



## 16. TOWNSHIP OF MONTAGUE

This jurisdictional annex to the Sussex County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Township of Montague with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of Montague, describes who participated in the planning process, assesses Montague's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

### 16.1 HAZARD MITIGATION PLANNING TEAM

The Township of Montague identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Township departments. The Emergency Management Coordinator represented the community on the Sussex County HMP Planning Partnership and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 16-1 summarizes Township officials who participated in the development of the annex and in what capacity. Additional documentation of the Township's planning activities through Planning Partnership meetings is included in Volume I.

Table 16-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Dave Coss, EMC Address: 277 Clove Road, Montague, NJ 07827 Phone Number: (908) 319-1811 Email: coss1101@yahoo.com	Name/Title: Jesse Brace-Revak, Deputy EMC Address: 277 Clove Road, Montague, NJ 07827 Phone Number: (908) 319-1813 Email: jbrace81@yahoo.com
<b>National Flood Insurance Program Floodplain Administrator</b>	
Name/Title: Bob Huber, Construction Official Address: 277 Clove Road, Montague, NJ 07827 Phone Number: (973) 293-3366 Email: construction@montaguenj.org	
<b>Additional Contributors</b>	
Name/Title: Dave Coss, EMC Method of Participation: Assisted in the completion of municipal worksheets; reviewed and approved draft annex.	
Name/Title: Jesse Brace-Revak, Deputy EMC/Flood Mitigation Method of Participation: Assisted in the completion of municipal worksheets.	
Name/Title: Harold E. Pellow, Township Engineer Method of Participation: Assisted in the completion of municipal worksheets; reviewed and approved draft annex.	
Name/Title: Tom Knutelsky, Township Planner Method of Participation: Assisted in the completion of municipal worksheets.	
Name/Title: George Zitone, Mayor Method of Participation: Assisted in the completion of municipal worksheets; reviewed and approved draft annex.	
Name/Title: George Hutnick, Code Enforcement Method of Participation: Assisted in the completion of municipal worksheets.	



Primary Point of Contact	Alternate Point of Contact
Name/Title: Bob Huber, Construction Official Method of Participation: Assisted in the completion of municipal worksheets; reviewed and approved draft annex.	
Name/Title: Dana Klinger, Municipal Clerk/Administrator Method of Participation: Assisted in the completion of municipal worksheets; reviewed and approved draft annex.	
Name/Title: Kyle Gottemoller, Assist DPW Foreman Method of Participation: Assisted in the completion of municipal worksheets.	

## 16.2 COMMUNITY 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. 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.

Research has shown that some populations are at greater risk from hazard events because of decreased resources or physical abilities. These populations can be more susceptible to hazard events based on a number of factors including their physical and financial ability to react or respond during a hazard, and the location and construction quality of their housing. Data from the 2021 American Community Survey 5-Year Population Estimates indicates that 3.2 percent of the population is 5 years of age or younger, 3.3 percent is 65 years of age or older, 4.3 percent is non-English speaking, 2.4 percent is below the poverty threshold, and 2.5 percent is considered disabled.

The Steering Committee also identified households that are above the Federal Poverty Level but earn less than the basic cost of living as socially vulnerable. For the Township of Montague, 33 percent of households earn less than the basic cost of living and are considered socially vulnerable.

Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

## 16.3 JURISDICTIONAL CAPABILITY ASSESSMENT AND INTEGRATION

Montague performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume I describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Planning and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events



For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and /policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Montague to identify opportunities for integrating mitigation concepts into ongoing Township procedures.

### 16.3.1 Planning and Regulatory Capability and Integration

Table 16-2 summarizes the planning and regulatory tools that are available to Montague.

Table 16-2. Planning and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
<b>CODES, ORDINANCES, &amp; REGULATIONS</b>				
<b>Building Code</b>	Yes	Chapter 32: Uniform Construction Codes	State & Local	Construction Official
<p>How has or will this be integrated with the HMP and how does this reduce risk?</p> <p><i>There is hereby established in the Township of Montague a State Uniform Construction Code enforcing agency to be known as the "Building Department," consisting of a Construction Official, Building Subcode Official, Plumbing Subcode Official, Electrical Subcode Official and such other subcode officials for such additional subcodes as the Commissioner of the Department of Community Affairs, State of New Jersey, shall hereafter adopt as part of the State Uniform Construction Code. The Construction Official shall be the chief administrator of the enforcing agency.</i></p>				
<b>Zoning/Land Use Code</b>	Yes	Chapter 76: Zoning	Local	Land Use Department
<p>How has or will this be integrated with the HMP and how does this reduce risk?</p> <p><i>The code enables where appropriate, flexibility of design and development of land in such a manner as to preserve its natural and scenic qualities, protect areas of meaningful ecological value, reduce flood hazards, facilitate the adequate and economical provision of streets and utilities, minimize negative environmental impacts, improve the aesthetic quality of new residential developments, encourage the conservation of energy, increase recreational opportunities, and otherwise promote the planned and environmentally desirable use of land.</i></p>				
<b>Subdivision Code</b>	Yes	Chapter 60: Subdivision of Land	Local	Land Use Department
<p>How has or will this be integrated with the HMP and how does this reduce risk?</p> <p><i>Land to be subdivided shall be of such character that it can be used safely for building or development purposes without danger to health or peril from fire, flood, or other menace, and without resulting in significant damage to the ecology of the area in which it is located. Land subject to fire, flood or other hazards shall not be subdivided nor developed for residential purposes, nor for such other uses as may increase danger to health, life, or property, or aggravate a flood hazard, but such land may be set aside for uses as shall not involve such danger nor produce unsatisfactory living conditions.</i></p>				
<b>Site Plan Code</b>	Yes	Chapter 55: Site Plan Review	Local	Land Use Department
<p>How has or will this be integrated with the HMP and how does this reduce risk?</p> <p><i>Approval of a site plan is required for a) the development or redevelopment of any building, structure or lot or portion thereof for a new use; b) the expansion or relocation of any existing use; or c) any change of use of a building, structure or lot or portion thereof. The Planning Board sets forth appropriate conditions and safeguards which are in harmony with several identified purposes, including drainage. Per the ordinance, a proposed stormwater drainage system shall be adequate to prevent any increase in the rate of surface runoff or otherwise contribute to downstream flooding during a storm of any magnitude, up to and including a one-hundred-year frequency storm.</i></p>				
<b>Stormwater Management Code</b>	Yes	Chapter 56: Stormwater Control	Local	Township Committee
<p>How has or will this be integrated with the HMP and how does this reduce risk?</p>				



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
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*The purpose of this article is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction. An identified objective of this ordinance is to minimize increases in the volumes and rates of stormwater runoff from land development activities in order to reduce flooding and streambank erosion.*

**Post-Disaster Recovery/  
Reconstruction Code**

No

-

-

-

How has or will this be integrated with the HMP and how does this reduce risk?

**Real Estate Disclosure  
Requirements**

Yes

Senate Bill 3110; P. L. 2023,  
c. 93, July 3, 2023

State

Sellers and Landlords  
of commercial or  
residential property

How has or will this be integrated with the HMP and how does this reduce risk?

*For leases, the law amends the New Jersey Truth-in-Renting Act, N.J.S.A. 46:8-43 et seq., to require every landlord to notify in writing each of the landlord's tenants, prior to lease signing or renewal, whether the property is located in the Federal Emergency Management Agency (FEMA) Special Flood Hazard Area ("100-year floodplain") or Moderate Risk Flood Hazard Area ("500-year floodplain") and if the landlord has actual knowledge that the rental premises or any portion of the parking areas of the real property containing the rental premises has been subjected to flooding. The law does not apply to (1) landlords who lease commercial space or residential dwellings for less than one month, (2) residential dwellings in a premises containing not more than two units, (3) owner-occupied premises containing not more than three units, or (4) hotels, motels, or other guest houses serving transient or seasonal guests for a period of less than 120 days.*

*The model notice is to contain the heading "Flood Risk" and questions for the landlord to answer regarding the landlord's actual knowledge of past flooding of the property. The questions regarding the property being in a FEMA Special or Moderate Risk Flood Hazard Area shall not contain the option for "unknown." To determine how the questions are to be answered, FEMA's current flood insurance rate maps for the leased premises area must be consulted. The landlord will be required to answer whether the rental premises or any portions of the parking areas of the real property containing the rental premises ever experienced any flood damage, water seepage, or pooled water due to a natural flood event and, if so, the number of times that has occurred.*

*The notice to residential tenants must also indicate that flood insurance may be available to renters through FEMA's National Flood Insurance Program to cover their personal property and contents in the event of a flood and that standard renter's insurance does not typically cover flood damage.*

*For sales, the law also amends the New Jersey Consumer Fraud Act, N.J.S.A. 56:8-1 et seq., to require sellers of real property to disclose, on the property condition disclosure statement, whether the property is located in the FEMA Special or Moderate Risk Flood Hazard Area and any actual knowledge of the seller concerning flood risks of the property to the purchaser before the purchaser becomes obligated under any contract for the purchase of the property.*

*The disclosure statement must contain the heading "Flood Risk" and ask the seller the following questions:*

- Is any or all of the property in the Special Flood Hazard Area ("100-year floodplain") or a Moderate Risk Flood Hazard Area ("500-year floodplain") according to FEMA's current flood insurance rate maps?*
- Is the property subject to any requirement under federal law to obtain and maintain flood insurance on the property? Properties in the Special Flood Hazard Area with mortgages from federally regulated or insured lenders are required to obtain and maintain flood insurance.*
- Have you ever received assistance from, or are you aware of any previous owners receiving assistance from FEMA, the U.S. Small Business Administration, or any other federal disaster flood assistance for flood damage on the property? For properties that have received flood disaster assistance, the requirement to obtain flood insurance passes down to all future owners.*
- Is there flood insurance on the property? A standard homeowner's insurance policy typically does not cover flood damage.*
- Is there a FEMA elevation certificate available for the property? If so, it must be shared with the buyer. An elevation certificate is a FEMA form, completed by a licensed surveyor or engineer, that provides critical*



