



9.23 Township of Montville

This section presents the jurisdictional annex for the Township of Montville.

9.23.1 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
Name: Rudy Appellmann Address: 360 Main Road Montville NJ 07045 Phone: 973-257-4300 E-mail: rappelmann@montvillenj.org	Name: Scott McGowan Address: 360 Main Road Montville NJ 07045 Phone: 973-257-4300 E-mail: smcgowan@montvillenj.org

9.23.2 Municipal Profile

The Township of Montville is located in the eastern region of Morris County; it is bordered by the Town and Township of Boonton and Parsippany-Troy Hills to the west, East Hanover to the south, Fairfield and Lincoln Park (Passaic County) to the west, and Kinnelon to the north. Major waterways include, the Passaic River, which flows along its eastern border, the Rockaway River, which flows along its western border, and the Whippany River, which flows along the southern border of the Township. According to the U.S. Census, the 2010 population for the Township was 21,528, and the total area is 19.06 square miles, 18.48 square miles of land and 0.58 square miles of water. The Township has two unincorporated communities, Pine Brook and Towaco.

The Township 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. The entire Township is located within both the Highlands Planning (8,793 acres) and Preservation (3,440 acres) Area.

Growth/Development Trends

The following table summarizes recent residential/commercial development since 2010 to present and any known or anticipated major residential/commercial development and major infrastructure development that has been identified in the next five years within the municipality. Refer to the map in section 9.23.9 of this annex which illustrates the hazard areas along with the location of potential new development.

Table 9.23-1. Growth and Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Block & Lot)	Known Hazard Zone(s)	Description/Status of Development
Recent Development from 2010 to present					
Briar Hill	Residential	31	Block 52.04/ Lot 19.01	None	Completed
Laurel Green	Residential	3	Block 39/Lot 63.01-63.03	Flood: 1% Chance; NEHRP: D	Completed
Towaco Crossings	Mixed-Use	1 Structure	8 Whitehall Road	None	In progress
Tuscany Village	Commercial	1 Structure	223 Changebridge Rd	NEHRP: D	In progress





Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Block & Lot)	Known Hazard Zone(s)	Description/Status of Development
Office Building	Commercial	1 Structure	53 Indian Lane East	Flood: 1% Chance; NEHRP: D	In progress
Known or Anticipated Development in the Next Five (5) Years					
G.I. Auto	Mixed-Use	Unknown	Block 167/Lots 29,30,31	Flood: 1% Chance; NEHRP: D	Not started

* Only location-specific hazard zones or vulnerabilities identified.

9.23.3 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 9.23-2. Hazard Event History

Dates of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
March 8, 2008	Flash Flood	N/A	N/A	Road closures and local business closures; \$320 in police overtime
December 26-27, 2010	Severe Winter Storm and Snowstorm	DR-1954	Yes	No
August 26 – September 5, 2011	Hurricane Irene	EM-3332 DR-4021	Yes Yes	Road closures and power outages through the town caused by severe flooding, downed trees and power lines; multiple local business closures; 2 single family homes with major damage, 80 single family homes and 10 local businesses with minor damage; 70 people were evacuated and 4 were displaced; About \$55K in Police and DPT overtime and equipment; About \$34K in damages (2 police vehicles, water treatment facility pump repairs, park)
October 29, 2011	Severe Storm	DR-4048	Yes	Montville Youth Center designated as a warming shelter from October 28 th -November 3 rd ; Large number of downed trees and power lines, which block numerous roadways throughout the town as a result of heavy snow and high winds; About \$10K in police labor costs and over \$66K in DPW labor and equipment costs



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	Shelters set up at fire stations and Montville Township High School; Numerous roadways closures as a result of flooded streets and downed power lines and trees; Power loss affected 90% of the town; Several businesses forced to close; Loss of equipment at treatment facilities due to back up of waste; Damage to Town Hall roof and MUA pump stations; Multiple generators used to power all water and sewer pump stations for several days; Total costs in excess of \$150K (labor, equipment, material and contract costs)

9.23.4 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 Montville. 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 Montville.

Table 9.23-3. 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: \$1,774,457 2,500-year MRP: \$45,997,990	Occasional	28	Medium
Extreme Temperature	Damage estimate not available	Frequent	18	Medium
Flood	1% Annual Chance: \$9,997,730	Frequent	18	Medium
Geological Hazards	Exposed to Class A and Class B: \$20,433,328	Frequent	18	Medium
Severe Storm	100-Year MRP: \$6,112,983 500-year MRP: \$21,864,013 Annualized: \$403,192	Frequent	48	High
Winter Storm	1% GBS: \$79,355,089 5% GBS: \$396,775,447	Frequent	54	High
Wildfire	Estimated Value Exposed to Extreme, Very High and High: \$32,405,933	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 Montville.

Table 9.23-4. 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 Montville	243	94	\$3,160,460.68	1	0	85

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 table below presents HAZUS-MH estimates of the damage and loss of use to critical facilities in the community as a result of a 1- and 0.2-percent annual chance flood events.

Table 9.23-5. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	Days to 100-Percent ⁽¹⁾
Boonton Reservoir Dam	Dam	X	X	-	-	-
Caldwell Garage	Bus Facility		X	-	-	-
Dicar Inc.	Hazardous Material	X	X	-	-	-
Konner Bus Co	Bus Facility		X	-	-	-
Montville Township	DPW		X	-	-	-
Montville Volunteer Fire Department Station 3	Fire	X	X	-	-	-
Pinebrook Volunteer Fire Department Station 2	Fire		X	-	-	-
Romaine Gate House - Valve Station	Potable Pump	X	X	-	-	-

Source: HAZUS-MH 2.1

Note (1): HAZUS-MH 2.1 provides a general indication of the maximum restoration time for 100% operations. Clearly, a great deal of effort is needed to quickly restore essential facilities to full functionality; therefore this will be an indication of the maximum downtime (HAZUS-MH 2.1 User Manual).





Note (2): In some cases, a facility may be located in the DFIRM flood hazard boundary; however HAZUS did not calculate potential loss. This may be because the depth of flooding does not amount to any damages to the structure according to the depth damage function used in HAZUS for that facility type. Further, HAZUS-MH may estimate potential damage to a facility that is outside the DFIRM because the model generated a depth grid beyond the DFIRM boundaries.

