



9.15 Township of Montague

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

9.15.1 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 |
|--|--|
| Jesse Brace-Revak, OEM Coordinator 277 Clove Road, Montague, NJ 07827 Phone: (908) 319-1813 Email: jbrace81@yahoo.com | Dave Coss, OEM Deputy 277 Clove Road, Montague, NJ 07827 Phone: (908)319-1811 Email: coss1101@yahoo.com |

9.15.2 Municipal Profile

Montague Township is located in the northwest corner of Sussex County. It is bordered to the north by New York State, to the south by Frankford and Sandyston Townships, to the east by Wantage Township and to the west by Pennsylvania. The Township covers a total area of 43.9 square miles and according to the U.S. Census, the 2010 population for the Township of Montague was 3,847. The following unincorporated communities are located within the Township: Four Corners, Montague, Millville, and Duttonville. The Delaware River makes up the northern and western border between the Township and Pennsylvania. Big Flat Brook is a stream located in the southern end of the Township. There are many ponds and lakes located throughout the Township as well.

Growth/Development Trends

The Township of Montague did not note any recent residential/commercial development since 2010 or any major residential or commercial development, or major infrastructure development planned for the next five years in the municipality.

9.15.3 Natural Hazard Event History Specific to the Municipality

Sussex 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 9.15-1. Hazard Event History

| Date(s) of Event | Event Type | FEMA Declaration # (If Applicable) | County Designated? | Summary of Damages/Losses |
|-------------------------------|-----------------|------------------------------------|--------------------|---|
| August 26 – September 5, 2011 | Hurricane Irene | DR-4021 | Yes | <p>The Township had to evacuate one home due to structural damage from a fallen tree. A set of 12 homes were evacuated in another part of the Township due to a brook overflowing its banks and causing a major wash out of the roadway and surrounding areas. A shelter was set up at the Town Hall for residents that needed it throughout the storm. The Town Hall was also used as a charging station for phones and computers and water and ice were distributed to residents.</p> <p>Approximately 70% of the roads (local, county and state) were closed during the storm for approximately 24 hours. After the storm passed, about 30% of the roads in the Township were closed due to downed utility wires and poles. Two roads in the Township were damaged – Bierskill Road and Brook Heaven Road. Bierskill Road had major damage; the road washed out due to flooding from a brook and a temporary road had to be put in. Brook Heaven Road had minor damage due to brook and storm washout and was open within a week. Utility outages occurred with some portions of the Township not having power for 23 days.</p> <p>The Township requested public assistance from FEMA.</p> |
| October 26 – November 8, 2012 | Hurricane Sandy | DR-4086 | Yes | <p>The Town Hall was opened and available to residents after the storm mainly due to large power outages. The shelter in the Township was set up for a charging station and water distribution. Many of the roads in the Township were closed due to downed trees and power lines. Most of the Township was without power for up to 20 days. Most of the commercial areas were up and going within a week. Public assistance was requested.</p> |

9.15.4 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 risk ranking methodology is presented in Section 5.3. However, each municipality had the opportunity to adjust the final ranking based on municipal feedback. The following summarizes the hazard vulnerabilities and their ranking in the Township of Montague. 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 Montague.

Table 9.15-2. 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 |
|-------------|--|---------------------------|---|-----------------------------|
| Dam Failure | Damage estimate not available | Occasional | 24 | High* |





| 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 | 30 | Medium |
| Earthquake | 100-Year GBS: \$0 500-Year GBS: \$336,634 2,500-Year GBS: \$4,837,353 | Occasional | 28 | Medium |
| Flood | 1% Annual Chance: \$12,396,929 | Frequent | 18 | Medium |
| Geologic | Exposed to Carbonate Rock Areas: \$481,080,865 | Occasional | 36 | High |
| Hurricane | 100-year MRP: \$51,076 500-year MRP: \$1,525,789 Annualized: \$8,449 | Frequent | 48 | High |
| Nor'Easter | Damage estimate not available | Frequent | 48 | High |
| Severe Weather | 100-Year MRP: \$51,076 500-year MRP: \$1,525,789 Annualized: \$8,449 | Frequent | 48 | High |
| Severe Winter Weather | 1% GBS: \$5,506,313 5% GBS: \$27,531,564 | Frequent | 51 | High |
| Wildfire | Estimated Value in the Extreme, Very High, and High Hazard Areas: \$116,618,913 | Frequent | 36 | High |
| Hazardous Materials | Damage estimate not available | Frequent | 36 | High |

Notes:

* The hazard ranking was increased to high due to the location of high hazard dams in the municipality

GBS = General building stock; MRP = Mean return period.

a. The general building stock valuation is based on the custom inventory generated for the municipality and based on improved value.

b. High = Total hazard priority risk ranking score of 31 and above

Medium = Total hazard priority risk ranking of 15-30+

Low = Total hazard risk ranking below 15

c. Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the estimated value of contents. Loss estimates for the flood and earthquake hazards represent both structure and contents. Potential flood loss estimates were generated using Hazus-MH 3.0 and the 2011 FEMA DFIRM for the 1-percent annual chance event. For the geologic and wildfire hazards, the improved value and estimated contents of buildings located within the identified hazard zones is provided.





National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Township of Montague.

Table 9.15-3. NFIP Summary

| Municipality | # Policies (1) | # Claims (Losses) (1) | Total Loss Payments (2) | # Rep. Loss Prop. (1) | # Severe Rep. Loss Prop. (1) | # Policies in 1% Flood Boundary (3) |
|----------------------|----------------|-----------------------|-------------------------|-----------------------|------------------------------|-------------------------------------|
| Township of Montague | 17 | 13 | \$155,437 | 1 | 0 | 4 |

Source: FEMA, 2014

Note (1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA and are current as of November 31, 2014 and are summarized by Community Name. Please note the total number of repetitive loss properties excludes the severe repetitive loss properties. The number of claims represents claims closed by 11/31/2014.