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
<p>information about the flood risk of the property and is used by flood insurance providers to determine the appropriate insurance rating for the property.</p> <ul style="list-style-type: none"> <li>Have you ever filed a claim for flood damage to the property with any insurance provider? If the claim was approved, what was the amount received?</li> <li>Has the property experienced any flood damage, water seepage, or pooled water due to a natural flood event, such as heavy rainfall, coastal storm surge, tidal inundation, or river overflow? If so, how many times?</li> </ul> <p>Not all provisions of this law have become effective at the time of the writing of this plan.</p>				
<b>Growth Management</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Environmental Protection Ordinance(s)</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Flood Damage Prevention Ordinance</b>	Yes	Chapter 38: Flood Damage Prevention	State & Local	Township Engineer
<p>How has or will this be integrated with the HMP and how does this reduce risk?</p> <p><i>It is 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 to:</i></p> <ul style="list-style-type: none"> <li><i>A. Protect human life and health;</i></li> <li><i>B. Minimize expenditure of public money for costly flood control projects;</i></li> <li><i>C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;</i></li> <li><i>D. Minimize prolonged business interruptions;</i></li> <li><i>E. 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;</i></li> <li><i>F. Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;</i></li> <li><i>G. Ensure that potential buyers are notified that property is in an area of special flood hazard; and</i></li> <li><i>H. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.</i></li> </ul>				
<b>Wellhead Protection</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Emergency Management Ordinance</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Climate Change Ordinance</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Other</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
<b>PLANNING DOCUMENTS</b>				
<b>General/Comprehensive Plan</b>	Yes	Montague Township Master Plan Adopted March 11, 2004, Reexamination September 2022	Local	Land Use Board Committee
How has or will this be integrated with the HMP and how does this reduce risk? The Master plan shall generally comprise a report or statement and land use and development proposals, with maps, diagrams, and text, presenting a land use plan element taking into account natural conditions, including, but not limited to, topography, soil conditions, water supply, drainage, floodplain areas, marshes, and woodlands. Showing the existing and proposed location, extent, and intensity of development of land to be use in the future of varying types of residential, commercial, industrial, agricultural, recreational, educational, and other public and private purposes and stating the relationship thereof to existing any proposed zoning plan and zoning ordinances, and showing the existing location of any airports and the boundaries of any airport safety zones. A housing plan element, a community facilities plan element, and a conservation plan element.				
<b>Capital Improvement Plan</b>	Yes	Township Budget	Local	Township Committee
How has or will this be integrated with the HMP and how does this reduce risk? <i>The municipal budget, which acts as the Township's Capital Improvement Plan, includes various potential projects which may assist in hazard mitigation efforts.</i>				
<b>Disaster Debris Management Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Floodplain Management or Watershed Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Stormwater Management Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Stormwater Pollution Prevention Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Open Space Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Urban Water Management Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Habitat Conservation Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Economic Development Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				





	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
<b>Shoreline Management Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Community Wildfire Protection Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Community Forest Management Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Transportation Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Agriculture Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Climate Action/ Resilience/Sustainability Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Tourism Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Business/ Downtown Development Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Other</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>RESPONSE/RECOVERY PLANNING</b>				
<b>Emergency Operations Plan</b>	Yes	Township of Montague EOP, May 9, 2023	County & Local	Office of Emergency Management
How has or will this be integrated with the HMP and how does this reduce risk?				
<i>The Emergency Operations Plan aims to assess the Township's ability to respond to emergency and identifies recommendations to improve its capacity to prepare and respond to future events. The plan address both short- and long-term recovery.</i>				
<b>Continuity of Operations Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Substantial Damage Response Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
<b>Threat and Hazard Identification and Risk Assessment</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Post-Disaster Recovery Plan</b>	Yes	Township of Montague EOP, May 9, 2023	County & Local	Office of Emergency Management
How has or will this be integrated with the HMP and how does this reduce risk? <i>The Post-Disaster Recovery Plan, a portion of the Emergency Operations Plan, aims to assess the Township's ability to respond to emergency and identifies recommendations to improve its capacity to prepare and respond to future events. The plan address both short- and long-term recovery.</i>				
<b>Public Health Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Other</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				

### 16.3.2 Development and Permitting Capability

Table 16-3 summarizes the capabilities of Montague to oversee and track development.

Table 16-3. Development and Permitting Capability

	Yes/No	Comment
Do you issue development permits? <ul style="list-style-type: none"> <li>If you issue development permits, what department is responsible?</li> <li>If you do not issue development permits, what is your process for tracking new development?</li> </ul>	Yes	Construction Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain development
Do you have a buildable land inventory? <ul style="list-style-type: none"> <li>If you have a buildable land inventory, please describe</li> </ul>	No	-
Describe the level of buildout in your jurisdiction.	N/A	The build out in the Township is nearly at its peak. Much of the Township is zoned as a conservation district, which limits any future development.

### 16.3.3 Administrative and Technical Capability

Table 16-4 summarizes potential staff and personnel resources available to Montague and their current responsibilities that contribute to hazard mitigation.





Table 16-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
<b>ADMINISTRATIVE CAPABILITY</b>		
Planning Board	Yes	The Montague Township Land Use Board acts as both the Planning Board and the Board of Adjustment. The Land Use Board will assume all statutory duties currently handled by the Montague Township Planning Board and the Montague Township Zoning Board of Adjustment. The Montague Township Land Use Board consists of nine members and two alternate members, as appointed by the Mayor and Township Committee.
Zoning Board of Adjustment	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission		<p>The Mayor may appoint one or more persons as a Citizens' Advisory Committee to assist or collaborate with the Land Use Board in its duties, but such person or persons shall have no power to vote or take other action required of the Board. Such person or persons shall serve at the pleasure of the Mayor.</p> <p>Whenever the Environmental Commission has prepared and submitted to the Land Use Board an index of the natural resources of the municipality, the Land Use Board shall make available to the Environmental Commission an informational copy of every application for development to the Land Use Board. Failure of the Land Use Board to make such informational copy available to the Environmental Commission shall not invalidate any hearing or proceeding.</p>
Open Space Board/Committee	No	-
Economic Development Commission/Committee		The Economic Development Committee has the following powers and duties inquire into, survey and publicize the extent, advantages, and utility of vacant land within the township; classify such vacant land according to its adaptability for the settlement thereon of various types of business, professional and industrial enterprise; study and analyze various businesses, industries, and professions with a view to ascertaining the opportunities for expansion of such business, industries, and professions within the township; recommend to the Township Committee advertising the economic advantages and opportunities and availability of real estate in the township; and to encourage and accomplish business, industrial and professional settlement within the township.
Public Works/Highway Department	Yes	The Department of Public Works attend to various projects within Montague including snow removal activities and the maintenance of Township roads.
Construction/Building/Code Enforcement Department	Yes	The Construction Department is responsible for enforcement of the NJ Uniform Construction Code.



Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
Emergency Management/Public Safety Department	Yes	The Township has an Emergency Management Coordinator and an Emergency Management Deputy Coordinator.  The Fire Prevention Division is responsible for life safety issues within the community. The division is involved with construction, occupancy inspections, public education, and fire investigations. Fire inspections ensure that buildings and fire protection systems are built and maintained according to the applicable codes. The Fire Prevention Division performs fire plan checks and inspections for fire sprinklers, alarms, and other systems. Fire construction permits are required to construct, alter, modify, or repair a fire protection system.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The Department of Public Works is responsible for Stormwater Management activities.
Mutual aid agreements	Yes	Fire/DPW
Human Resources Manual - Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?	No	-
Other	No	-
<b>TECHNICAL/STAFFING CAPABILITY</b>		
Planners or engineers with knowledge of land development and land management practices	Yes	Harold E. Pellow & Associates
Engineers or professionals trained in building or infrastructure construction practices	Yes	Harold E. Pellow & Associates
Planners or engineers with an understanding of natural hazards	Yes	Harold E. Pellow & Associates
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazus applications	No	-
Staff that work with socially vulnerable populations or underserved communities	Yes	The Senior Citizens of Montague Township, Inc. meets on the second Friday of each month.
Environmental scientists familiar with natural hazards	No	-
Surveyors	No	-
Emergency manager	Yes	OEM
Grant writers	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-



### 16.3.4 Fiscal Capability

Table 16-5 summarizes financial resources available to Montague.

Table 16-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community Development Block Grants (CDBG, CDBG-DR)	No
Capital improvement 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	Yes
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	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes, Clean Water Act 319 Grants

### 16.3.5 Education and Outreach Capability

Table 16-6 summarizes the education and outreach resources available to Montague.

Table 16-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment
Public information officer or communications office	Yes	Mayor and Township Committee
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	The Township can utilize the County's reverse messaging system.
Natural disaster/safety programs in place for schools	No	-
Organizations that conduct outreach to socially vulnerable populations and underserved populations	Yes	The Senior Citizens of Montague Township, Inc. meets on the second Friday of each month.
Public outreach mechanisms / programs to inform citizens on natural hazards, risk, and ways to protect themselves during such events	No	-



### 16.3.6 Community Classifications

Table 16-7 summarizes classifications for community programs available to Montague.