- NA Not available
- X Facility located within the DFIRM boundary
- Not calculated by HAZUS-MH 2.1

Other Vulnerabilities Identified

According to the 2010 preliminary FEMA Flood Insurance Study (FIS) for Morris County, flooding in the Township of Montville is a result of heavy rain produced by hurricanes moving up the Atlantic coast, large frontal storms from the west and east, and local thunderstorms. Flooding occurs along the Rockaway and Passaic Rivers in the Township (FEMA FIS 2010).

9.23.5 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 Montville.

Table 9.23-6. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	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/2013	Local	Land Use	Master Plan
Capital Improvements Plan	Yes/2014	Local	Administration	6 Year Capital Improvement Plan
Floodplain Management / Basin Plan	Yes/2013	Local & State	Engineering/ Mark Mantyla	Chapter 230,
Stormwater Management Plan	Yes/2010	Local & State	Engineering	Chapter 323
Open Space Plan	Yes	Local	Land Use & Administration	Master Plan
Stream Corridor Management Plan	Yes	Local	Engineering & Land Use	Chapter 230
Watershed Management or Protection Plan	Yes/2013	Local	Engineering & Land Use	Chapter 230
Natural Resource Inventory	Yes/2013	Local	Land Use	Master Plan
Economic Development Plan	No			



Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Comprehensive Emergency Management Plan	Yes	Federal & Local	Police / OEM	
Emergency Response Plan	Yes	Local	Police / OEM	
Post-Disaster Recovery Plan	No			
Transportation Plan	Yes/2013	Local	Land Use	Master Plan
Strategic Recovery Planning Report	No			
Other Plans:				
Regulatory Capability				
Building Code	Yes	State & Local	Building Dept.	State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.)
Zoning Ordinance	Yes/2012	Local & State	Land Use	Chapter 230
Subdivision Ordinance	Yes/2012	Local & State	Land Use	Chapter 230
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local	Engineering & Land Use	Chapter 200
NFIP: Cumulative Substantial Damages	No			
NFIP: Freeboard	Yes	State, Local		
Growth Management Ordinances	No			
Site Plan Review Requirements	Yes/2012	Local	Land Use	Chapter 230
Stormwater Management Ordinance	Yes/2006	Local & State	Engineering	Chapter 323
Municipal Separate Storm Sewer System (MS4)	Yes	State	NJDEP	7:14A-25.1
Natural Hazard Ordinance	No			
Post-Disaster Recovery Ordinance	No			
Real Estate Disclosure Requirement	No	State	Division of Consumer Affairs	N.J.A.C. 13:45A-29.1
Other <i>Steep slopes/ Sensitive areas</i>	Yes/2012	Local	Land Use/ Engineering	Chapter 230

Administrative and Technical Capability

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

Table 9.23-7. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Land Use
Mitigation Planning Committee	No	
Environmental Board/Commission	Yes	Land Use





Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Open Space Board/Committee	Yes	Administration
Economic Development Commission/Committee	Yes	Land Use
Maintenance Programs to Reduce Risk	Yes	Public Works
Mutual Aid Agreements	Yes	Administration/Police
Technical/Staffing Capability		
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Yes	Land Use & Engineering
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Land Use & Engineering & Construction
Planners or engineers with an understanding of natural hazards	Yes	Land Use & Engineering
NFIP Floodplain Administrator	Yes*	Engineering / MARK MANTYLA 973 331 3323
Surveyor(s)	Yes	Engineering
Personnel skilled or trained in GIS and/or HAZUS-MH applications	Yes	Land Use & Engineering
Scientist familiar with natural hazards	No	Land Use & Engineering
Emergency Manager	Yes	Police
Grant Writer(s)	Yes	Land Use & Administration
Staff with expertise or training in benefit/cost analysis	Yes	Finance
Professionals trained in conducting damage assessments	Yes	Engineer

Fiscal Capability

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

Table 9.23-8. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No/Don't Know)
Community Development Block Grants (CDBG, CDBG-DR)	Yes/Administration
Capital Improvements Project Funding	Yes/Administration & Engineering
Authority to Levy Taxes for specific purposes	Yes/Governing Body
User fees for water, sewer, gas, or electric service	Yes/Water & Sewer
Impact Fees for homebuyers or developers of new development/homes	No
Stormwater Utility Fee	No
Incur debt through general obligation bonds	Yes/Finance
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal or State Funding Programs	Yes/Administration
Open Space Acquisition Funding Programs	Yes/Administration
Highlands Grants for Stormwater and Stream Corridor Restoration and Protection Plan	Yes/Administration & Land Use



Community Classifications

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

Table 9.23-9. Community Classifications

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No		
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	4	2010
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	4	2010
Storm Ready	No		
Firewise	No		
Disaster/Safety Programs in/for Schools	No		
Organizations with Mitigation Focus (advocacy group, non-government)	Yes	Preparedness/Response	2013/Emergency Preparedness Response Committee
Public Education Program/Outreach (through website, social media)	Yes	Website, Nixle, Facebook, Mailings, Signs	
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 Montville’s capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.





Table 9.23-10. 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

Mark Mantyla, Township Engineer

Flood Vulnerability Summary

A formal list of flood-damaged properties and property owner’s interest in pursuing mitigation is not maintained by the Township. However, the Township has a GIS inventory of properties within the floodplain.

Resources

The NFIP FPA is the sole person assuming the responsibilities of floodplain administration. The Township does not provide education or outreach to the community in regards to flood hazards and risk and flood risk reduction through NFIP insurance and mitigation. Barriers to running an effective floodplain management program in the Township include limited staffing. The NFIP FPA would consider attending continuing education and/or certification training on floodplain management if offered.

Compliance History

The community is currently in good-standing with the NFIP, and it is unknown when the latest compliance audit was conducted.

Regulatory

Currently, the Township is not a part of the Community Rating System program, but would attend a CRS seminar, if held locally.