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

Note (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.

Note (4) 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.

Critical Facilities

There are no critical facilities located in the FEMA 1% or 0.2% annual chance flood boundary.

Other Vulnerabilities Identified by Municipality

The hazard profiles in Section 5.0 have detailed information regarding each plan participant’s vulnerability to the identified hazards. Further, mitigation projects have been identified that may more specifically detail vulnerabilities in the community. There are no additional vulnerabilities identified at this time.

9.15.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Education/Outreach and Community classification
- Self-Assessment of Capability
- 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 Montague.

Table 9.15-4. 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 | Local | Land Use | Re-examination Adopted 12/8/2011 |
| Capital Improvements Plan | Yes | Local | Twp. Comm. | Adopted Budget 4/14/2015 |
| Floodplain Management/Basin Plan | No | | | |
| Stormwater Management Plan | No | | | |
| Open Space Plan | No | | | |
| Stream Corridor Management Plan | No | | | |
| Watershed Management or Protection Plan | No | | | |
| Economic Development Plan | No | | | |
| Comprehensive Emergency Management Plan | No | | | |
| Emergency Response Plan | Yes | Local, County | Township OEM | Emergency Operations Plan |
| Post-Disaster Recovery Plan | No | | | |
| Transportation Plan | No | | | |
| Strategic Recovery Planning Report | No | | | |
| Other Plans: | No | | | |
| Regulatory Capability | | | | |
| Building Code | Yes | State & Local | | State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.) |
| Zoning Ordinance | Yes | Local | Land Use | Chapter 76 |
| Subdivision Ordinance | Yes | Local | Land Use | Chapter 60 |
| NFIP Flood Damage Prevention Ordinance | Yes | Federal, State, Local | | Chapter 38 |
| NFIP: Cumulative Substantial Damages | No | | | |
| NFIP: Freeboard | Yes | State, Local | | |
| Growth Management Ordinances | No | | | |
| Site Plan Review Requirements | Yes | Local | Land Use | Chapter 60 |
| Stormwater Management Ordinance | Yes | Local | Twp. Comm. | Chapter 56 |
| Municipal Separate Storm Sewer System (MS4) | No | | | |
| Natural Hazard Ordinance | No | | | |
| Post-Disaster Recovery | No | | | |



Table 9.15-4. 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.) |
|---|---|--|------------------------------|--|
| Ordinance | | | | |
| Real Estate Disclosure Requirement | No | State | Division of Consumer Affairs | N.J.A.C. 13:45A-29.1 |
| 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 Montague.

Table 9.15-5. Administrative and Technical Capabilities

| Resources | Is this in place? (Yes or No) | Department/Agency/Position |
|---|----------------------------------|-------------------------------|
| Administrative Capability | | |
| Planning Board | Yes | Land Use Board |
| Mitigation Planning Committee | No | |
| Environmental Board/Commission | No | |
| Open Space Board/Committee | No | |
| Economic Development Commission/Committee | Yes | |
| Maintenance Programs to Reduce Risk | No | |
| Mutual Aid Agreements | Yes | Fire/DPW |
| Technical/Staffing Capability | | |
| Planner(s) or Engineer(s) with knowledge of land development and land management practices | Yes | Harold E. Pellow & Associates |
| Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure | No | |
| Planners or engineers with an understanding of natural hazards | No | |
| NFIP Floodplain Administrator | Yes | Bob Huber |
| Surveyor(s) | No | |
| Personnel skilled or trained in GIS and/or Hazus-MH applications | No | |
| Scientist familiar with natural hazards | No | |
| Emergency Manager | Yes | |
| Grant Writer(s) | Yes | |
| Staff with expertise or training in benefit/cost analysis | No | |
| Professionals trained in conducting damage assessments | No | |

Fiscal Capability

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





Table 9.15-6. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use (Yes/No/Don't Know) |
|---|---|
| Community Development Block Grants (CDBG, CDBG-DR) | No |
| Capital Improvements Project Funding | Yes |
| Authority to levy taxes for specific purposes | No |
| User fees for water, sewer, gas, or electric service | No |
| 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 | No |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other Federal or State Funding Programs | No |
| Open Space Acquisition Funding Programs | No |
| Other | No |

Education/Outreach and Community Classifications

The table below summarizes education/outreach programs the community participates in and the classifications for community program available to the Township of Montague.

Table 9.15-7. Education/Outreach and Community Classifications

| Program | Do you have/participate in this? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|--|---|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | | |
| Building Code Effectiveness Grading Schedule (BCEGS) | TBD | | |
| Public Protection (ISO Fire Protection Classes 1 to 10) | Yes | 6/9 | Being Reviewed |
| Storm Ready | No | | |
| Firewise | No | | |
| Disaster/Safety Programs in/for Schools | TBD | | |
| Organizations with Mitigation Focus (advocacy group, non-government) | TBD | | |
| Public Education Program/Outreach (through website, social media) | TBD | | |
| Public-Private Partnerships | TBD | | |

NP = Not participating;

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 Community Rating System (CRS) class applies to flood insurance while the Building Code Effectiveness Grading Schedule (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 1,000 feet of a creditable fire hydrant and is within five 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 the Township of Montague’s capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

Table 9.15-8. Self-Assessment of Capability – Please mark each with an ‘X’ to indicate your capability.

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

National Flood Insurance Program

NFIP Floodplain Administrator (FPA)

Robert Huber, Construction Official

Flood Vulnerability Summary

The Township maintains a list of properties that have been flooded in the past. Flooding that has impacted these homes is caused by the river. A few of the houses have been sold recently and the new owners have not contacted the Township about any flood issues. During recent FEMA declared disasters (Irene, Lee and Sandy), the Township did not make any substantial damage estimates. There is currently no interest in





mitigation by any homeowner in the municipality. If properties were mitigated, funding sources were be from grant funding.