Table 16-7. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Unavailable	Unavailable
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	6/9	Being Reviewed
National Weather Service StormReady Certification	No	-	-
Firewise Communities classification	No	-	-
New Jersey Sustainable Jersey Community	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

N/A = Not applicable

— = Unavailable

### 16.3.7 Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 16-8 summarizes the adaptive capacity for each identified hazard of concern and the Township’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement

Table 16-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak
Dam Failure	Weak
Disease Outbreak	Weak
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Geological Hazards	Weak
Hazardous Materials	Moderate
Hurricane	Moderate
Infestation	Weak
Nor’easter	Moderate
Severe Weather	Moderate
Severe Winter Weather	Moderate



Hazard	Adaptive Capacity - Strong/Moderate/Weak
Wildfire	Moderate

## 16.4 NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The floodplain administrator listed in Table 16-1 is responsible for maintaining this information.

### 16.4.1 NFIP Statistics

Table 16-9 summarizes the NFIP policy and claim statistics for Montague.

Table 16-9. Montague NFIP Summary of Policy and Claim Statistics

# Policies	13
# Claims (Losses)	17
Total Loss Payments	\$178,247.79
# Repetitive Loss Properties (NFIP definition)	3
# Repetitive Loss Properties (FMA definition)	0
# Severe Repetitive Loss Properties	0

*NFIP Definition of Repetitive Loss: The NFIP defines a repetitive loss property as any insurable building for which two or more claims of more than \$1,000 were paid by the NFIP within any rolling 10-year period since 1978.*

*FMA Definition of Repetitive Loss: FEMA's Flood Mitigation Assistance (FMA) program defines a repetitive loss property as any insurable building that has incurred flood-related damage on two occasions, in which the cost of the repair, on average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event.*

*Definition of Severe Repetitive Loss: A residential property covered under an NFIP flood insurance policy and: (a) That has at least four NFIP claim payments over \$5,000 each, and the cumulative amount of such claims payments exceeds \$20,000; or (b) For which at least two separate claims payments have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building. At least two of the claims must have occurred within any 10-year period, more than 10 days apart.*

*Source: FEMA Region II 2024*

### 16.4.2 Flood Vulnerability Summary

Table 16-10 provides a summary of the NFIP program in Montague.

Table 16-10. NFIP Summary

NFIP Topic	Comments
<b>Flood Vulnerability Summary</b>	
Describe areas prone to flooding in your jurisdiction.	Flooding in the Township occurs within the SFHA.
Do you maintain a list of properties that have been damaged by flooding?	No
Do you maintain a list of property owners interested in flood mitigation?	No



NFIP Topic	Comments
How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	Unknown
Are any RiskMAP projects currently underway in your jurisdiction? If so, state what projects are underway.	No
How do you make Substantial Damage determinations?	Unknown
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	Unknown
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? If there are mitigation properties, how were the projects funded?	Unknown
Do your flood hazard maps adequately address the flood risk within your jurisdiction? If not, state why.	No
<b>NFIP Compliance</b>	
What local department is responsible for floodplain management?	Construction Official / Township Engineer
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	Yes, online FEMA, State, and regional resources.
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	The FPA would consider attending continuing education and/or certification training on floodplain management if it were offered in the County.
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Permit review, engineering capability
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	If the value of the proposed development would increase the structure's value by at least 50 percent.
What are the barriers to running an effective NFIP program in the community, if any?	Staff and funding
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	Unknown
What is the local law number or municipal code of your flood damage prevention ordinance?	Chapter 38: Flood Damage Prevention
What is the date that your flood damage prevention ordinance was last amended?	September 13, 2011
Does your floodplain management program meet or exceed minimum requirements? If exceeds, in what ways?	The program meets minimum requirements.
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	The Land Use Board considers efforts to reduce flood risk when reviewing variances such as height restrictions. The Township has subdivision and site plan ordinances.





NFIP Topic	Comments
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

## 16.5 GROWTH/DEVELOPMENT TRENDS

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. Recent and expected future development trends, including major residential/commercial development and major infrastructure development, are summarized in Table 16-11 through Table 16-13.

Table 16-11. Number of Building Permits for New Construction Issued Since the Previous HMP

	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
<b>2019</b>				
Total Permits	2	0	1	0
Permits within SFHA	0	0	0	0
<b>2020</b>				
Total Permits	3	0	1	0
Permits within SFHA	0	0	0	0
<b>2021</b>				
Total Permits	3	0	1	0
Permits within SFHA	0	0	0	0
<b>2022</b>				
Total Permits	6	0	0	0
Permits within SFHA	0	0	0	0
<b>2023</b>				
Total Permits	4	0	0	0
Permits within SFHA	0	0	0	0

SFHA = Special Flood Hazard Area (1% flood event)

Table 16-12. Recent Major Development and Infrastructure from 2019 to Present

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zones*	Description / Status of Development
The Township has not had any recent major development or infrastructure from 2019 to present.					

\* Only location-specific hazard zones or vulnerabilities identified.



Table 16-13. Known or Anticipated Major Development and Infrastructure in the Next Five Years

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zones*	Description / Status of Development
The Township does not anticipate any major development or infrastructure in the next five (5) years.					

## 16.6 JURISDICTIONAL RISK ASSESSMENT

The hazard profiles in Volume I provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Montague's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

### 16.6.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Township are shown in Figure 16-1 through Figure 16-3. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Montague has significant exposure. The maps show the location of potential new development, where available.

Figure 16-1. Montague Flood and Sinkhole Hazard Area Extent and Location Map

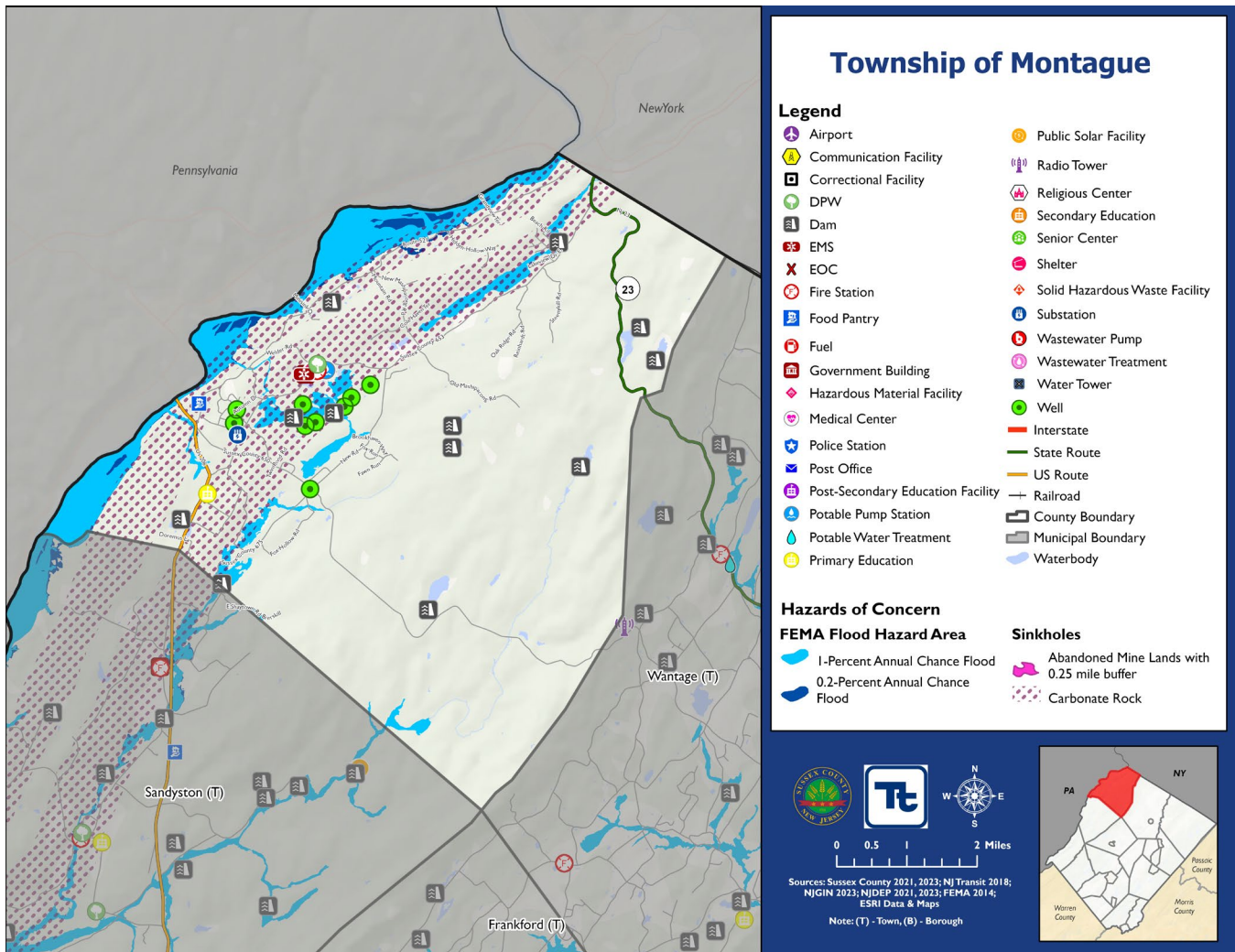




Figure 16-2. Hazardous Materials and Wildfire Hazard Area Extent and Location Map

