFIP Floodplain Administrator

Samuel Morris, Mayor

Flood Vulnerability Summary

Mine Hill joined the NFIP on January 7, 1977, and is currently an active member of the NFIP. The current effective Flood Insurance Rate Maps are dated 05/03/1993.

Mine Hill does not currently maintain a list of flood damaged properties nor a property owner’s interest in mitigation projects. No Substantial Damage Estimates were made following Hurricane Sandy. At this time, no property owners in Mine Hill are interested in mitigation projects.

Resources

The community FDPO identifies the Mayor as the local NFIP Floodplain Administrator, currently Samuel Morris, for which floodplain administration is an auxiliary duty. Samuel Morris is the sole person responsible for the implementation of the floodplain management program. Duties and responsibilities of the NFIP Administrator are permit review, inspections, damage assessments, and record keeping. No financial, political, or personnel barriers were identified to inhibit the Township’s ability to implement an effective floodplain program. Samuel Morris is not certified in floodplain management, however seeks opportunities to increase his knowledge of the NFIP.



Compliance History

The community is currently in good standing in the NFIP and has no outstanding compliance issues. The current NFIP Floodplain Administrator has no knowledge of when the last CAV was performed. Samuel Morris sees no specific need for a CAV at this time.

Regulatory

Current ordinances and regulations enforced exceed the minimum requirements set forth by FEMA and the State of New Jersey. Mine Hill does not currently participate in the Community Rating System (CRS) program.

Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

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, each community was surveyed to obtain a better understanding of their community's progress in plan integration. A summary is provided below. In addition, the community identified specific integration activities that will be incorporated into municipal procedures.

Planning

Mine Hill intends to include mitigation planning into future master plans as well as emergency operational plans and initiatives.

Regulatory and Enforcement

Mine Hill currently includes mitigation components to their building and zoning regulations.

Operational and Administration

Mine Hill will continue to include mitigation into operational and administrative functions.

Education and Outreach

Mine Hill currently has a public information and outreach program in place. This program includes social media (Facebook/Twitter) and an SMS text messaging service. This program serves to inform residents of vital information during a disaster as well as provide residents with seasonal tips and warnings during daily operations.

9.22.6 Mitigation Strategy and Prioritization

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

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2010 Plan. 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 may also be found under 'Capability Assessment' presented previously in this annex.



Table 9.22-9. Past Mitigation Initiative Status

Description	Status	Review Comments
Mine Hill 1: Hazard Threat Recognition through mapping and capping of mines in Mining Halls area.	Ongoing	Mine Hill has extensive maps and continues to remedy old mapping with new. Should not be carried forward, as this in an ongoing function.
Mine Hill 2: Backup power Canfield Avenue School (shelter) on Canfield Avenue.	No progress/Discontinue	Discontinue and refocus on installing permanent backup power at the Civic Center.
Mine Hill 3: Backup power for Municipal Building (Data Storage) on Baker Street.	No Progress	Lack of funding. Carry forward as a priority for 2015 update.
Mine Hill 4: Harden/bury utility lines along power lines on Canfield Avenue	Discontinue	Impractical and unnecessary
Mine Hill 5: Retrofit roof to meet current snow load standards on the municipal building on Baker Street	Completed	Municipal building received new, pitched roof.
Mine Hill 6: Develop all-hazards public education and outreach program for hazard mitigation and preparedness	Ongoing	Currently able to reach majority of population through SMS messaging and social media.

Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy

The municipality has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2010 Plan:

- None identified

Proposed Hazard Mitigation Initiatives for the Plan Update

The Township of Mine Hill participated in a mitigation action workshop in July 2015 and was provided 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).

Table 9.22-10 summarizes the comprehensive-range of specific mitigation initiatives the Township of Mine Hill would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. 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, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.22-11 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.





Table 9.22-10. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
MH-1	Hazard Threat Recognition through mapping and capping of mines in Mining Halls area.	N/A	Subsidence	2,3,4	Mine Hill OEM, Mine Hill Planning	High	Medium	HMGP, PDM, Local Budget	Short	Medium	LRP, SIP	PI, PP
MH-2	Develop all-hazards public education and outreach program for hazard mitigation and preparedness	N/A	All-hazards	1	Mine Hill OEM	Medium	Low	Local Budget	Short	High	EAP	PI
MH-3	COOP/COG cataloguing – scanning vital records for electronic recordkeeping	N/A	All-hazards	2,3	Mine Hill Administration	High	Low	Local Budget	Short	Medium	LRP	PR
MH-4	Clear sediment at county bridge at Frank Street (Shaw’s Brook)	Existing	Flooding	4	County Planning/Public Works, Mine Hill Administration	High	High	HMGP, PDM, County Budget	Medium	Medium	SIP, NSP	PP
MH-5	Replace firehouse roof that has been previously damaged by water infiltration	Existing	Severe Storm, Severe Winter Storm	3,4	Mine Hill Fire Department	High	High	HMGP, PDM, Local Budget	DOF	High	SIP	PP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