Resources

The construction official for the Township is the sole person assuming the role and responsibilities of the floodplain administration. His services include damage assessments and limited education and outreach. The Township provides information on flood hazards/risk and flood risk reduction at the municipal building. There are currently no barriers to running an effective floodplain management program and the FPA feels adequately supported and trained to fulfill his responsibilities as the floodplain administrator.

Compliance History

The Township is currently in good standing with the NFIP and the most recent compliance audit was conducted within the last five years.

Regulatory

The Township's flood damage prevention ordinance meets the minimum requirements set by FEMA and the State of New Jersey.

Community Rating System

The Township of Montague does not 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

Land Use Planning: The Township has a Joint Land Use Board which reviews all applications for development and consider natural hazard risk areas in their review.

Montague Township Master Plan Reexamination 2014: This plan updated a number of the goals and objectives from the 2004 Master Plan. None of the goals were mitigation related. The Master Plan also incorporates natural hazard risk/mitigation.

Regulatory and Enforcement (Ordinances)

The Township has multiple chapters pertaining to the mitigation of hazards. These ordinances include the Flood Damage Prevention Chapter, Stormwater Control Chapter, and an Environmental Impact Statement requirement included in the Site Plan Review Chapter. When updating these ordinances, hazard mitigation is and will be a priority.

Chapter 38: Flood Damage Prevention: The purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

- A. To protect human life and health;





- B. To minimize expenditure of public money for costly flood control projects;
- C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. To minimize prolonged business interruptions;
- E. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
- F. To help maintain a stable tax base by providing for the alternate use and development of areas of special flood hazard so as to minimize future flood blight areas;
- G. To ensure that potential buyers are notified that property is in an area of special flood hazard; and
- H. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

Chapter 56: Stormwater Control: The purposed of the Stormwater Control Chapter is to implement best management practices for stormwater management designed to promote the public health, safety and general welfare of the Townships' citizens and businesses.

Chapter 55-12: Environmental Impact Statement: The purpose of this section of the Chapter is to allow the Township to assess the impact of a proposed development upon the natural environment. Before approving any major subdivision or any site plan that involves a nonresidential use in which there is proposed a new structure, an addition or alteration to an existing structure, a change of use or an expansion of an existing use, the Planning Board shall take into consideration the effect of the proposal for development upon the natural environment, particularly with respect to potable water, pollution of all kinds, flooding, waste disposal, soil erosion and the preservation of trees and other vegetation.

Operational and Administration

The Township has established a Land Use Board to review all development applications in the Township. Beyond that the Township employs and Planning Board Secretary and contracts out for professional legal, planning, and engineering services for development review.

Funding

Operating Budget: The Township's operating budget contains minimal provisions for expected repairs like snow removal and infrastructure repair after a storm or natural disaster.

Grants: The Township has received funding from the NJDOT and The Garden State Preservation Trust Fund grant programs. The Township's 2014 Capital Budget includes line items for improvements to the Municipal Building, as well as a number or drainage and roadway improvements.

Education and Outreach

The Township's website posts information regarding upcoming community events and important municipal decisions on the home page. The Township also conducts outreach by having informational brochures available to residents at the Town Hall.



Figure 1. Screenshot of Township Website with Examples of their Emergency Information

Important Emergency Contacts
Immediate Emergency Dial 911.

Fire Department (973) 293-7441

Blue Ridge Rescue Squad (972) 948-4828

NJ Office of Emerg. Mgmt. (609) 963-6992

NJ State Police Augusta, NJ Barracks (973) 383-1514

Montague Emergency Management Coordinator - Jesse Brace-Revak (908) 319-1813

First Energy (Jersey Central Power & Light) (973) 401-8860 | (973) 219-6791
 To Report an Outage: (800) 545-7738

Orange & Rockland To Report an Outage (877) 434-4100

Jersey Central <http://outages.firstenergycorp.com/nj.html> | 888.544.4877 (1.888.LIGHTSS)

CenturyLink Customer Service numbers: Residential: 800 366 8201 | Business: 877 365 0045

Traffic Incidents: 511nj.org

If you have an immediate emergency, call 911

The County of Sussex Division of Emergency Management will provide regular updates on the County website and social media channels:
[Twitter](#) • [Facebook](#) • [Subscribe to Email Alerts](#) • [Watch our Alerts web page for the latest updates](#)

9.15.6 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 2011 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 9.15-9. Past Mitigation Initiative Status