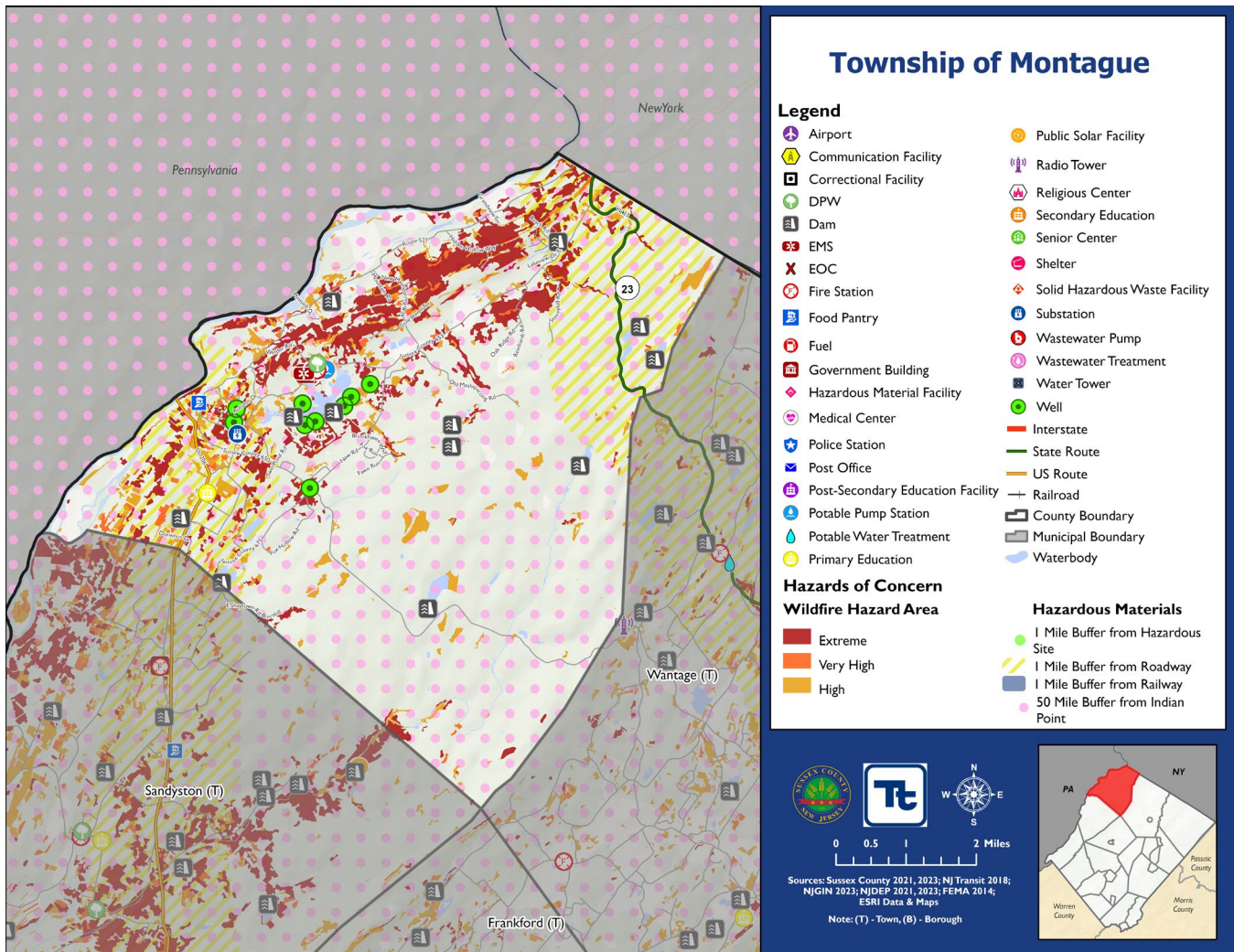
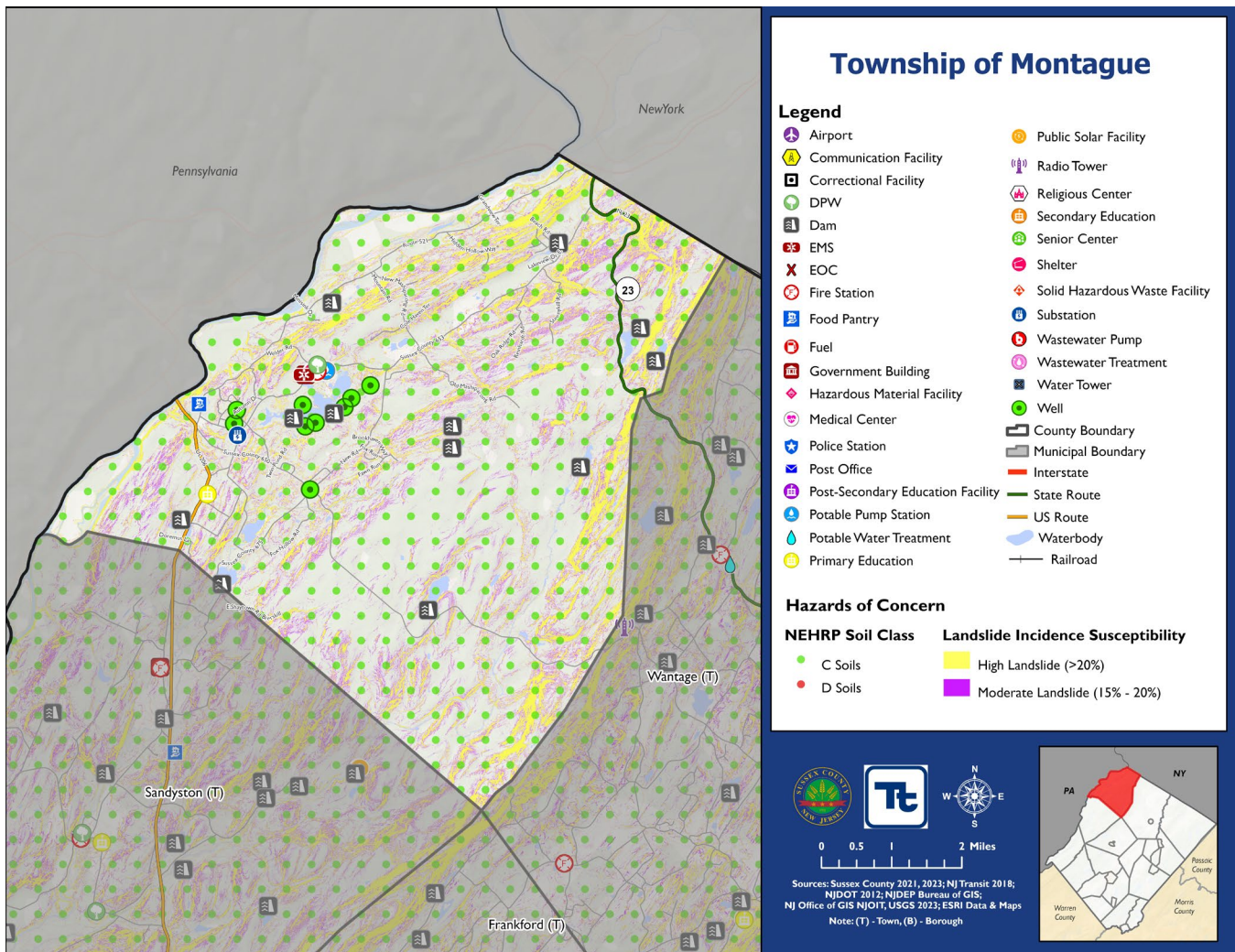




Figure 16-3. Landslide and NEHRP Soils Hazard Area Extent and Location Map





## 16.6.2 Hazard Event History

The history of natural and non-natural hazard events in Montague is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 16-14 provides details on loss and damage in Montague during hazard events since the last hazard mitigation plan update.

Table 16-14. Hazard Event History in Montague

Dates of Event	Event Type (Disaster Declaration)	County Designated?	Summary of Event	Summary of Damage and Losses in Montague
January 20, 2020 – May 11, 2023	Covid-19 Pandemic (EM-3451-NJ, DR-4488-NJ)	Yes	Sussex County accounted for 37,642 positive cases of COVID-19 in the State of New Jersey, and 425 of the reported deaths. A total of 277,542 vaccinations were delivered in the County to both residents and non-residents.	Montague Township was aided by county resources and supplies
August 4, 2020	Tropical Storm Isaias (DR-4574-NJ)	Yes	Tropical Storm Isaias brought high winds and heavy rain to Sussex County; there were numerous reports of downed trees and power lines. Observations from surrounding areas suggest sustained tropical storm force winds likely occurred.	Loss of Power Minor Road wash out/Flooding Debris and Fallen Trees Down Power Lines/Poles
January 31 – February 2, 2021	Severe Winter Storm (DR-4597-NJ)	Yes	Heavy precipitation developed producing areas of extreme snowfall rates of 2 to 4 inches per hour in northern New Jersey. Numerous reports of 24 to 32 inches were received from across the County.	Snow Removal Tree/Power Poles down Loss of Power
September 1-3, 2021	Remnants of Hurricane Ida (EM-3573-NJ, DR-4614-NJ)	Yes	The remnants of Hurricane Ida produced heavy rainfall and flash floods. Widespread flash flooding occurred in Sussex County with numerous road closures.	Minor roadway flooding Loss of Power Trees down

EM = Emergency Declaration (FEMA)

FEMA = Federal Emergency Management Agency

DR = Major Disaster Declaration (FEMA)

N/A = Not applicable

## 16.6.3 Hazard Ranking and Vulnerabilities

The hazard profiles in Volume I have detailed information regarding each planning partner's vulnerability to the identified hazards. The following presents key risk assessment results for Montague .

### Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume I. The ranking process involves an assessment of





the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions. Montague reviewed the County hazard ranking and individual results to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the Township indicated the rankings were accurate.

Table 16-15 shows Montague's final hazard rankings for identified hazards of concern. Mitigation action development uses the ranking to target hazards with the highest risk.