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

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
- NJDEP New Jersey Department of Environmental Protection
- NJOEM New Jersey Office of Emergency Management
- 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
- RFC Repetitive Flood Claims Grant Program (discontinued 2015)
- SRL Severe Repetitive Loss Grant Program (discontinued 2015)

Timeline:

- Short 1 to 5 years
- Long Term 5 years or greater
- OG On-going program
- DOF Depending on funding





Costs:

Where actual project costs have been reasonably estimated:

- Low < \$10,000
- Medium \$10,000 to \$100,000
- High > \$100,000

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

- Low Possible to fund under existing budget. Project is part of, or can be part of an existing on-going program.
- Medium Could budget for under existing work plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
- High Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.

Benefits:

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

- Low= < \$10,000
- Medium \$10,000 to \$100,000
- High > \$100,000

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

- Low Long-term benefits of the project are difficult to quantify in the short term.
- Medium Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.
- High Project will have an immediate impact on the reduction of risk exposure to life and property.

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 also 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. Such 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 also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- 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 9.22-11. Summary of Prioritization of Actions

Mitigation Action / Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community	Total	High / Medium / Low
MH-1	Hazard Threat Recognition through mapping and capping of mines in Mining Halls area.	1	1	1	-1	1	0	0	1	1	1	0	1	1	0	8	Medium
MH-2	Develop all-hazards public education and outreach program for hazard mitigation and preparedness	1	1	1	1	1	0	1	0	1	1	1	1	1	0	11	High
MH-3	COOP/COG cataloguing – scanning vital records for electronic recordkeeping	0	0	1	1	1	1	1	0	0	1	1	1	1	0	9	Medium
MH-4	Clear sediment at county bridge at Frank Street (Shaw’s Brook)	1	1	1	-1	1	0	0	1	1	1	0	0	1	0	7	Medium
MH-5	Replace firehouse roof that has been previously damaged by water infiltration	1	1	1	1	1	0	1	0	0	1	1	0	1	1	10	High

Note: Refer to Section 6 which contains the guidance on conducting the prioritization of mitigation actions.



9.22.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.22.8 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Township of Mine Hill 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 considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Township of Mine Hill has significant exposure. These maps are illustrated in the hazard profiles within Section 5.4, Volume I of this Plan.

9.22.9 Additional Comments

None at this time.