| Initiative Number | 2011 Mitigation Action | Responsible Party | Status (In progress, No progress, Complete) | Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)? | Next Step (Include in 2016 HMP? or Discontinue) | Describe Next Step 1. If including action in the 2015 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why. |
|--------------------------|---|----------------------------|---|--|---|---|
| Montague Township 1 | Acquisition/Elevation of two Repetitive Loss properties on River Road. | OEM Coordinator | No Progress | There has been no progress on this project as it is not needed in this plan update. | Discontinue | This initiative will be discontinued as it is not needed in this plan update. |
| Montague Township 2 | Retrofit roof to current standards for snow load on Montague Fire Department building located on Clove Road. | Station Commander | No Progress | There has been no progress on this initiative due to lack of funding. | Include in 2016 HMP | The roof at the fire department is flat and failing. It is over 20 years old and in need of replacement. This action will be included in the 2016 HMP Update. |
| Montague Township 3 | Retrofit roof to current standards for high winds on Montague Fire Department building located on Clove Road. | Station Commander | No Progress | There has been no progress on this initiative due to lack of funding. | Include in 2016 HMP | This facility is used as a shelter for first responders during emergencies. The windows are over 30 years old. This action will be included in the 2016 HMP Update. |
| Montague Township 4 | Retrofit roof to current standards for high winds on Montague Elementary School (shelter) located on Route 206. | School Board Administrator | No Progress | There has been no progress on this initiative due to lack of funding. | Include in 2016 HMP | This action will be included in the 2016 HMP Update. |
| Montague Township 5 | Retrofit roof to current standards for snow load on Montague Elementary School (shelter) located on Route 206. | School Board Administrator | Complete | The roof of the school has been replaced and meets current standards for snow load. The project was funded by the local school budget. | Discontinue | Project has been completed. |
| Montague Township 6 | Backup generator for Montague Elementary School (shelter) located on Route 206. | OEM Coordinator | No Progress | There has been no progress on this initiative due to lack of funding. | Include in 2016 HMP | Include in the 2016 HMP Update. |
| Montague Township 7 | Retrofit roof to current standards for snow load on Montague Department of Public Works building | DPW Administrator | Complete | This project was completed approximately five years ago. The roof meets current standards for snow load. The project was funded by the local | Discontinue | Project has been completed. |





| Initiative Number | 2011 Mitigation Action | Responsible Party | Status (In progress, No progress, Complete) | Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)? | Next Step (Include in 2016 HMP? or Discontinue) | Describe Next Step 1. If including action in the 2015 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why. |
|--------------------------|---|---|---|--|---|---|
| | located on Weider Road. | | | Township budget. | | |
| Montague Township 8 | Retrofit roof to current standards for high winds on Montague Department of Public Works building located on Weider Road. | DPW Administrator | Complete | This project was completed approximately five years ago. The roof meets current standards for high winds. The project was funded by the local Township budget. | Discontinue | Project has been completed. |
| Montague Township 9 | Retrofit municipal building with impact resistant windows and shutters located on Clove Road. | Municipal Engineer | No Progress | There has been no progress on this initiative due to lack of funding. | Include in 2016 HMP | Include in the 2016 HMP Update. |
| Montague Township 10 | Implementation of the Fire Wise Program throughout the Township. | OEM Coordinator | In Progress | The Township is currently working with New Jersey Forest Fire Service to implement this project for the past three years. | Include in 2016 HMP | Include in the 2016 HMP Update. |
| Montague Township 11 | Warning system installation along flood areas on River Road. | OEM Coordinator | No Progress | There has been no progress on this initiative due to lack of funding. | Include in 2016 HMP | The Township will add three warning systems along flood areas on River Road. This will help better warn the Township in the event of flooding. |
| Montague Township 12 | Elevate river banks for a half mile along the Delaware and Benekill Rivers | Township Engineer | No Progress | There has been no progress on this initiative due to lack of funding. | Include in 2016 HMP | Conduct a study along the river banks of the Delaware and Benekill Rivers to identify areas that need to be elevated to reduce flooding impacts. |
| Montague Township 13 | Conduct all-hazards public education and outreach program for hazard mitigation and preparedness. | OEM Coordinator, in coordination with SCDEM | In Progress | The Township conducts outreach by having informational brochures available at the Town Hall for residents. | Include in 2016 HMP | This is an ongoing initiative that the Township will enhance and continue to conduct. |





Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy

The Township has not identified any additional mitigation projects/activities that have been completed since approval of the 2011 Plan.

Proposed Hazard Mitigation Initiatives for the Plan Update

The Township participated in a mitigation action workshop in April 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). In May 2015, FEMA Region 2 and NJOEM led a workshop and provided the results of the risk assessment to further assist the communities with the identification of mitigation actions. Additionally, in September 2015, the Township participated in an annex support meeting to identify and finalize the community's mitigation actions.

Table 9.15-10 summarizes the comprehensive-range of specific mitigation initiatives the Township 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 9.15-11 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.15-10. 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 |
|------------|--|--|---------------------------------------|---------------|---|--------------------|----------------|---------------------------------------|------------------|----------|---------------------|--------------|
| Montague-1 | Retrofit roof to current standards for snow load on Montague Fire Department building located on Clove Road. | Existing | Severe Winter Weather | 1, 2, 6 | Station Commander | High | Medium | HMGP with local budget for cost share | Short Term / DOF | High | SIP | PP |
| Montague-2 | Retrofit roof to current standards for high winds on Montague Fire Department building located on Clove Road. | Existing | Severe Weather, Severe Winter Weather | 1, 2, 6 | Station Commander | High | Medium | HMGP with local budget for cost share | Short Term / DOF | High | SIP | PP |
| Montague-3 | Retrofit roof to current standards for high winds on Montague Elementary School (shelter) located on Route 206. | Existing | Severe Weather, Severe Winter Weather | 1, 2, 6 | School Board Administrator | High | Medium | HMGP with local budget for cost share | Short Term / DOF | High | SIP | PP |
| Montague-4 | Backup generator for Montague Elementary School (shelter) located on Route 206. | Existing | All | 1, 2, 6 | OEM Coordinator | High | High | HMGP with local budget for cost share | Short Term / DOF | High | SIP | PP |
| Montague-5 | Retrofit municipal building with impact resistant windows and shutters located on Clove Road. | Existing | Severe Winter Weather | 1, 2, 6 | Municipal Engineer | High | Medium | HMGP with local budget for cost share | Short Term / DOF | High | SIP | PP |
| Montague-6 | Work with the New Jersey Forest Fire Service to implement the FireWise program for the Township | N/A | Wildfire | All | OEM Coordinator | Medium | Low | Municipal Budget; NJDEP | Short Term / DOF | High | EAP, NSP | PI, NR |
| Montague-7 | The Township will add three warning systems along flood areas on River Road. This will help better warn the Township in the event of flooding. | New and Existing | Flood, Severe Weather | 1, 2, 3, 4, 5 | OEM Coordinator | High | Medium | HMGP with local budget for cost share | Short Term / DOF | High | SIP, NSP | PP, NR |
| Montague-8 | Conduct a study along the river banks of the Delaware and Benekill Rivers to identify areas that need to be elevated to reduce flooding impacts. | New and Existing | Flood, Severe Weather | 1, 2, 3, 4, 5 | Township Engineer | Medium | Medium | HMGP with local budget for cost share | Short Term / DOF | Medium | LPR, NSP | PR, NR |
| Montague-9 | Conduct all-hazards public education and outreach program for hazard mitigation and preparedness. | New and Existing | All | All | OEM Coordinator, in coordination with SCDEM | High | Low | Municipal Budget | Ongoing | High | EAP | PI |