Table 16-15. Hazard Ranking

Hazard	Rank
Dam Failure	Medium
Disease Outbreak	Low
Drought	Low
Earthquake	Low
Flood	Medium
Geological Hazards	Medium
Hazardous Materials	Medium
Hurricane	Medium
Infestation	Low
Nor'easter	High
Severe Weather	High
Severe Winter Weather	High
Wildfire	Medium

*Note: The scale is based on the hazard rankings established in Volume I, modified as appropriate based on review by the jurisdiction*

## Critical Facilities

Table 16-16 identifies critical facilities in the community located in the 1 percent and 0.2 percent annual chance floodplains.

Table 16-16. Critical Facilities Flood Vulnerability

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Annual Chance Event	0.2% Annual Chance Event		
Biccum Dam	Dam	Yes	Yes	2025-MontagueTwp-09	-
Clove Lake Dam	Dam	Yes	Yes	2025-MontagueTwp-09	-
Hainesville WMA Dam	Dam	Yes	Yes	2025-MontagueTwp-09	-

Source: NJGIN 2023; Sussex County 2021, 2023

In addition to critical facilities that are exposed to flooding, the following high hazard dams are located in Montague:



- Steenykill Lake Dam

### 16.6.4 Identified Issues

After review of Montague's hazard event history, hazard rankings, hazard location, and current capabilities, Montague identified the following vulnerabilities within the community:

- Recent storm events have resulted in severe rainfall which have overwhelmed culverts and caused flooding. It is assumed that some culverts may be undersized and contribute to flooding. The culvert located at Highpoint Country Club (private community) is undersized and compromised during storm and flood events.
- The status of the Township's bridges and causeway in relation to ability to withstand hazard events is unknown. Failure of bridges or causeways could result in loss to life and limitations to emergency access.
- Dams in the municipality and have been found to have either a poor or unsatisfactory safety rating based on their most recent inspections. Dams with poor or unsatisfactory safety ratings have deficiencies that could potentially make dam failure more likely to occur or the consequences of dam failure more significant.
- The Township lacks a Disaster Debris Management Plan to address post disaster cleanup. Without a plan in place, there are no identified resources in place to properly address debris and do not have identified locations for debris storage.
- The Township currently does not have a comprehensive education and outreach program. There is a need to educate residents and businesses about hazard mitigation, preparation, response, and recovery utilizing a variety of outreach methods.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Township has three repetitive loss properties, but other properties may be impacted by flooding as well.
- The Township does not have a formalized list of damaged properties or property owners which may be interested in flood mitigation measures, such as elevation or acquisition. Maintaining these lists can assist the Township in identifying and prioritizing properties to mitigate.
- The Township does not have any certified floodplain managers (CFM) on staff. Becoming a CFM increases the depth of understanding when dealing with FEMA floodplains. The certifications ensures those that bare it understand the regulatory requirements and procedures needed to make floodplain management work effectively and efficiently at the community level.
- Critical facilities located in the floodplain are not only susceptible to flood damage but also create unnecessary complications for the municipality during an emergency event and post-disaster recovery. The Biccum Dam, Clove Lake Dam, and Hainesville WMA Dam, all critical infrastructures, are located in the 1- and 0.2-percent flood hazard areas. The Township also has a high-hazard potential dam, the Steenykill Lake Dam, within its jurisdiction. These structures have the potential to impact those living nearby.
- The Montague Township Elementary School, located at 475 Route 206, has been identified as a sheltering location but lacks a backup power source. The new fire station/community center/shelter, located at 274 Clover Road, is a lifeline for the Township and provides essential services to the municipality and its residents. It currently does not have a backup generator to provide continuity of operations during a power outage and serve as a shelter to the community.
- The Township's current flood damage prevention ordinance was last adopted in 2011. It currently does not have a freeboard requirement and does not meeting New Jersey's minimum requirement. A recent audit of New Jersey's model ordinances by FEMA for conformance with NFIP, resulted in a review of existing local flood damage prevention ordinances. Based upon FEMA's review, specific language related to NFIP



regulations was not consistent. Additionally, it was determined that better coordination was needed between the three sets of regulations that regulate development and construction in the floodplain.

- It is unknown if the windows of the Township hall building located at 277 Clover Road are impact resistant. Impact resistant windows provide a barrier during severe weather and severe winter weather events. High winds associated with these hazards can blow debris into windows, potentially endangering those inside the structure, as well as damaging the structure itself, if the windows are not impact resistant.
- Montague Township is located within the northwest corner of the State and sits along the Delaware River. Several state and national parks are located within the Township, providing acres of forested land. This creates an increased risk of wildfires to residents who border the forested areas.
- Montague Township is located within the northwest corner of the State and sits along the Delaware River. Properties located along the Delaware River are susceptible to flooding and damages.
- The municipality does not have a Substantial Damage Management Plan in place, nor do they have a formal process in place when conducting substantial damage determinations. The municipality is in need of a formal process and plan to provide a framework for conducting such inspections and determinations.
- Steenykill Lake Dam is a Class I High Hazard Dam that is located on Steeny Kill Lake. The dam is owned by the New Jersey Division of Parks and Forestry. Failure of the dam could result in inundation of forested areas, recreational areas, and roadways including State Route 23. The dam was last inspected in 2022 and found to be in poor condition, meaning the risk of dam failure warrants an engineering evaluation to determine if retrofits of the dam would result in safer conditions.

## 16.7 MITIGATION STRATEGY AND PRIORITIZATION

This section discusses the status of mitigation actions from the previous HMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

### 16.7.1 Past Mitigation Action Status

Table 16-17 indicates progress on the Township's mitigation strategy identified in the 2021 HMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

### 16.7.2 Additional Mitigation Efforts

Montague did not identify any additional mitigation efforts completed since the last HMP.



Table 16-17. Status of Previous Mitigation Actions

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2021-Montague-001	Backup Generator for Fire House/Community Center / Shelter	Severe Weather, Severe Winter Weather, Hurricane, Nor'easter	Engineer, Township OEM, Administration	<b>Problem:</b> The new fire house/community center/shelter, located at 274 Clover Road, is a lifeline for the Township and provides essential services to the municipality and its residents. It currently does not have a backup generator to provide continuity of operations during a power outage and serve as a shelter to the community.  <b>Solution:</b> Working with the Township Engineer, determine the proper type and size of generator for the facility. Once determined, obtain funding and purchase generator. Once purchased, install generator.	1. Completed 2. Not Applicable	1. Discontinue. 2. Not Applicable 3. The Township has installed the proper type and size generator to operate the fire house/community center/shelter, located at 275 Clover Road.
2021-Montague-002	Backup Generator for Elementary School:	Severe Weather, Severe Winter Weather, Hurricane, Nor'easter	Engineer, Township OEM, Administration, School Board	<b>Problem:</b> The Montague Township Elementary School at 475 Route 206 lacks a backup power source.  <b>Solution:</b> The Engineer will research what size generator is needed to power the Montague Township Elementary School. The Township will then purchase and install the selected generator and necessary electrical components to supply backup power to the Montague Township Elementary School.	1. No Progress. 2. Challenges with funding.	1. Keep in the 2025 HMP 2. Not Applicable 3. Not Applicable



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2021-Montague-003	Repetitive Loss Properties	Flood, Severe Weather	FPA, Homeowners	<p><b>Problem:</b> Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Township has 2 repetitive loss properties, but other properties may be impacted by flooding as well.</p> <p><b>Solution:</b> Conduct outreach to 10 flood-prone property owners, including RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information, and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).</p>	1. No Progress 2. The Township focused on other priorities which prevented progress on this action.	1. Keep in the 2025 HMP. 2. Not Applicable 3. Not Applicable
2021-Montague-004	Develop Debris Management Plan	Dam Failure, Drought, Earthquake, Flood, Geologic, Hazardous Materials, Hurricane and Tropical	OEM, Public Works	<p><b>Problem:</b> The Township currently does not have an adopted debris management plan. Without a plan in place, there are no identified resources in place to properly address debris and do not have identified locations for debris storage.</p> <p><b>Solution:</b> The Township will develop a debris management plan that will assist the municipality when they</p>	1. No Progress 2. Challenges with funding availability	1. Keep in the 2025 HMP. 2. Not Applicable 3. Not Applicable



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
		Storm, Nor'easter, Severe Weather, Severe Winter Weather, Wildfire		need to facilitate response and recovery after a debris-causing incident. The plan will provide direction to facilitate and coordinate the management of debris following a disaster.		
2021-Montague-005	Update Flood Damage Prevention Ordinance	Flood	Township Administration, Engineer	<b>Problem:</b> The Township's current flood damage prevention ordinance was last adopted in 2011. It currently does not have a freeboard requirement and does not meet New Jersey's minimum requirement.  <b>Solution:</b> The Township will update its flood damage prevention ordinance to meet the New Jersey requirement of one foot of freeboard.	1. No Progress 2. The Township focused on other priorities which prevented progress on this action.	1. Keep in the 2025 HMP 2. Not Applicable 3. Not Applicable
2021-Montague-006	Impact Resistant Windows and Shutters for the Township Hall	Hurricane, Nor'easter, Severe Weather, Severe Winter Weather	OEM, Public Works	<b>Problem:</b> It is unknown if the windows of the Township Hall building located at 277 Clover Road are impact resistant.  <b>Solution:</b> The Township will conduct a study to determine whether or not the windows of the township hall are impact resistant. If not, the Township will retrofit municipal building with impact resistant windows and shutters.	1. No Progress 2. Challenges with funding availability.	1. Keep in the 2025 HMP. 2. Not Applicable 3. Not Applicable





Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2021-Montague-007	Firewise	Wildfire	Township Administration, Fire Department	<p><b>Problem:</b> Montague Township is located within the northwest corner of the State and sits along the Delaware River. Several state and national parks are located within the Township, providing acres of forested land. This creates an increased risk of wildfires to residents who border the forested areas.</p> <p><b>Solution:</b> The Township will follow the proper steps in applying for and becoming a Firewise community. This includes forming a board/committee, obtaining a wildfire risk assessment, developing an action plan, and hosting outreach events and programs. The Township will also create an education program and set up town hall meetings.</p>	1. In Progress 2. The Township focused on other priorities which prevented progress on this action.	1. Keep in the 2025 HMP 2. Not Applicable 3. Not Applicable
2021-Montague-008	Delaware River Study	Flood	Engineer	<p><b>Problem:</b> Montague Township is located within the northwest corner of the State and sits along the Delaware River. Properties located along the river are susceptible to flooding and damages.</p> <p><b>Solution:</b> Conduct a study along the riverbanks of the Delaware River to identify areas that need to be elevated to reduce flooding impacts. Once identified, cost-effective actions will be carried out.</p>	1. No Progress 2. The Township focused on other priorities which prevented progress on this action.	1. Keep in the 2025 HMP 2. Not Applicable 3. Not Applicable



### 16.7.3 Proposed Hazard Mitigation Actions for the HMP Update

Montague participated in the mitigation strategy workshop for this HMP to identify appropriate actions to include in a local hazard mitigation strategy. Its comprehensive consideration of all possible activities to address hazards of concern included review of the following FEMA documents:

- FEMA 551 “Selecting Appropriate Mitigation Measures for Floodprone Structures” (March 2007)
- FEMA “Mitigation Ideas—A Resource for Reducing Risk to Natural Hazards” (January 2013).