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

The Township's 2010 Land Use Plan Element is used to guide the appropriate use or development of land in Montville that will promote public health, safety, morals and general welfare of the community. A main goal of the plan is to also ensure that any proposed new developments must take into account the Township's environmental features and preserve them during development. Environmental features that are to be preserved include steep slopes, wetlands, floodplains and vegetated open space. The plan also proposes to amend land use ordinances to incorporate green design standards into development.

The Township is located in both the Highlands Planning and Preservation Areas; the goals of the 2013 Highlands Master Plan Element include to protect, restore and enhance the quality and quantity of surface and groundwater, to preserve extensive and contiguous areas of land in its natural state, to promote the conservation of water resource, and to promote brownfield remediation and redevelopment if possible. Many objectives are aimed to protect forest resources, open water and riparian areas, steep slopes, critical habitats, water resources and prime groundwater recharge areas.

Other municipal plans include an Open Space Plan, Natural Resource Inventory, Floodplain Management Plan, Comprehensive Emergency Management Plan and Emergency Response Plan.

Regulatory and Enforcement

The Township 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 steep slopes and sensitive environmental areas.

Operational and Administration

The Township has established an Environmental Commission and Open Space Committee that aid in planning decisions to support the conservation and preservation of the Township's critical environmental features. Montville 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 Township has a multitude of fiscal capabilities for funding mitigation actions and projects. The Township has access to Community Development Block Grants and other state and federal funding sources. Local fiscal resources include capital improvements funding and open space acquisition funding. The Township has also obtained funding through the Highlands Council for a Stream Corridor Protection/ Restoration planning. The Township partnered with Parsippany through Morris County on a Rockaway River De-snagging project.

Education and Outreach

Montville Township is currently using the Nixle alert system to notify residents of upcoming storms and or hazards within the Township. The township also has a Facebook account as well as a Twitter account that emergency notifications are made on. Montville Township also puts up emergency alerts on their main website. Montville Township is looking to enhance our outreach program to the community in reference to natural hazards and ways the residents keep themselves safe. Some public education seminars we would like



to start to include would be safe use of generators, overall emergency preparedness classes, flood hazard information and informational handouts.

9.23.6 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 9.23-11. Past Mitigation Initiative Status

2010 Mitigation Action	Lead	Status (In progress, No progress, Complete)	Describe Status <ul style="list-style-type: none"> Please describe what was accomplished and indicate % complete. If there was no progress, indicate what obstacles/delays encountered? If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)? 	Next Step (Include in 2015 HMP or Discontinue)	Describe Next Step <ul style="list-style-type: none"> If including action in 2015 HMP, revise/reword to be more specific (as appropriate). If discontinuing, explain why.
Montville Twp. 1: Backup power (generator) for the Chelsea Elder Care facility.	Engineering Department	No Progress	0% Complete	Discontinue	This is a private facility and the responsibility of the facility to maintain their equipment.
Montville Twp. 2: Backup power (generator) for Greenbriar Nursing Home.	Engineering Department	No Progress	0% Complete	Discontinue	This is a private facility and the responsibility of the facility to maintain their equipment.
Montville Twp. 3: Backup power (generator) for Mountville Township High School (shelter).	Engineering Department	No Progress	0% Complete	Include in 2015 HMP	Unable to secure funding at this time
Montville Twp. 4: Building code update.	Municipal Code Enforcement	In Progress	Last update was 2009. New Building code waiting to be adopted by township committee. Will take place most likely in September, 2015.	Include in 2015 HMP	Township Committee to adopt the new Building code in 2015.
Montville Twp. 5: Valhalla Dam and Jersey City Reservoir; inundation study.	Engineering Department	No Progress.	0% Complete No Funding secured	Include in 2015 HMP	Unable to secure funding at this time
Montville Twp. 6: Elevation of 20-30 flood prone homes located on Normandy Drive, Sheffield Place Lancaster, Manchester, and Stiles Lane.	Engineering Department	No Progress.	0% Complete No funding secured	Include in 2015 HMP	Unable to secure funding at this time
Montville Twp. 7: Alert system downstream of Boonton Dam in conjunction with Boonton Town and Parsippany.	OEM	No Progress.	0% Complete Continuing discussion with private vendor	Include in 2015 HMP	Continue discussion with private vendor
Montville Twp. 8: Acquisition /elevation of three repetitive loss properties located on Lancaster Avenue, River Road, and Rennes Street.	OEM	No Progress	0% Complete No funding secured	Include in 2015 HMP	Continue discussion and attempt to get funding
Montville Twp. 9: Develop all-hazards public education and outreach program for hazard mitigation and preparedness.	County and Municipal OEM	No Progress.	Discussion continuing	Include in 2015 HMP	Continue discussion and attempt to get funding



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:

The Township has installed a number of fixed natural gas backup generators at key public facilities including:

1. The Senior House (the Townships main shelter)
2. The First Aid Squad
3. DPW Building at 143 River Road

The Township has partnered with a Parsippany in and the County on a Rockaway River de-snagging and dredging project that is currently underway.