Table 9.15-10. 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 |
|-------------|--|--|---|-----------|---|--------------------|----------------|--|---|----------|---------------------|--------------|
| Montague-10 | Review the current hazard mitigation plan prior to updating land use, zoning changes, or development permitting. | New and Existing | All | All | Township | High | Low | Municipal Budget | Ongoing | High | LPR | PR |
| Montague-11 | Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a priority when applicable. Phase 1: Identify appropriate candidates and determine most cost-effective mitigation option. Phase 2: Work with the property owners to implement selected action based on available funding and local match availability. | | | | | | | | | | | |
| | See above. | Existing | Flood, Severe Weather Wildfire, Severe Winter Weather | | Engineering via NFIP FPA with NJOEM, FEMA support | High | High | FEMA Mitigation Grant Programs and local budget (or property owner) for cost share | Ongoing (outreach and specific project identification); Long term DOF (specific project application and implementation) | 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:

- 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
- HMA Hazard Mitigation Assistance Program

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

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





Costs:

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 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 9.15-11. 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 Objectives | Total | High / Medium / Low |
|------------------------------------|---|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| Montague-1 | Retrofit roof to current standards for snow load on Montague Fire Department building located on Clove Road. | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 8 | High |
| Montague-2 | Retrofit roof to current standards for high winds on Montague Fire Department building located on Clove Road. | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 8 | High |
| Montague-3 | Retrofit roof to current standards for high winds on Montague Elementary School (shelter) located on Route 206. | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 8 | High |
| Montague-4 | Backup generator for Montague Elementary School (shelter) located on Route 206. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 10 | High |
| Montague-5 | Retrofit municipal building with impact resistant windows and shutters located on Clove Road. | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 8 | High |
| Montague-6 | Work with the New Jersey Forest Fire Service to implement the FireWise program for the Township | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | -1 | 1 | 1 | 0 | 7 | High |
| Montague-7 | The Township will add three warning systems along flood areas on River Road. This will help better warn the Township in the event of flooding. | 1 | 1 | 1 | 1 | 0 | 0 | -1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 7 | High |
| Montague-8 | Conduct a study along the river banks of the Delaware and Benekill Rivers to identify areas that need to be elevated to reduce flooding impacts. | 1 | 1 | 1 | 1 | 0 | 0 | -1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 7 | Medium |
| Montague-9 | Conduct all-hazards public education and outreach program for hazard mitigation and preparedness. | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 9 | High |
| Montague-10 | Review the current hazard mitigation plan prior to updating land use, zoning changes, or development permitting. | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 9 | High |
| Montague-11 | Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a priority when applicable. | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 9 | High |

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



9.15.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.15.8 Hazard Area Extent and Location

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

9.15.9 Additional Comments

None at this time.

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Figure 9.15-2. Township of Montague Hazard Area Extent and Location Map 1