The action worksheets included at the end of this annex list the mitigation actions that Montague would like to pursue in the future to reduce the effects of hazards. The actions 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 Township priorities.

Table 16-18 indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table to further demonstrate the wide range of activities and mitigation measures selected.

Volume I identifies 14 evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric rank is assigned (-1, 0, or 1) for each of the evaluation criteria. Table 16-19 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.



Table 16-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	Actions That Address the Hazard, by Action Category									
	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam Failure	X	X		X		X	X		X	X
Disease Outbreak		X		X		X	X			X
Drought		X		X		X	X			X
Earthquake	X	X		X		X	X			X
Flood	X	X		X	X	X	X	X	X	X
Geological Hazards	X	X		X		X	X			X
Hazardous Materials	X			X		X	X			X
Hurricane	X	X		X		X	X	X		X
Infestation				X			X			
Nor'easter	X	X		X		X	X	X		X
Severe Weather	X	X		X		X	X	X		X
Severe Winter Weather	X	X		X		X	X			X
Wildfire	X	X		X		X	X			X

**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 structures to reduce the impact of hazards.

**Natural Systems Protection (NSP)**—These are actions that minimize damage and losses and preserve or restore the functions of natural systems.

**Education and Awareness Programs (EAP)**—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

**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 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 16-19. Summary of Prioritization of Actions

Project Number	Project Name	Scores for Evaluation Criteria															High / Medium / Low
		Life Safety	Property Protection	Cost-Effectiveness	Political	Legal	Fiscal	Environmental	Social Vulnerability	Administrative	Hazards of Concern	Climate Change	Timeline	Community Lifelines	Other Local Objectives	Total	
2025-MontagueTwp-01	Upgrades to Culvert	1	1	1	1	1	0	1	1	1	1	1	1	0	0	11	High
2025-MontagueTwp-02	Township Bridge Vulnerabilities	1	1	1	1	1	0	1	1	1	0	1	1	1	0	11	High
2025-MontagueTwp-03	Dam Repair	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2025-MontagueTwp-04	Disaster Debris Management Plan	0	1	1	1	1	1	1	0	1	1	1	1	0	1	11	High
2025-MontagueTwp-05	Public Education and Outreach	1	1	1	1	1	1	0	1	1	1	1	1	0	1	12	High
2025-MontagueTwp-06	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	1	1	1	0	1	12	High
2025-MontagueTwp-07	Flood Mitigation Interest	1	1	1	1	1	1	1	1	1	0	1	1	1	1	13	High
2025-MontagueTwp-08	NFIP Training	1	1	1	1	1	1	0	1	1	1	1	1	0	1	12	High
2025-MontagueTwp-09	Critical Facilities in the Floodplain	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2025-MontagueTwp-10	Critical Facility Emergency Generators	1	1	1	1	1	0	0	1	1	1	0	1	1	0	10	Medium
2025-MontagueTwp-11	Code Coordinated Ordinance	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High
2025-MontagueTwp-12	Impact Resistant Windows and Shutters for Municipal Hall	0	1	1	1	1	0	0	0	1	1	1	1	1	0	9	Medium
2025-MontagueTwp-13	Firewise Program Participation	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High



Project Number	Project Name	Scores for Evaluation Criteria															High / Medium / Low
		Life Safety	Property Protection	Cost-Effectiveness	Political	Legal	Fiscal	Environmental	Social Vulnerability	Administrative	Hazards of Concern	Climate Change	Timeline	Community Lifelines	Other Local Objectives	Total	
2025-MontagueTwp-14	Delaware River Study	1	1	1	1	1	0	1	1	1	0	1	1	1	0	11	High
2025-MontagueTwp-15	Substantial Damage Management Plan	0	1	1	1	1	1	0	1	1	1	1	1	1	0	11	High
2025-MontagueTwp-16	Steenykill Lake Dam Rehab	1	1	1	1	0	0	1	1	1	0	1	1	1	1	11	High

*Note: Volume I, Section 21 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)*



## Action 2025-MontagueTwp-01. Upgrades to Culvert

<b>Lead Agency:</b>	Engineering																
<b>Supporting Agencies:</b>	Public Works, Highpoint Country Club																
<b>Hazard(s) of Concern:</b>	<table><tr><td><input type="checkbox"/> Dam Failure</td><td><input checked="" type="checkbox"/> Hurricane</td></tr><tr><td><input type="checkbox"/> Disease Outbreak</td><td><input type="checkbox"/> Infestation</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input checked="" type="checkbox"/> Nor'easter</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input checked="" type="checkbox"/> Severe Weather</td></tr><tr><td><input checked="" type="checkbox"/> Flood</td><td><input type="checkbox"/> Severe Winter Weather</td></tr><tr><td><input type="checkbox"/> Geological Hazards</td><td><input type="checkbox"/> Wildfire</td></tr><tr><td><input type="checkbox"/> Hazardous Materials</td><td></td></tr></table>			<input type="checkbox"/> Dam Failure	<input checked="" type="checkbox"/> Hurricane	<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation	<input type="checkbox"/> Drought	<input checked="" type="checkbox"/> Nor'easter	<input type="checkbox"/> Earthquake	<input checked="" type="checkbox"/> Severe Weather	<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather	<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Hazardous Materials	
<input type="checkbox"/> Dam Failure	<input checked="" type="checkbox"/> Hurricane																
<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation																
<input type="checkbox"/> Drought	<input checked="" type="checkbox"/> Nor'easter																
<input type="checkbox"/> Earthquake	<input checked="" type="checkbox"/> Severe Weather																
<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather																
<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire																
<input type="checkbox"/> Hazardous Materials																	
<b>Description of the Problem:</b>	Recent storm events have resulted in severe rainfall which have overwhelmed culverts and caused flooding. It is assumed that some culverts may be undersized and contribute to flooding. Culverts located at Highpoint Country Club (private community) are undersized and compromised during storm and flood events.																
<b>Description of the Solution:</b>	The Township Engineer will complete an engineering survey of culverts at Highpoint Country Club that are undersized and contribute to flooding to determine the proper size necessary to provide stormwater capacity. The Township Public Works will complete the necessary upsizing for those culverts noted to be undersized.																
<b>Estimated Cost:</b>	Medium																
<b>Potential Funding Sources:</b>	BRIC, HMGP, Township Budget																
<b>Implementation Timeline:</b>	3 years																
<b>Goals Met:</b>	1, 2																
<b>Benefits:</b>	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to culverts and roadways during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.																
<b>Impact on Socially Vulnerable Populations:</b>	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.																
<b>Impact on Future Development:</b>	Future development in the impacted area will be less likely to be flooded.																
<b>Impact on Critical Facilities/Lifelines:</b>	Transportation routes are more likely to remain open, which enables evacuation routes to remain intact. Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.																
<b>Impact on Capabilities:</b>	Identifying the culverts that are at greatest risk of damage or failure can allow for resource staging to take place where the need is greatest ahead of a flood event.																
<b>Climate Change Considerations:</b>	Climate change is likely to result in more frequent and severe rainfall events. This action upsizes culvert sizes to meet changing stormwater needs as the result of climate change.																
<b>Mitigation Category</b>	<table><tr><td><input type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
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<b>CRS Category</b>	<table><tr><td><input type="checkbox"/> Preventative Measures (PR)</td><td><input type="checkbox"/> Natural Resource Protection (NR)</td></tr><tr><td><input type="checkbox"/> Property Protection (PP)</td><td><input checked="" type="checkbox"/> Structural Flood Control Projects (SP)</td></tr><tr><td><input type="checkbox"/> Public Information (PI)</td><td><input type="checkbox"/> Emergency Services (ES)</td></tr></table>			<input type="checkbox"/> Preventative Measures (PR)	<input type="checkbox"/> Natural Resource Protection (NR)	<input type="checkbox"/> Property Protection (PP)	<input checked="" type="checkbox"/> Structural Flood Control Projects (SP)	<input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Emergency Services (ES)								
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<input type="checkbox"/> Property Protection (PP)	<input checked="" type="checkbox"/> Structural Flood Control Projects (SP)																
<input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Emergency Services (ES)																
<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
<b>Alternatives:</b>	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>Current problem remains</td></tr><tr><td>Remove roadway</td><td>Roadway cannot be removed</td></tr><tr><td>Raingardens</td><td>Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.</td></tr></table>	Action	Evaluation	No Action	Current problem remains	Remove roadway	Roadway cannot be removed	Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.								
Action	Evaluation																
No Action	Current problem remains																
Remove roadway	Roadway cannot be removed																
Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.																