Proposed Hazard Mitigation Initiatives for the Plan Update

The Township of Montville participated in a mitigation action workshop in January 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 9.23-12 summarizes the comprehensive-range of specific mitigation initiatives the Township of Montville 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 9.23-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.23-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
MT-1 (Old Montville Twp. 3)	Backup power (generator) for Mountville Township High School (shelter).	Existing	All-Hazard	G-4	Engineering Department	High	High	HMGP	DOF	High	SIP	PP
MT-2 (Old Montville Twp. 5)	Valhalla Dam and Jersey City Reservoir; inundation study.	Existing	Flood, Severe Storm, Severe Winter Storm	G-2, G-3	Engineering Department	Medium	Low	PDM	Short	Medium	EAP	PP
MT-3 (Old Montville Twp. 6)	Elevation of 20-30 flood prone homes located on Normandy Drive, Sheffield Place Lancaster, Manchester, and Stiles Lane.	Existing	Flood, Severe Storm, Severe Winter Storm	G-4	Engineering Department	Medium	Medium	RFC/SRL	Short	Medium	SIP	PP
MT-4 (Old Montville Twp. 7)	Alert system downstream of Boonton Dam in conjunction with Boonton Town and Parsippany.	Existing	Flood, Severe Storm, Severe Winter Storm	G-4	OEM	Medium	Medium	RFC/SRL	DOF	Medium	-	ES
MT-5 (Old Montville Twp. 8)	Acquisition /elevation of properties Lancaster Avenue, River Road, and Rennes Street which are routinely damaged by flooding events	Existing	Flood, Severe Storm, Severe Winter Storm	G-4	OEM	Medium	Medium	RFC/SRL	Short	Medium	SIP	PP
MT-7	Secure secondary dispatch location for police at the First Aid Squad Building – 137 Changebridge Road	Existing	All-Hazard	G-3	Police-OEM	Medium	Low	HMGP/PDM	Short /OG	High	SIP	PR / PP
MT-8	Normandy Drive, Sheffield Place Lancaster, Manchester, and Stiles Lane. Stormwater infrastructure improvements	Existing	Flood and Severe Storm	G-4	Engineering/DPW	Medium	High	FMA, HMGP, RFC, SRL	Long	Medium	SIP/NSP	PR/P P/SP
MT-9	Back-up power for key infrastructure facilities including pump stations and lift stations	Existing	All-Hazard	G-3	Engineering/DPW	Medium	Low	PDM, HMGP	Short	Medium	SIP	PR



Table 9.23-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
MT-10	Municipal Building parking lot flooding issue stormwater improvements	Existing	Flood, Severe Storm,	G-4	Engineering/DPW	Medium	Low	PDM, HMGP	Short	Medium	SIP	PR
MT-11	Backup solar power for lights at key intersections along route 46 and 202, and Changebridge Road	Existing	All-Hazard	G-3	Engineering/DPW	Medium	Low	HMGP	Long	Medium	SIP	PR
MT-12	Stream Corridor Management and Restoration Plan	Existing and New	Flood, Severe Storm,	G-4	Land Use	Medium	Low	PDM, FMA, and Highlands	Short	High	LRP./N SP/EAP	PI/N R

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.
-----	-------------------------------------------------------------------------------------------------------------

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.
-----	--------------------------------------------------------------------------------





Costs:

- 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:

- 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 9.23-13. 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 Objectives	Total	High / Medium / Low
MT-1 (Old Montville Twp. 3)	Backup power (generator) for Mountville Township High School (shelter).	1	1	1	1	0	1	-1	1	1	-1	1	1	0	0	7	High
MT-3 (Old Montville Twp. 6)	Elevation of 20-30 flood prone homes located on Normandy Drive, Sheffield Place Lancaster, Manchester, and Stiles Lane.	1	1	-1	0	0	1	-1	0	0	-1	1	-1	0	0	0	Low
MT-4 (Old Montville Twp. 7)	Alert system downstream of Boonton Dam in conjunction with Boonton Town and Parsippany.	1	1	1	1	0	1	-1	1	1	-1	1	0	0	1	7	Medium
MT-5 (Old Montville Twp. 8)	Acquisition /elevation of properties Lancaster Avenue, River Road, and Rennes Street which are routinely damaged by flooding events.	1	1	-1	1	0	1	-1	0	0	-1	1	-1	0	1	2	Medium
MT-6 (Old Montville Twp. 9)	Develop all-hazards public education and outreach program for hazard mitigation and preparedness.	1	1	1	1	0	1	1	1	1	1	1	1	0	0	11	High
MT-7	Secure secondary dispatch location for police at the First Aid Squad Building – 137 Changebridge Road	1	1	1	1	0	1	-1	1	1	-1	1	1	1	0	8	High
MT-8	Normandy Drive, Sheffield Place Lancaster, Manchester, and Stiles Lane. Stormwater infrastructure improvements	1	1	1	1	0	1	1	1	1	1	1	1	0	1	12	High





Table 9.23-13. 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 Objectives	Total	High / Medium / Low
MT-9	Backup power for key infrastructure facilities including pump stations and lift stations	1	1	1	1	0	1	0	1	0	0	1	1	1	0	7	Medium
MT-10	Municipal Building parking lot flooding issue stormwater improvements	1	1	1	1	0	1	1	1	1	1	1	1	0	0	11	High
MT-11	Backup solar power for lights at key intersections along route 46 and 202, and Changebridge Road	1	1	1	1	0	1	-1	1	1	-1	1	1	0	0	7	Medium
MT-12	Stream Corridor Management and Restoration Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High

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



9.23.7 Future Needs To Better Understand Risk/Vulnerability

The Township would like to clearly disseminate hazard information to the public and would consider the development of a web page to display information and links on applicable hazards.

9.23.8 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Township of Montville 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 Montville has significant exposure. These maps are illustrated in the hazard profiles within Section 5.4, Volume I of this Plan.

9.23.9 Additional Comments

None at this time.