Figure 9.22-1. Township of Mine Hill Hazard Area Extent and Location Map 1

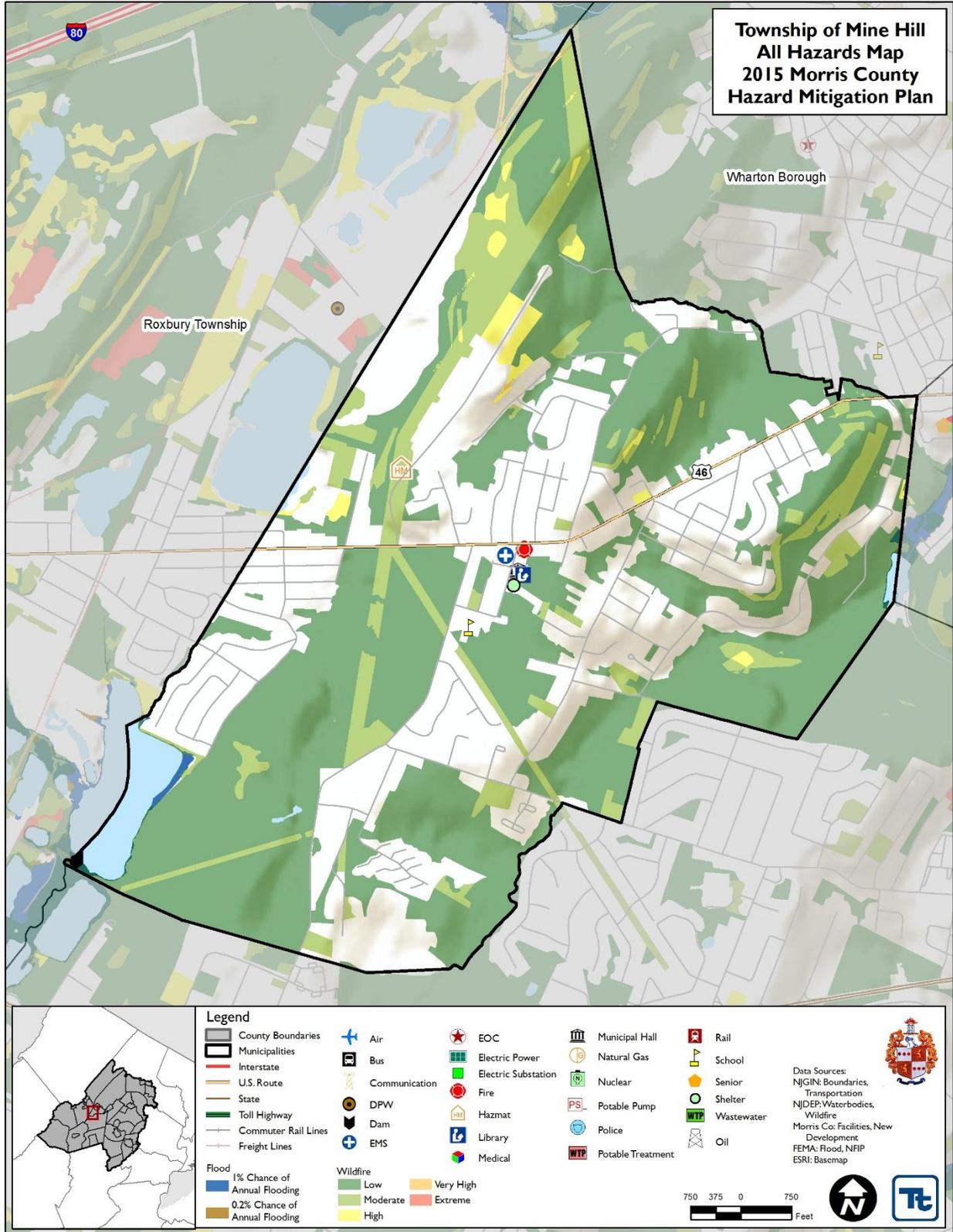
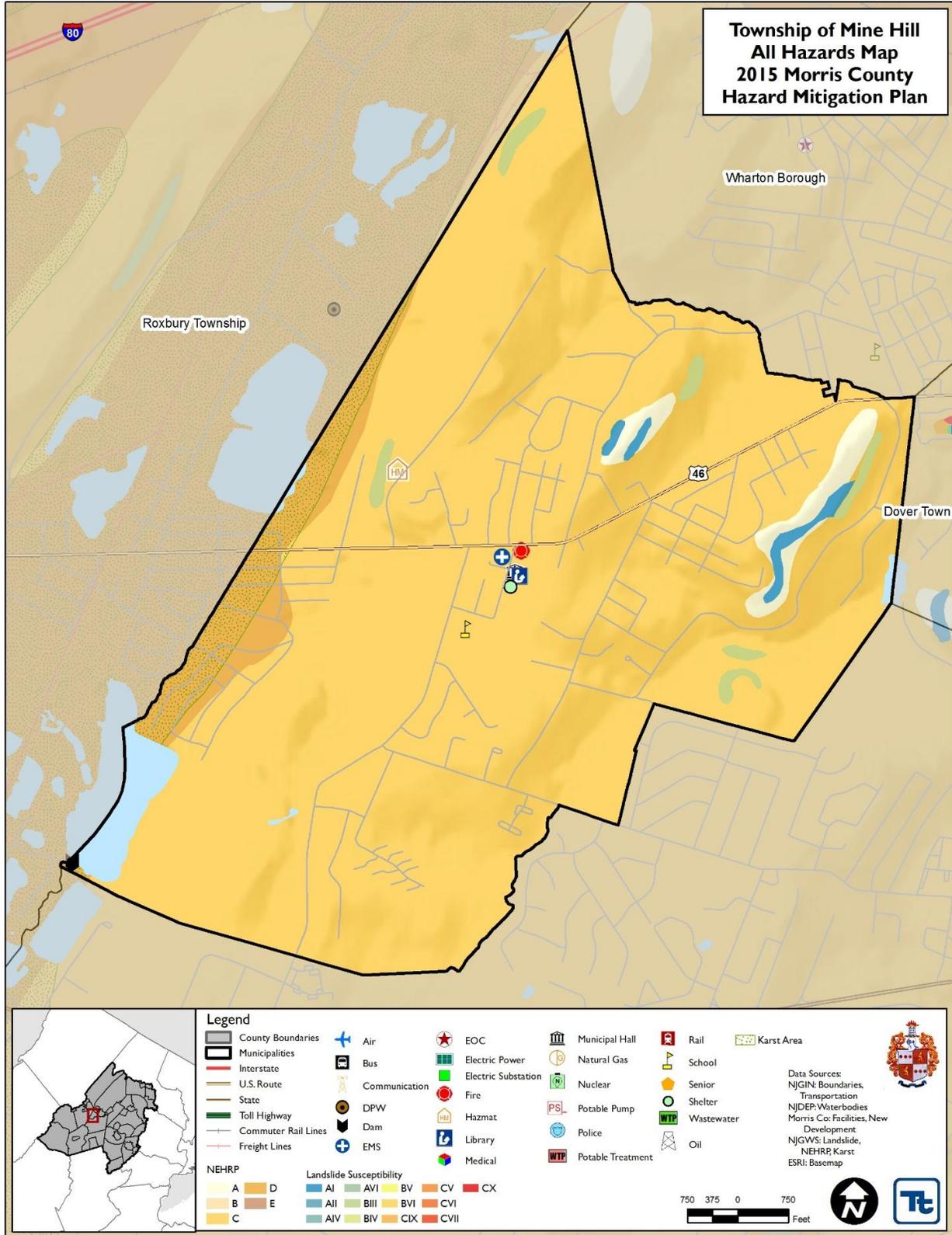