## Action 2025-MontagueTwp-02. Township Bridge Vulnerabilities

<b>Lead Agency:</b>	Engineering Department																
<b>Supporting Agencies:</b>	Township Administration																
<b>Hazard(s) of Concern:</b>	<table><tr><td><input type="checkbox"/> Dam Failure</td><td><input checked="" type="checkbox"/> Hurricane</td></tr><tr><td><input type="checkbox"/> Disease Outbreak</td><td><input type="checkbox"/> Infestation</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input checked="" type="checkbox"/> Nor'easter</td></tr><tr><td><input checked="" type="checkbox"/> Earthquake</td><td><input checked="" type="checkbox"/> Severe Weather</td></tr><tr><td><input checked="" type="checkbox"/> Flood</td><td><input checked="" type="checkbox"/> Severe Winter Weather</td></tr><tr><td><input checked="" type="checkbox"/> Geological Hazards</td><td><input type="checkbox"/> Wildfire</td></tr><tr><td><input type="checkbox"/> Hazardous Materials</td><td></td></tr></table>			<input type="checkbox"/> Dam Failure	<input checked="" type="checkbox"/> Hurricane	<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation	<input type="checkbox"/> Drought	<input checked="" type="checkbox"/> Nor'easter	<input checked="" type="checkbox"/> Earthquake	<input checked="" type="checkbox"/> Severe Weather	<input checked="" type="checkbox"/> Flood	<input checked="" type="checkbox"/> Severe Winter Weather	<input checked="" type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Hazardous Materials	
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<input checked="" type="checkbox"/> Earthquake	<input checked="" type="checkbox"/> Severe Weather																
<input checked="" type="checkbox"/> Flood	<input checked="" type="checkbox"/> Severe Winter Weather																
<input checked="" type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire																
<input type="checkbox"/> Hazardous Materials																	
<b>Description of the Problem:</b>	The status of the Township's bridges and causeway in relation to ability to withstand hazard events is unknown. Failure of bridges or causeways could result in loss to life and limitations to emergency access.																
<b>Description of the Solution:</b>	The Engineer will identify inadequate or vulnerable bridges and causeways within the Township and lift or retrofit the identified bridges and causeways.																
<b>Estimated Cost:</b>	Dependent on number of bridges identified and mitigation method sought.																
<b>Potential Funding Sources:</b>	HMGP, BRIC, Township Budget, Bridge Owners																
<b>Implementation Timeline:</b>	Within 5 years																
<b>Goals Met:</b>	2, 5																
<b>Benefits:</b>	This action ensures infrastructure will be protected from future hazard damages and that at least a single transportation route remains accessible to the community.																
<b>Impact on Socially Vulnerable Populations:</b>	This action will benefit socially vulnerable populations by ensuring routes are available for travel, should an evacuation occur or if emergency medical assistance is required.																
<b>Impact on Future Development:</b>	This action will ensure transportation routes are available to future developments during periods of heavy rainfall, which would otherwise cause roadway flooding.																
<b>Impact on Critical Facilities/Lifelines:</b>	This action ensures transportation routes remain open and accessible to the public for daily use and evacuation needs and provides a point of access for first responders into communities that may have faced damage from a hazard event on either side of the bridge.																
<b>Impact on Capabilities:</b>	Increases community resiliency to flooding events in vulnerable areas that would normally be vulnerable to prolonged isolation after high-water events.																
<b>Climate Change Considerations:</b>	Ensure the bridge structure is impervious to erosion at its base due to rising water levels.																
<b>Mitigation Category</b>	<table><tr><td><input type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
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<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
<b>Alternatives:</b>	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No action</td><td>Current problem remains</td></tr><tr><td>Build entirely new roads, bridges, and culverts throughout the county with adequate capacity</td><td>Project will most likely be too expensive</td></tr><tr><td>Install pumps at flood prone locations to pump water away from infrastructure and reduce the impact</td><td>Could have substantial upfront costs and would increase operations and maintenance cost</td></tr></table>			Action	Evaluation	No action	Current problem remains	Build entirely new roads, bridges, and culverts throughout the county with adequate capacity	Project will most likely be too expensive	Install pumps at flood prone locations to pump water away from infrastructure and reduce the impact	Could have substantial upfront costs and would increase operations and maintenance cost						
Action	Evaluation																
No action	Current problem remains																
Build entirely new roads, bridges, and culverts throughout the county with adequate capacity	Project will most likely be too expensive																
Install pumps at flood prone locations to pump water away from infrastructure and reduce the impact	Could have substantial upfront costs and would increase operations and maintenance cost																



## Action 2025-MontagueTwp-03. Dam Repair

<b>Lead Agency:</b>	Engineer																
<b>Supporting Agencies:</b>	Dam Manager, NJDEP Bureau of Dam Safety, County Engineer																
<b>Hazard(s) of Concern:</b>	<table><tr><td><input checked="" type="checkbox"/> Dam Failure</td><td><input type="checkbox"/> Hurricane</td></tr><tr><td><input type="checkbox"/> Disease Outbreak</td><td><input type="checkbox"/> Infestation</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input type="checkbox"/> Nor'easter</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input type="checkbox"/> Severe Weather</td></tr><tr><td><input checked="" type="checkbox"/> Flood</td><td><input type="checkbox"/> Severe Winter Weather</td></tr><tr><td><input type="checkbox"/> Geological Hazards</td><td><input type="checkbox"/> Wildfire</td></tr><tr><td><input type="checkbox"/> Hazardous Materials</td><td></td></tr></table>			<input checked="" type="checkbox"/> Dam Failure	<input type="checkbox"/> Hurricane	<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation	<input type="checkbox"/> Drought	<input type="checkbox"/> Nor'easter	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Severe Weather	<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather	<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Hazardous Materials	
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<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather																
<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire																
<input type="checkbox"/> Hazardous Materials																	
<b>Description of the Problem:</b>	<p>The following dams are located in the municipality and have been found to have either a poor or unsatisfactory safety rating based on their most recent inspections:</p> <ul style="list-style-type: none"><li>• Holiday Pond Dam (poor)</li><li>• Steenykill Lake Dam (poor)</li><li>• Kulp Lake Dam (poor)</li><li>• Sawmill Pond Dam (poor)</li><li>• Fountain House Dam (poor)</li></ul> <p>Dams with poor or unsatisfactory safety ratings have deficiencies that could potentially make dam failure more likely to occur or the consequences of dam failure more significant.</p>																
<b>Description of the Solution:</b>	<p>The municipal engineer will work with dam managers, the NJDEP Bureau of Dam Safety, and the County Engineer to review the most recent inspections of dams in the municipality that have resulted in a poor or unsatisfactory safety rating, identify the deficiencies, determine the necessary repairs and improvements necessary to address the deficiencies, identify available funding sources for the identified repairs/improvements, and implement the cost-effective repairs/improvements.</p>																
<b>Estimated Cost:</b>	Low for initial assessment of options, TBD for total cost based on mitigation actions selected																
<b>Potential Funding Sources:</b>	NJDEP, Annual Budget																
<b>Implementation Timeline:</b>	Within 5 years																
<b>Goals Met:</b>	1, 2, 3																
<b>Benefits:</b>	<p>Dam failure will be avoided, which will reduce the risk of harm to people and property downstream. Certain safety requirements will be met that can allow for funding to be received for further mitigation projects.</p>																
<b>Impact on Socially Vulnerable Populations:</b>	<p>The most vulnerable populations may live directly downstream of the dam and lack the ability to receive notifications of dam failure or evacuate when notified. Preventing dam failure allows those communities to remain intact and reduces the risk of loss of life and property in those areas.</p>																
<b>Impact on Future Development:</b>	<p>Future development downstream of dams will also be protected from dam failure.</p>																
<b>Impact on Critical Facilities/Lifelines:</b>	<p>Critical roads and utilities will be protected from potential damage or loss from unintended dam releases.</p>																
<b>Impact on Capabilities:</b>	Not applicable																
<b>Climate Change Considerations:</b>	<p>Climate change is resulting in an increase to annual precipitation. Much of this increase is in the form of heavy rainfall events. Consideration should be taken for increases in frequency and severity of rainfall events to ensure that the dam is designed to withstand these increases.</p>																
<b>Mitigation Category</b>	<table><tr><td><input type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input checked="" type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)	<input checked="" type="checkbox"/> Education and Awareness Programs (EAP)										
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<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
<b>Alternatives:</b>	<b>Action</b>	<b>Evaluation</b>															



	No Action	Risk of dam failure remains or increases over time
	Work without County Engineer involvement	Improvements made but may lack appropriate support from County, including data and potential funding access
	Remove all dams	Without proper analysis, dam removal may increase flooding risk