Figure 9.23-1. Township of Montville Hazard Area Extent and Location Map 1

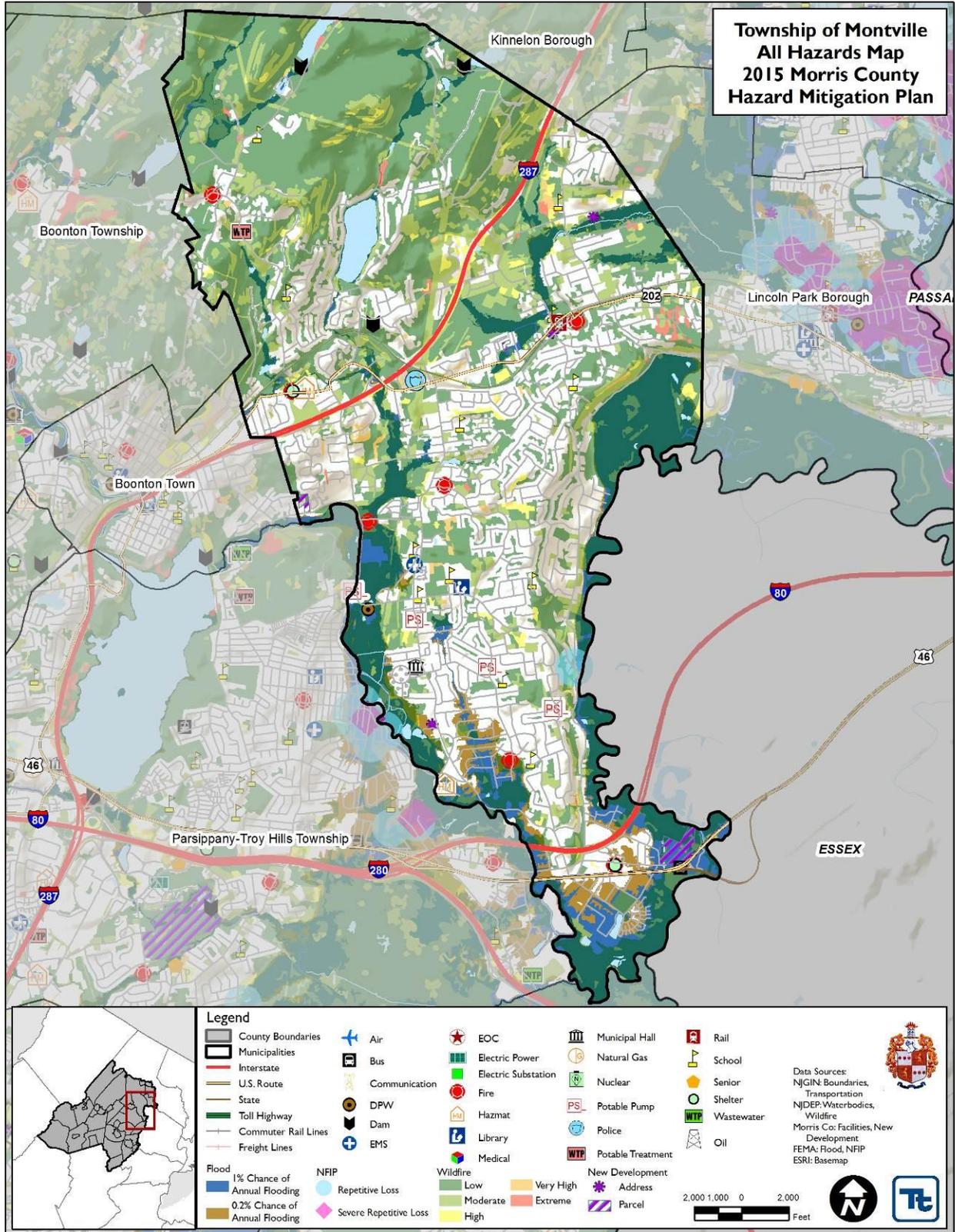
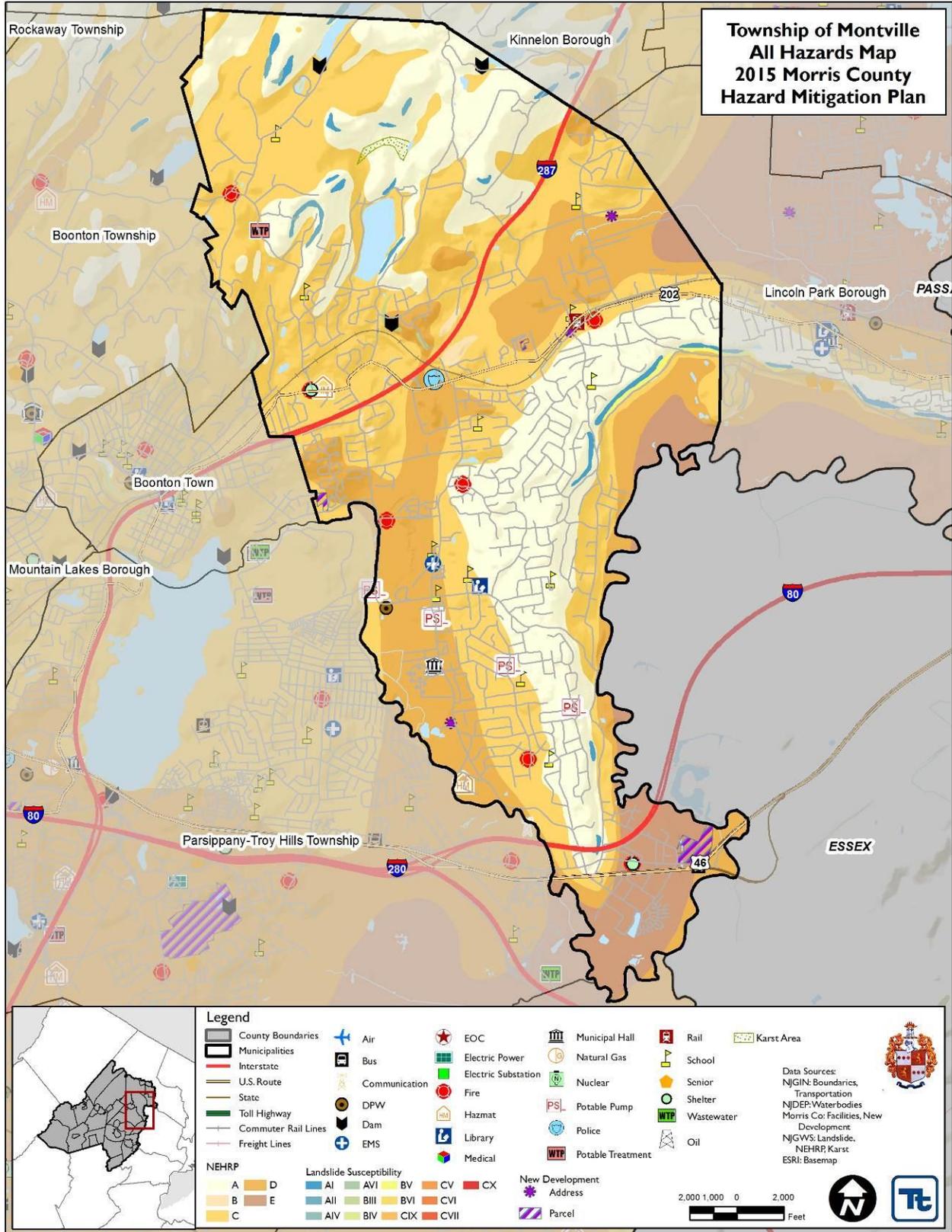