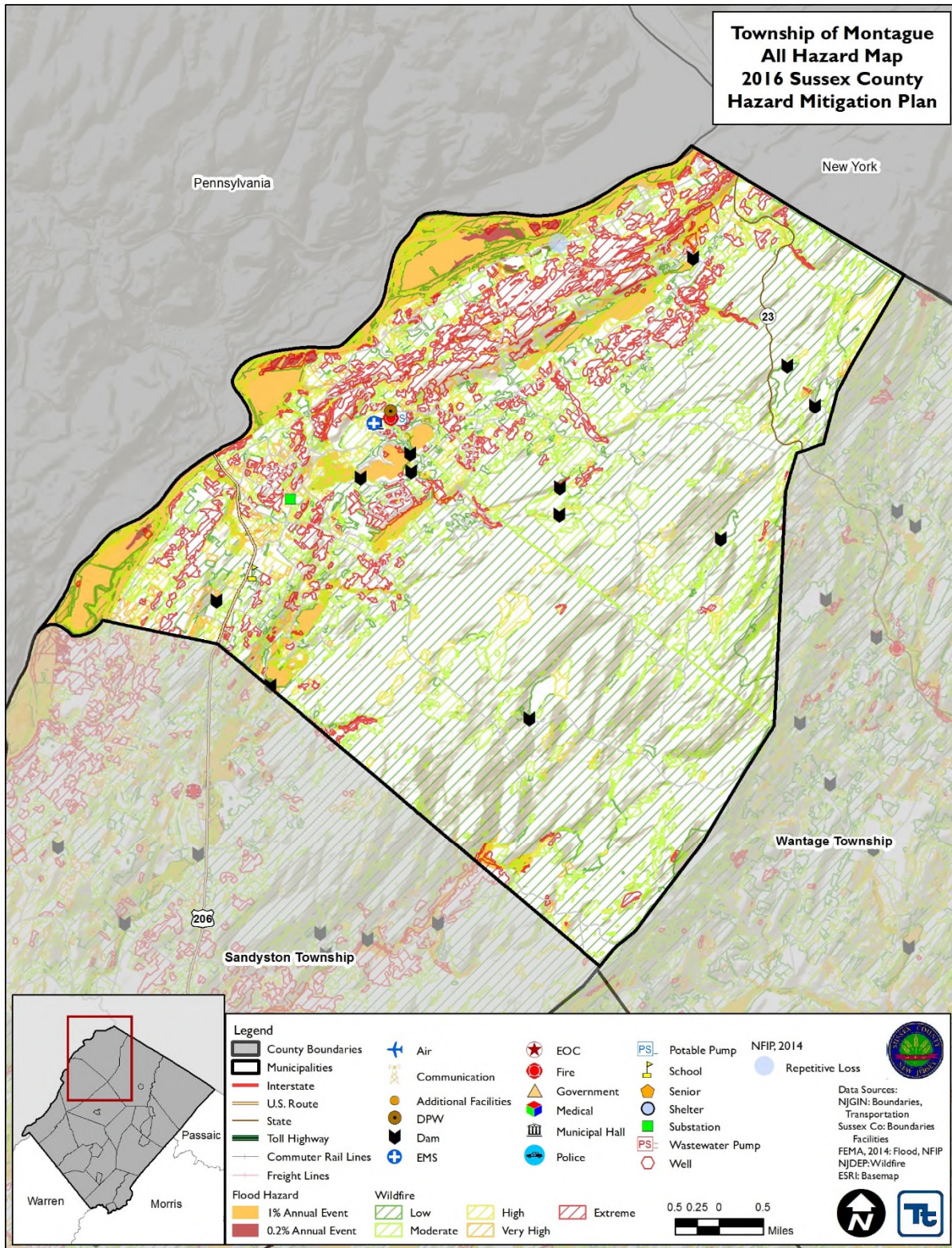
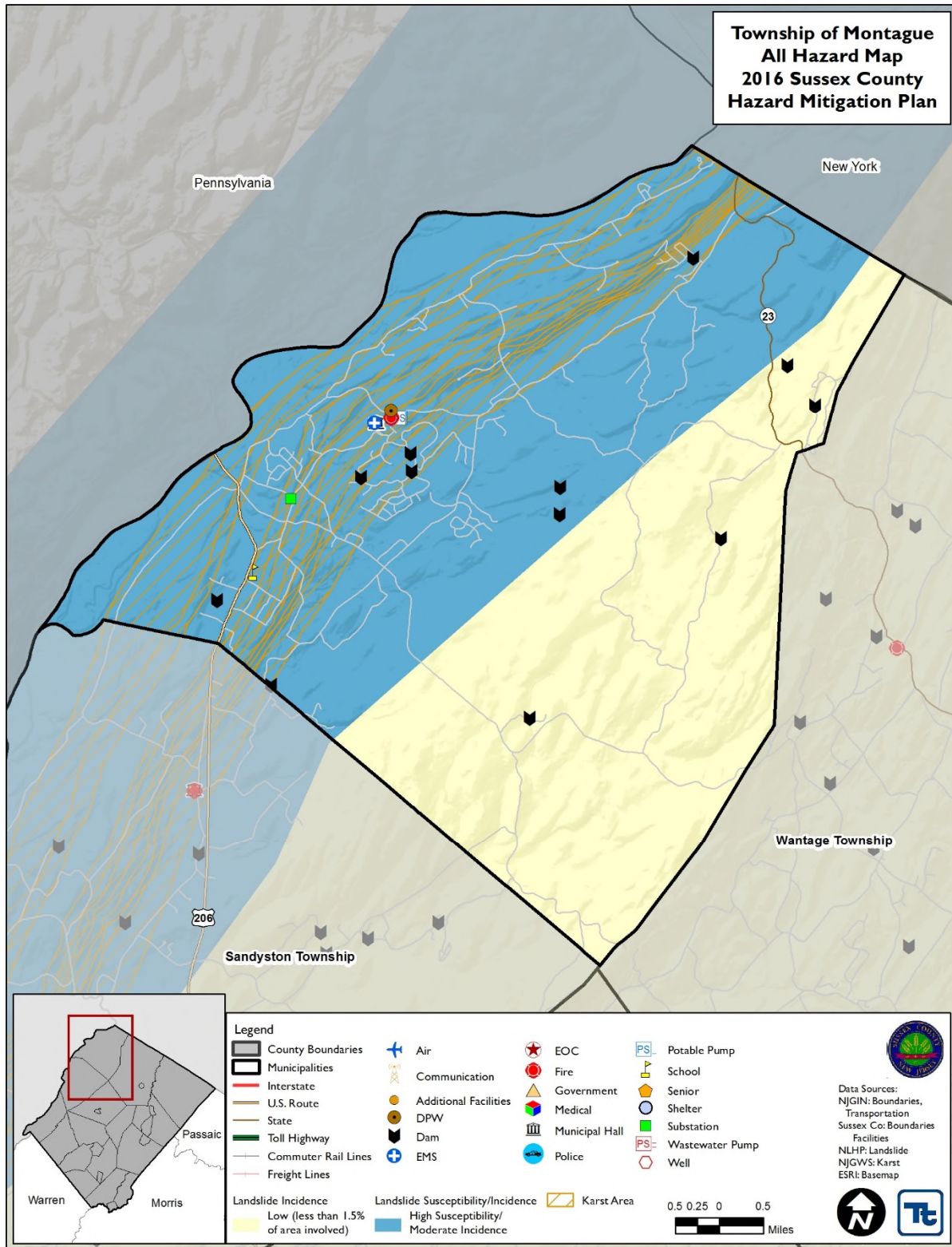