Figure 9.22-2. Township of Mine Hill Hazard Area Extent and Location Map 2





Action Number: MH-4
Mitigation Action/Initiative: Clear sediment at county bridge at Frank Park

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	Flooding along Shaw's Brook at Frank Street due to sediment build-up
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Remove sediment building
	2. Do nothing – current problem continues
	3. No other feasible options were identified
Action/Project Intended for Implementation	
Description of Selected Action/Project	Work with the Morris County Department of Planning and Public Works to clear sediment buildup at bridge over Shaw's Brook located at Frank Street
Action/Project Category	SIP, NSP
Goals/Objectives Met	4
Applies to existing, future, or not applicable	Existing
Benefits (losses avoided)	Roadway inundation and residential flooding
Estimated Cost	High
Priority*	Medium
Plan for Implementation	
Responsible Organization	County Planning and DPW
Local Planning Mechanism	Capital Improvement
Potential Funding Sources	County and FEMA Grants, Bonding, County Budget for 2016
Timeline for Completion	Short Term
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:



Action Number: MH-4

Mitigation Action/Initiative: Clear sediment at county bridge at Frank Park

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Protection of affected residents living in hazard area
Property Protection	1	Protection of affected residential structures prone to flooding due to this issue
Cost-Effectiveness	1	
Technical	-1	Municipality does not have the technical capability or authority to complete – needs buy-in from county
Political	1	High political support for this project
Legal	0	
Fiscal	0	
Environmental	1	Removal of sediment improves Shaw’s Brook natural processes
Social	1	High social support for project
Administrative	1	High municipal administrative support for this project
Multi-Hazard	0	
Timeline	0	
Local Champion	1	Mayor serves as the local municipal champion for seeing this project through
Other Community Objectives	0	
Total	7	
Priority (High/Med/Low)	Medium	



Action Number: MH-5
Mitigation Action/Initiative: Replace firehouse roof

Assessing the Risk	
Hazard(s) addressed:	Severe Storm, Severe Winter Storm
Specific problem being mitigated:	Structural instability of the roof
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Do nothing – current problem continues 2. Construct a new firehouse or repurpose current building – too expensive 3. Replace roof of the existing firehouse
Action/Project Intended for Implementation	
Description of Selected Action/Project	The roof of the firehouse has been damaged by water infiltration and it needs to be replaced. The Township will replace the roof to prevent further damage.
Action/Project Category	SIP
Goals/Objectives Met	3, 4
Applies to existing, future, or not applicable	Existing
Benefits (losses avoided)	Continuity of essential operations
Estimated Cost	High
Priority*	High
Plan for Implementation	
Responsible Organization	Mine Hill Fire Department
Local Planning Mechanism	Capital Improvement
Potential Funding Sources	County and FEMA Grants, Municipal Budget for 2016
Timeline for Completion	Short Term
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:



Action Number: MH-5
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Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	COOP for essential community service
Property Protection	1	Protection of firehouse and protection of property that would need fire services
Cost-Effectiveness	1	Benefits of project outweigh potential negatives in terms of continuing essential services for the community
Technical	1	Available technical resources for project completion
Political	1	High political support of project
Legal	0	
Fiscal	1	Multiple pathways to acquire funding
Environmental	0	
Social	0	
Administrative	1	High administrative support of project
Multi-Hazard	1	Multiple hazards addressed
Timeline	0	
Local Champion	1	Mayor serves as local champion of project
Other Community Objectives	1	Benefits far reaching throughout community for emergency services
Total	10	
Priority (High/Med/Low)	High	