Figure 9.23-2. Township of Montville Hazard Area Extent and Location Map 2





Action Number: MT-1
Mitigation Action/Initiative: Backup Generator for Montville Township High School

Assessing the Risk	
Hazard(s) addressed:	All-Hazard
Specific problem being mitigated:	High winds and winter storms have the potential to cause widespread loss of electrical power to buildings throughout the Township. The emergency shelter is a critical facility and remaining opening during emergency events is important for response and recovery.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No Action
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The generator will allow the shelter remain functional to effectively aid residents that have been evacuated from their homes or have lost power.
Action/Project Category	SIP, PP
Goals/Objectives Met	G-4
Applies to existing, future, or not applicable	Existing structure
Benefits (losses avoided)	High It is important for an emergency shelter to maintain functionality throughout an emergency event to provide a safe location for residents that have displaced from their homes.
Estimated Cost	High
Priority*	High
Plan for Implementation	
Responsible Organization	Engineering Department
Local Planning Mechanism	CIP Plan
Potential Funding Sources	HMGP
Timeline for Completion	DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 7/1/2015 Progress on Action/Project: Unable to secure funding at this time



Action Number: MT-1
Mitigation Action/Initiative: Backup Generator for Montville Township High School

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Provide heat and shelter to residents that have lost their home, or their power
Property Protection	1	Provide backup power for the school in the event they lose power, no equipment will be lost or destroyed
Cost-Effectiveness	1	Will protect people from possible injury
Technical	1	Project is feasible
Political	0	Unknown
Legal	1	
Fiscal	-1	Needs a new budget/ funding
Environmental	1	It will comply with environmental regulations
Social	1	Will impact the entire community equally in a positive way
Administrative	-1	Outside help will be needed
Multi-Hazard	1	All hazards are being addressed
Timeline	1	Yes as long as funding is secured
Local Champion	0	Unknown
Other Community Objectives	0	Supports overall wellbeing of Montville residents
Total	7	
Priority (High/Med/Low)	High	



Action Number: MT-3
Mitigation Action/Initiative: Elevation of 20-30 flood prone homes on Normandy Drive, Sheffield Place, Lancaster Lane, Manchester Lane, Stiles Land

Assessing the Risk	
Hazard(s) addressed:	Flooding, Severe Storm, Severe Winter Storm
Specific problem being mitigated:	Flooding along these roadways has caused significant damage and loss to these properties and the owners.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No Action
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Town is looking to elevate these properties in order to reduce the damages and losses associated with flooding in this area. The elevations will bring the main floor of each property above the base flood elevation.
Action/Project Category	SIP, PP
Goals/Objectives Met	G-4
Applies to existing, future, or not applicable	Existing structure
Benefits (losses avoided)	Medium
Estimated Cost	High
Priority*	Medium
Plan for Implementation	
Responsible Organization	Engineering Department
Local Planning Mechanism	The acquisition and elevation of these properties can be added into the Township's Master Plan or Floodplain Management Plan.
Potential Funding Sources	RFC/SRL
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 7/1/2012 Progress on Action/Project: Unable to secure funding at this time



Action Number: MT-3
Mitigation Action/Initiative: Elevation of 20-30 flood prone homes on Normandy Drive, Sheffield Place, Lancaster Lane, Manchester Lane, Stiles Land

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Will protect residents as well as first responders
Property Protection	1	Will prevent damage from these flood prone homes
Cost-Effectiveness	-1	Very costly for a small number of homes that would require this
Technical	0	A long term solution
Political	0	Unknown
Legal	1	
Fiscal	-1	New budget/funding would be needed
Environmental	0	Have not done a study on this
Social	0	Should not affect any other residents or areas of town
Administrative	-1	Outside help would be required
Multi-Hazard	1	Reduces risk for all water hazards
Timeline	-1	Long term goal
Local Champion	0	Unknown
Other Community Objectives	0	Unknown
Total	0	
Priority (High/Med/Low)	Low	



Action Number: MT-4
Mitigation Action/Initiative: Alert System downstream of Boonton Dam in conjunction with Boonton Town and Parsippany-Troy Hills Township

Assessing the Risk	
Hazard(s) addressed:	Flooding, Severe Storm, Severe Winter Storm
Specific problem being mitigated:	Early response and action in regards to a flooding event are important to reduce potential damages and loss of life.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No Action
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Township is looking to install an alert system downstream of the Boonton Dam in conjunction with Boonton Town and Parsippany-Troy Hills Township. This alert system will allow for potential flooding events to be monitored and notify residents prior to the emergency.
Action/Project Category	SIP
Goals/Objectives Met	G-4
Applies to existing, future, or not applicable	Future
Benefits (losses avoided)	Medium The alert system will allow residents and other members of the community to prepare for an incoming flood event to prevent significant losses to property and life.
Estimated Cost	High
Priority*	Medium
Plan for Implementation	
Responsible Organization	Office of Emergency Management
Local Planning Mechanism	The acquisition and elevation of these properties can be added into the Township's Master Plan or Floodplain Management Plan.
Potential Funding Sources	RFC/SRL
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 7/1/2012 Progress on Action/Project: Continue discussion with private vendor



Action Number: MT-4
Mitigation Action/Initiative: Alert System downstream of Boonton Dam in conjunction with Boonton Town and Parsippany-Troy Hills Township

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Will help evacuation residents quickly from flood areas
Property Protection	1	Will prevent a large amount of damage
Cost-Effectiveness	1	High cost but also very high benefit
Technical	1	Feasible but long term goal
Political	0	Unknown
Legal	1	This action is legal
Fiscal	-1	New budget / Funding must be secured
Environmental	1	Only impact would be positive
Social	1	Will affect everyone equally
Administrative	-1	Outside help will be required
Multi-Hazard	1	Reduces risk to all water hazards
Timeline	0	Unknown
Local Champion	0	Unknown
Other Community Objectives	1	
Total	7	
Priority (High/Med/Low)	Medium	