Figure 9.15-3. Township of Montague Hazard Area Extent and Location Map 2





Action Number: Montague-1

Mitigation Action/Initiative: Retrofit roof of Montague Fire Department on Clove Road

| Assessing the Risk | |
|--|--|
| Hazard(s) addressed: | Severe Weather, Severe Winter Weather |
| Specific problem being mitigated: | The roof at the fire department is flat and failing. It is over 20 years old and in need of replacement. This facility is used a shelter for first responders. |
| Evaluation of Potential Actions/Projects | |
| Actions/Projects Considered (name of project and reason for not selecting): | 1. Retrofit roof of Montague Fire Department on Clove Road to meet current snow load and high wind standards |
| | 2. Do nothing – current problem continues |
| | 3. No other feasible options were identified |
| Action/Project Intended for Implementation | |
| Description of Selected Action/Project | Retrofit roof of Montague Fire Department on Clove Road to meet current snow load and high wind standards |
| Action/Project Category | SIP |
| Goals/Objectives Met | 1, 2, 6 |
| Applies to existing and/or new development; or not applicable | Existing |
| Benefits (losses avoided) | High |
| Estimated Cost | High |
| Priority | High |
| Plan for Implementation | |
| Responsible/Lead Agency/Department | Fire Department, Township |
| Local Planning Mechanism | Emergency Management |
| Potential Funding Sources | HMGP with local budget for cost share |
| Timeline for Completion | Short Term / DOF |
| Reporting on Progress | |
| Date of Status Report/ Report of Progress | Date: Progress on Action/Project: |



Action Number: Montague-1

Mitigation Action/Initiative: Retrofit roof of Montague Fire Department on Clove Road

| Criteria | Numeric Rank (-1, 0, 1) | Provide brief rationale for numeric rank when appropriate |
|--------------------------------|-------------------------|---|
| Life Safety | 1 | Allow for continuity of operations in the event of an emergency |
| Property Protection | 1 | Reduce damages to building from heavy snow or strong winds |
| Cost-Effectiveness | 1 | Little to no repair costs |
| Technical | 1 | |
| Political | 0 | |
| Legal | 0 | |
| Fiscal | 1 | Township will seek grant funding |
| Environmental | 0 | |
| Social | 0 | |
| Administrative | 1 | |
| Multi-Hazard | 1 | Severe Weather, Severe Winter Weather |
| Timeline | 1 | |
| Local Champion | 0 | |
| Other Community Objectives | 0 | |
| Total | 8 | |
| Priority (High/Med/Low) | High | |



Action Number: Montague-2

Mitigation Action/Initiative: Retrofit roof of Montague Elementary School (shelter)

| Assessing the Risk | |
|--|---|
| Hazard(s) addressed: | Severe Weather, Severe Winter Weather |
| Specific problem being mitigated: | The roof of the school is not retrofitted for current standards for high winds and faces exposure to strong wind events and at risk for being damaged from these types of events. |
| Evaluation of Potential Actions/Projects | |
| Actions/Projects Considered (name of project and reason for not selecting): | 1. Retrofit roof of Montague Elementary School (shelter) to meet high wind standards |
| | 2. Do nothing – current problem continues |
| | 3. No other feasible options were identified |
| Action/Project Intended for Implementation | |
| Description of Selected Action/Project | Retrofit roof of Montague Elementary School (shelter) to meet high wind standards |
| Action/Project Category | SIP |
| Goals/Objectives Met | 1, 2, 6 |
| Applies to existing and/or new development; or not applicable | Existing |
| Benefits (losses avoided) | High |
| Estimated Cost | Medium |
| Priority | High |
| Plan for Implementation | |
| Responsible/Lead Agency/Department | School Administration, Township |
| Local Planning Mechanism | School Budget |
| Potential Funding Sources | HMGP with local budget for cost share |
| Timeline for Completion | Short Term / DOF |
| Reporting on Progress | |
| Date of Status Report/ Report of Progress | Date: Progress on Action/Project: |



Action Number: Montague-2

Mitigation Action/Initiative: Retrofit roof of Montague Elementary School (shelter)

| Criteria | Numeric Rank (-1, 0, 1) | Provide brief rationale for numeric rank when appropriate |
|--------------------------------|-------------------------|---|
| Life Safety | 1 | Allow for continuity of operations in the event of an emergency |
| Property Protection | 1 | Reduce damages to building from strong winds |
| Cost-Effectiveness | 1 | Little to no repair costs after roof is retrofitted |
| Technical | 1 | |
| Political | 0 | |
| Legal | 0 | |
| Fiscal | 1 | Township will seek grant funding |
| Environmental | 0 | |
| Social | 0 | |
| Administrative | 1 | |
| Multi-Hazard | 1 | Severe Weather, Severe Winter Weather |
| Timeline | 1 | |
| Local Champion | 0 | |
| Other Community Objectives | 0 | |
| Total | 8 | |
| Priority (High/Med/Low) | High | |



Action Number: Montague-3

Mitigation Action/Initiative: Generator Montague Elementary School (shelter)

| Assessing the Risk | |
|--|--|
| Hazard(s) addressed: | All |
| Specific problem being mitigated: | Loss of power impacts the school which is used as a shelter; without power, the school cannot function as a proper shelter |
| Evaluation of Potential Actions/Projects | |
| Actions/Projects Considered (name of project and reason for not selecting): | 1. Purchase and install backup generator for elementary school located on Route 206 |
| | 2. Do nothing – current problem continues |
| | 3. No other feasible options were identified |
| Action/Project Intended for Implementation | |
| Description of Selected Action/Project | Purchase and install backup generator for elementary school; the school is used a shelter for the Township |
| Action/Project Category | SIP |
| Goals/Objectives Met | 1, 2, 6 |
| Applies to existing and/or new development; or not applicable | Existing |
| Benefits (losses avoided) | High |
| Estimated Cost | High |
| Priority | High |
| Plan for Implementation | |
| Responsible/Lead Agency/Department | School Administration, Township |
| Local Planning Mechanism | School Budget |
| Potential Funding Sources | HMGP with local budget for cost share |
| Timeline for Completion | Short Term / DOF |
| Reporting on Progress | |
| Date of Status Report/ Report of Progress | Date: Progress on Action/Project: |