Action Number: MT-5
Mitigation Action/Initiative: Acquisition and elevation of three repetitive loss properties located on Lancaster Avenue, River Road and Rennes Street

Assessing the Risk	
Hazard(s) addressed:	Flooding, Severe Storm, Severe Winter Storm
Specific problem being mitigated:	Flooding along these roadways has caused significant damage and loss to these properties and the owners.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No Action
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Township is looking to acquire or elevate these properties in order to reduce the damages and losses associated with flooding in this area. By acquiring these properties, the Township can use the land for further mitigation or strategies. The elevations will bring the main floor of each property above the base flood elevation.
Action/Project Category	SIP, PP
Goals/Objectives Met	G-4
Applies to existing, future, or not applicable	Existing structure
Benefits (losses avoided)	Medium
Estimated Cost	Medium
Priority*	Medium
Plan for Implementation	
Responsible Organization	Office of Emergency Management
Local Planning Mechanism	The acquisition and elevation of these properties can be added into the Township's Master Plan or Floodplain Management Plan.
Potential Funding Sources	RFC/SRL
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 7/1/2012 Progress on Action/Project: Continue discussion and attempt to get funding



Action Number:

MT-5

Mitigation Action/Initiative:

Acquisition and elevation of three repetitive loss properties located on Lancaster Avenue, River Road and Rennes Street

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Will protect the residents from these three properties
Property Protection	1	Highly effective at eliminating damage to these properties
Cost-Effectiveness	-1	Very costly for 3 houses
Technical	1	This is feasible
Political	0	Unknown
Legal	1	This is legal
Fiscal	-1	Needs new budget/ funding
Environmental	0	Unknown if it would now impact more homes by removing these existing
Social	0	Unknown if it would now impact more homes by removing these existing
Administrative	-1	Outside personnel would be required to do this project
Multi-Hazard	1	All water hazards
Timeline	-1	Unknown
Local Champion	0	Unknown
Other Community Objectives	1	Capital improvements
Total	2	
Priority (High/Med/Low)	Medium	



Action Number: MT-6
Mitigation Action/Initiative: Develop all-hazards public education and outreach program for hazard mitigation and preparedness

Assessing the Risk	
Hazard(s) addressed:	All-Hazards
Specific problem being mitigated:	Each hazard can cause different emergency situations for the Township. These impacts could include physical damage to structures as well as loss of life if not properly prepared.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No Action
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Township is looking to provide opportunities for residents to learn about the impacts associated with each hazard. This will allow residents to become informed on these hazards and how to avoid potential losses.
Action/Project Category	EAP
Goals/Objectives Met	G-1
Applies to existing, future, or not applicable	Future
Benefits (losses avoided)	Medium Education and informed residents will be able to make decisions regarding how to effectively respond to emergency situations.
Estimated Cost	Medium
Priority*	Medium
Plan for Implementation	
Responsible Organization	County and Municipal OEM
Local Planning Mechanism	Public Safety Plan/Outreach Plan
Potential Funding Sources	FEMA, Township Funding
Timeline for Completion	Short/OG
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 7/1/2015 Progress on Action/Project: Continue discussion and attempt to get funding



Action Number:

MT-6

Mitigation Action/Initiative:

Develop all-hazards public education and outreach program for hazard mitigation and preparedness

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Will protect the residents from these three properties
Property Protection	1	Highly effective at eliminating damage to these properties
Cost-Effectiveness	-1	Very costly for 3 houses
Technical	1	This is feasible
Political	0	Unknown
Legal	1	This is legal
Fiscal	-1	Needs new budget/ funding
Environmental	0	Unknown if it would now impact more homes by removing these existing
Social	0	Unknown if it would now impact more homes by removing these existing
Administrative	-1	Outside personnel would be required to do this project
Multi-Hazard	1	All water hazards
Timeline	-1	Unknown
Local Champion	0	Unknown
Other Community Objectives	1	Capital improvements
Total	2	
Priority (High/Med/Low)	Medium	



Action Number: MT-7
Mitigation Action/Initiative: Secure secondary dispatch location for Police at the First Aid Squad Building – 137 Changebridge Road

Assessing the Risk	
Hazard(s) addressed:	All-Hazards
Specific problem being mitigated:	During an emergency event, the Police Department may lose the ability to communicate and dispatch first responders. Having a secondary location will allow the Township and Department to ensure their ability to communicate and respond to emergency situations as needed.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No Action
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Township is looking to convert the First Aid Squad Building at 137 Changebridge Road into a secondary dispatch location for the Police Department.
Action/Project Category	SIP, PP, PR
Goals/Objectives Met	G-3
Applies to existing, future, or not applicable	Existing
Benefits (losses avoided)	Medium
Estimated Cost	Low
Priority*	High
Plan for Implementation	
Responsible Organization	Police Department – Office of Emergency Management
Local Planning Mechanism	EMP or PSP
Potential Funding Sources	HMGP/PDM
Timeline for Completion	Short/OG
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 7/1/2012 Progress on Action/Project: New Action



Action Number:

MT-7

Mitigation Action/Initiative:

Secure secondary dispatch location for Police at the First Aid Squad Building – 137 Changebridge Road

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	If we lose Police department communication we have no back up dispatch center
Property Protection	1	Will not reduce damage for the building but will prevent all first responders from losing communication
Cost-Effectiveness	1	Much greater benefit
Technical	1	Short term goal
Political	0	Unknown
Legal	1	
Fiscal	-1	Needs new budget/funding however costs should be low
Environmental	1	Little to no environmental impact
Social	1	Will affect everyone equally
Administrative	-1	Some outside help would be required
Multi-Hazard	1	Solves problem for all hazards
Timeline	1	Short term goal
Local Champion	1	Police/OEM
Other Community Objectives	0	Unknown
Total	8	
Priority (High/Med/Low)	High	



Action Number: MT-8
Mitigation Action/Initiative: Normandy Drive, Sheffield Place Lancaster, Manchester, and Stiles Lane. Stormwater infrastructure improvements

Assessing the Risk	
Hazard(s) addressed:	Flooding and Severe storm
Specific problem being mitigated:	During severe storms and flooding events the tributary of the Rockaway routinely floods adjacent properties and infrastructure. The point of confluence with the Rockaway River is just downstream of this area and one the River reaches a certain height the tributary can no longer drain the water away and becomes backed up.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No Action
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Township is looking to analyze and plan for selective stormwater infrastructure or stream mitigation improvements for this neighborhood.
Action/Project Category	PR/PP/SP
Goals/Objectives Met	G-4
Applies to existing, future, or not applicable	Existing
Benefits (losses avoided)	Medium
Estimated Cost	Low
Priority*	High
Plan for Implementation	
Responsible Organization	Engineering and DPW
Local Planning Mechanism	CIP Plan
Potential Funding Sources	HMGP/PDM
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date:7/1/2015 Progress on Action/Project: New Action



Action Number: MT-8
Mitigation Action/Initiative: Normandy Drive, Sheffield Place Lancaster, Manchester, and Stiles Lane. Stormwater infrastructure improvements

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Will help protect residents from flooding
Property Protection	1	Will prevent damage from flooding
Cost-Effectiveness	1	High cost medium benefit
Technical	1	Feasible but long term goal
Political	0	Unknown
Legal	1	This action is legal
Fiscal	1	New budget / Funding must be secured
Environmental	1	Only impact would be positive
Social	1	Will affect everyone equally
Administrative	1	Consultant or in-house engineer and complete
Multi-Hazard	1	Reduces risk to all water hazards
Timeline	1	Unknown
Local Champion	0	Unknown
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	



Action Number: MT-9
Mitigation Action/Initiative: Backup power for key infrastructure facilities including pump stations and lift stations

Assessing the Risk	
Hazard(s) addressed:	All Hazards
Specific problem being mitigated:	High winds and winter storms have the potential to cause widespread loss of electrical power to buildings throughout the Township. Township emergency response and continued potable water and sewer service is key to recovery and continued operations during a disaster event.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No Action
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Township will acquire fixed backup generators for key pump and lift stations.
Action/Project Category	PR/PP/SP
Goals/Objectives Met	G-4
Applies to existing, future, or not applicable	Existing
Benefits (losses avoided)	Medium
Estimated Cost	Low
Priority*	Medium
Plan for Implementation	
Responsible Organization	Engineering and DPW
Local Planning Mechanism	CIP Plan
Potential Funding Sources	HMGP/PDM
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 7/1/2015 Progress on Action/Project: New Action



Action Number: MT-9

Mitigation Action/Initiative: Backup power for key infrastructure facilities including pump stations and lift stations

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Provide water services to residents and emergency personnel during
Property Protection	1	Protect infrastructure from damage due to power loss
Cost-Effectiveness	1	Low cost high reward
Technical	1	Project is feasible
Political	0	Unknown
Legal	1	
Fiscal	0	Needs a new budget/ funding
Environmental	1	It will comply with environmental regulations
Social	0	Will impact the entire community equally in a positive way
Administrative	0	Outside help will be needed
Multi-Hazard	1	All hazards are being addressed
Timeline	1	Yes as long as funding is secured
Local Champion	1	Unknown
Other Community Objectives	0	
Total	7	
Priority (High/Med/Low)	Medium	



Action Number: MT-10
Mitigation Action/Initiative: Municipal Building parking lot flooding issue stormwater improvements

Assessing the Risk	
Hazard(s) addressed:	Flooding and severe storm
Specific problem being mitigated:	The Municipal buildings parking lot routinely floods during severe storms and limits access to and from the building which could inhibit emergency response.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No Action
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Township will re-grade and install stormwater management improvements.
Action/Project Category	PR
Goals/Objectives Met	G-4
Applies to existing, future, or not applicable	Existing
Benefits (losses avoided)	Medium
Estimated Cost	Low
Priority*	High
Plan for Implementation	
Responsible Organization	Engineering and DPW
Local Planning Mechanism	CIP Plan
Potential Funding Sources	HMGP/PDM
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 7/1/2015 Progress on Action/Project: New Action



Action Number:

MT-10

Mitigation Action/Initiative:

Municipal Building parking lot flooding issue stormwater improvements

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Provide emergency personnel access to and from municipal building during storm events.
Property Protection	1	Protect infrastructure from damage due to flooding
Cost-Effectiveness	1	Low cost high reward
Technical	1	Project is feasible
Political	0	Unknown
Legal	1	
Fiscal	1	Needs a new budget/ funding
Environmental	1	It will comply with environmental regulations
Social	1	Will impact the entire community equally in a positive way
Administrative	1	Outside help will be needed
Multi-Hazard	1	All hazards are being addressed
Timeline	1	Yes as long as funding is secured
Local Champion	0	Unknown
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	



Action Number: MT-11
Mitigation Action/Initiative: Backup solar power for lights at key intersections along route 46 and 202, and Changebridge Road

Assessing the Risk	
Hazard(s) addressed:	All Hazards
Specific problem being mitigated:	Occasionally during severe storms or other events the intersections along the major arterial roadways in the Township have lost power.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No Action
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Township will work with the power service provider to install the solar power backup at key intersections
Action/Project Category	PR
Goals/Objectives Met	G-4
Applies to existing, future, or not applicable	Existing
Benefits (losses avoided)	Medium
Estimated Cost	Low
Priority*	Medium
Plan for Implementation	
Responsible Organization	Engineering and DPW
Local Planning Mechanism	CIP Plan
Potential Funding Sources	HMGP
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 7/1/2015 Progress on Action/Project: New Action



Action Number:

MT-11

Mitigation Action/Initiative:

Backup solar power for lights at key intersections along route 46 and 202, and Changebridge Road

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	Low cost high reward
Technical	1	Project is feasible
Political	0	Unknown
Legal	1	
Fiscal	-1	Needs a new budget/ funding
Environmental	1	It will comply with environmental regulations
Social	1	Will impact the entire community equally in a positive way
Administrative	-1	Outside help will be needed
Multi-Hazard	1	All hazards are being addressed
Timeline	1	Yes as long as funding is secured
Local Champion	0	Unknown
Other Community Objectives	0	
Total	7	
Priority (High/Med/Low)	Medium	