Action Number: Montague-3

Mitigation Action/Initiative: Generator Montague Elementary School (shelter)

| Criteria | Numeric Rank (-1, 0, 1) | Provide brief rationale for numeric rank when appropriate |
|--------------------------------|-------------------------|---|
| Life Safety | 1 | Allow for continuity of operations in the event of an emergency |
| Property Protection | 1 | |
| Cost-Effectiveness | 1 | |
| Technical | 1 | |
| Political | 1 | |
| Legal | 1 | |
| Fiscal | 1 | Township will seek grant funding |
| Environmental | 0 | |
| Social | 0 | |
| Administrative | 1 | |
| Multi-Hazard | 1 | All |
| Timeline | 1 | |
| Local Champion | 0 | |
| Other Community Objectives | 0 | |
| Total | 10 | |
| Priority (High/Med/Low) | High | |



Action Number: Montague-4
Mitigation Action/Initiative: Retrofit municipal building with impact resistant windows and shutters located on Clove Road.

| Assessing the Risk | |
|--|---|
| Hazard(s) addressed: | Severe Weather, Severe Winter Weather |
| Specific problem being mitigated: | The municipal building is at risk to wind damage; if damaged, the municipal building cannot conduct day-to-day operations or emergency operations properly. |
| Evaluation of Potential Actions/Projects | |
| Actions/Projects Considered (name of project and reason for not selecting): | 1. Retrofit municipal building with impact resistant windows and shutters located on Clove Road. |
| | 2. Do nothing – current problem continues |
| | 3. No other feasible options were identified |
| Action/Project Intended for Implementation | |
| Description of Selected Action/Project | Retrofit municipal building with impact resistant windows and shutters located on Clove Road. |
| Action/Project Category | SIP |
| Goals/Objectives Met | 1, 2, 6 |
| Applies to existing and/or new development; or not applicable | Existing |
| Benefits (losses avoided) | High |
| Estimated Cost | Medium |
| Priority | High |
| Plan for Implementation | |
| Responsible/Lead Agency/Department | Township Administration, Municipal Engineer |
| Local Planning Mechanism | Emergency Management |
| Potential Funding Sources | HMGP with local budget for cost share |
| Timeline for Completion | Short Term / DOF |
| Reporting on Progress | |
| Date of Status Report/ Report of Progress | Date: Progress on Action/Project: |



Action Number: Montague-4

Mitigation Action/Initiative: Retrofit municipal building with impact resistant windows and shutters located on Clove Road.

| Criteria | Numeric Rank (-1, 0, 1) | Provide brief rationale for numeric rank when appropriate |
|--------------------------------|-------------------------|---|
| Life Safety | 1 | Allow for continuity of operations in the event of an emergency |
| Property Protection | 1 | |
| Cost-Effectiveness | 1 | |
| Technical | 1 | |
| Political | 1 | |
| Legal | 1 | |
| Fiscal | 1 | Township will seek grant funding |
| Environmental | 0 | |
| Social | 0 | |
| Administrative | 1 | |
| Multi-Hazard | 1 | All |
| Timeline | 1 | |
| Local Champion | 0 | |
| Other Community Objectives | 0 | |
| Total | 10 | |
| Priority (High/Med/Low) | High | |



Action Number: Montague-6

Mitigation Action/Initiative: Warning systems along River Road

| Assessing the Risk | |
|--|---|
| Hazard(s) addressed: | Flood, Severe Weather |
| Specific problem being mitigated: | Lack of flood warning systems along River Road gives the Township little to no warning as to when flooding will occur along this floodprone area in the Township. |
| Evaluation of Potential Actions/Projects | |
| Actions/Projects Considered (name of project and reason for not selecting): | 1. Install three warning systems along flood areas of River Road. |
| | 2. Do nothing – current problem continues |
| | 3. No other feasible options were identified |
| Action/Project Intended for Implementation | |
| Description of Selected Action/Project | Install three warning systems along flood areas of River Road. This will help better warn the Township in the event of flooding. |
| Action/Project Category | SIP |
| Goals/Objectives Met | 1, 2, 3, 4, 5 |
| Applies to existing and/or new development; or not applicable | Existing |
| Benefits (losses avoided) | High |
| Estimated Cost | Medium |
| Priority | High |
| Plan for Implementation | |
| Responsible/Lead Agency/Department | OEM Coordinator |
| Local Planning Mechanism | Emergency Management |
| Potential Funding Sources | HMGP with local budget for cost share |
| Timeline for Completion | Short Term / DOF |
| Reporting on Progress | |
| Date of Status Report/ Report of Progress | Date: Progress on Action/Project: |



Action Number: Montague-6

Mitigation Action/Initiative: Warning systems along River Road

| Criteria | Numeric Rank (-1, 0, 1) | Provide brief rationale for numeric rank when appropriate |
|--------------------------------|-------------------------|---|
| Life Safety | 1 | Protect residents along River Road from flooding |
| Property Protection | 1 | Reduce the impact of flooding |
| Cost-Effectiveness | 1 | |
| Technical | 1 | |
| Political | 0 | |
| Legal | 0 | |
| Fiscal | -1 | |
| Environmental | 1 | |
| Social | 0 | |
| Administrative | 0 | |
| Multi-Hazard | 1 | Severe Weather, Flood |
| Timeline | 1 | |
| Local Champion | 1 | |
| Other Community Objectives | 0 | |
| Total | 7 | |
| Priority (High/Med/Low) | High | |