## Action 2025-MontagueTwp-04. Disaster Debris Management Plan

<b>Lead Agency:</b>	Emergency Management		
<b>Supporting Agencies:</b>	Public Works, Building Department, Township Administration		
<b>Hazard(s) of Concern:</b>	<input checked="" type="checkbox"/> Dam Failure <input type="checkbox"/> Disease Outbreak <input type="checkbox"/> Drought <input checked="" type="checkbox"/> Earthquake <input checked="" type="checkbox"/> Flood <input checked="" type="checkbox"/> Geological Hazards <input checked="" type="checkbox"/> Hazardous Materials <input checked="" type="checkbox"/> Hurricane <input type="checkbox"/> Infestation <input checked="" type="checkbox"/> Nor'easter <input checked="" type="checkbox"/> Severe Weather <input checked="" type="checkbox"/> Severe Winter Weather <input checked="" type="checkbox"/> Wildfire		
<b>Description of the Problem:</b>	The Township lacks a Disaster Debris Management Plan to address post disaster cleanup. Without a plan in place, there are no identified resources in place to properly address debris and do not have identified locations for debris storage.		
<b>Description of the Solution:</b>	The municipality will develop a disaster debris management plan. This plan will establish procedures and guidelines for managing disaster debris in a coordinated, environmentally responsible, and cost-effective manner. The plan will identify responsibilities for execution of the plan. The plan will align with permitted temporary collection areas.		
<b>Estimated Cost:</b>	Staff time		
<b>Potential Funding Sources:</b>	Municipal budget		
<b>Implementation Timeline:</b>	Within 5 years		
<b>Goals Met:</b>	5		
<b>Benefits:</b>	The action will result in increased quicker and more efficient cleanup after disaster events.		
<b>Impact on Socially Vulnerable Populations:</b>	Not Applicable		
<b>Impact on Future Development:</b>	Not Applicable		
<b>Impact on Critical Facilities/Lifelines:</b>	Not Applicable		
<b>Impact on Capabilities:</b>	The action will result in increased post disaster capabilities.		
<b>Climate Change Considerations:</b>	Climate change may result in an increase in the frequency and severity of weather-related disaster events. This action will increase the capabilities to respond to these events.		
<b>Mitigation Category</b>	<input checked="" type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) <input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP)		
<b>CRS Category</b>	<input type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input checked="" type="checkbox"/> Emergency Services (ES)		
<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low
<b>Alternatives:</b>	<b>Action</b>		<b>Evaluation</b>
	No Action		Current problem remains
	Rely on federal cleanup		These services may or may not be available
	Rely on state cleanup		These services may or may not be available



## Action 2025-MontagueTwp-05. Public Education and Outreach

<b>Lead Agency:</b>	Emergency Management		
<b>Supporting Agencies:</b>	Township Administration, Sussex County		
<b>Hazard(s) of Concern:</b>	<input checked="" type="checkbox"/> Dam Failure <input checked="" type="checkbox"/> Disease Outbreak <input checked="" type="checkbox"/> Drought <input checked="" type="checkbox"/> Earthquake <input checked="" type="checkbox"/> Flood <input checked="" type="checkbox"/> Geological Hazards <input checked="" type="checkbox"/> Hazardous Materials	<input checked="" type="checkbox"/> Hurricane <input checked="" type="checkbox"/> Infestation <input checked="" type="checkbox"/> Nor'easter <input checked="" type="checkbox"/> Severe Weather <input checked="" type="checkbox"/> Severe Winter Weather <input checked="" type="checkbox"/> Wildfire	
<b>Description of the Problem:</b>	The Township currently does not have a comprehensive education and outreach program. There is a need to educate residents and businesses about hazard mitigation, preparation, response, and recovery utilizing a variety of outreach methods.		
<b>Description of the Solution:</b>	Develop and enhance the public awareness program on hazards, prevention, and mitigation. Continue to work with Sussex County on their program that provides information to the municipalities.		
<b>Estimated Cost:</b>	Low		
<b>Potential Funding Sources:</b>	Municipal Budget		
<b>Implementation Timeline:</b>	2 years		
<b>Goals Met:</b>	1, 2, 3, 7		
<b>Benefits:</b>	This action will improve the current public education and outreach program in the Township by including discussions on disaster preparedness and hazard mitigation to residents and business owners, which will contribute to the resiliency of the Township.		
<b>Impact on Socially Vulnerable Populations:</b>	Socially vulnerable populations will learn how to prepare for and mitigate the various hazards which may impact them in the Township.		
<b>Impact on Future Development:</b>	Not applicable		
<b>Impact on Critical Facilities/Lifelines:</b>	Businesses, which may be considered critical facilities or lifelines, would be more informed on how to prepare for emergency events and mitigate the risks of potential hazards. With these businesses becoming more resilient, this action would contribute to their continuity of operations.		
<b>Impact on Capabilities:</b>	This action would build upon the Township's already existing public education and outreach program.		
<b>Climate Change Considerations:</b>	Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action will inform residents and business owners of how to reduce risk from hazards and how climate change may exacerbate those risks.		
<b>Mitigation Category</b>	<input type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Natural Systems Protection (NSP) <input checked="" type="checkbox"/> Education and Awareness Programs (EAP)	
<b>CRS Category</b>	<input type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input checked="" type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES)	
<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low
<b>Alternatives:</b>	<b>Action</b>	<b>Evaluation</b>	
	No action	Current methods remain the only ones used	
	Rely on state or federal resources	Resources may be generalized and not specific to the risks in the Township	
	Use only a few methods for distribution	Using only a few methods of distribution may hinder socially vulnerable populations from receiving the guidance	



## Action 2025-MontagueTwp-06. Repetitive Loss Properties

<b>Lead Agency:</b>	Floodplain Administrator		
<b>Supporting Agencies:</b>	Sussex County		
<b>Hazard(s) of Concern:</b>	<div><input type="checkbox"/> Dam Failure</div> <div><input type="checkbox"/> Disease Outbreak</div> <div><input type="checkbox"/> Drought</div> <div><input type="checkbox"/> Earthquake</div> <div><input checked="" type="checkbox"/> Flood</div> <div><input type="checkbox"/> Geological Hazards</div> <div><input type="checkbox"/> Hazardous Materials</div> <div><input type="checkbox"/> Hurricane</div> <div><input type="checkbox"/> Infestation</div> <div><input type="checkbox"/> Nor'easter</div> <div><input type="checkbox"/> Severe Weather</div> <div><input type="checkbox"/> Severe Winter Weather</div> <div><input type="checkbox"/> Wildfire</div>		
<b>Description of the Problem:</b>	Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Township has three repetitive loss properties, but other properties may be impacted by flooding as well.		
<b>Description of the Solution:</b>	The Township will promote and support non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, including those that have been identified as Repetitive Loss (RL) and Severe Repetitive Loss (SRL), such as acquisition/relocation or elevation depending on feasibility. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.		
<b>Estimated Cost:</b>	Medium		
<b>Potential Funding Sources:</b>	FEMA FMA, FMA SWIFT, Municipal Budget, County Budget, Property Owners		
<b>Implementation Timeline:</b>	3 years		
<b>Goals Met:</b>	2, 3		
<b>Benefits:</b>	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.		
<b>Impact on Socially Vulnerable Populations:</b>	Socially vulnerable populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.		
<b>Impact on Future Development:</b>	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.		
<b>Impact on Critical Facilities/Lifelines:</b>	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.		
<b>Impact on Capabilities:</b>	This action will enhance the Township's current NFIP capabilities.		
<b>Climate Change Considerations:</b>	A warmer atmosphere means storms have the potential to be more intense and occur more often, including increased periods of intense rain events.		
<b>Mitigation Category</b>	<div><input type="checkbox"/> Local Plans and Regulations (LPR)</div> <div><input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)</div> <div><input type="checkbox"/> Natural Systems Protection (NSP)</div> <div><input type="checkbox"/> Education and Awareness Programs (EAP)</div>		
<b>CRS Category</b>	<div><input type="checkbox"/> Preventative Measures (PR)</div> <div><input checked="" type="checkbox"/> Property Protection (PP)</div> <div><input type="checkbox"/> Public Information (PI)</div> <div><input type="checkbox"/> Natural Resource Protection (NR)</div> <div><input checked="" type="checkbox"/> Structural Flood Control Projects (SP)</div> <div><input type="checkbox"/> Emergency Services (ES)</div>		
<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low
<b>Alternatives:</b>	<b>Action</b>	<b>Evaluation</b>	
	No action	Current problem continues	
	Construct flood walls/barriers around vulnerable areas	Costly and can divert floodwaters to other areas	
	Deployable flood barriers for vulnerable areas	Requires a great deal of work to implement prior to each event	



## Action 2025-MontagueTwp-07. Flood Mitigation Interest

<b>Lead Agency:</b>	Floodplain Administrator		
<b>Supporting Agencies:</b>	Land Use Board, Township Administration		
<b>Hazard(s) of Concern:</b>	<input type="checkbox"/> Dam Failure <input type="checkbox"/> Disease Outbreak <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Geological Hazards <input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Hurricane <input type="checkbox"/> Infestation <input type="checkbox"/> Nor'easter <input type="checkbox"/> Severe Weather <input type="checkbox"/> Severe Winter Weather <input type="checkbox"/> Wildfire		
<b>Description of the Problem:</b>	The Township does not have a formalized list of damaged properties or property owners which may be interested in flood mitigation measures, such as elevation or acquisition. Maintaining these lists can assist the Township in identifying and prioritizing properties to mitigate.		
<b>Description of the Solution:</b>	The Floodplain Administration will develop a list for inventorying system or properties damaged by flood events and property owners who are interested in flood mitigation measures, such as elevation or acquisition.		
<b>Estimated Cost:</b>	Staff time, Low		
<b>Potential Funding Sources:</b>	Township Budget		
<b>Implementation Timeline:</b>	Within 2 years		
<b>Goals Met:</b>	1, 2, 5		
<b>Benefits:</b>	Keeping a list of damaged properties and property owners interested in flood mitigation efforts may lead to the elimination of flood damage to homes and residences, which creating an open space for the municipality and increasing flood storage.		
<b>Impact on Socially Vulnerable Populations:</b>	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. Removing homes from the floodplain immediately removes the risk to life and property.		
<b>Impact on Future Development:</b>	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.		
<b>Impact on Critical Facilities/Lifelines:</b>	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.		
<b>Impact on Capabilities:</b>	This action will create a new Township capability, while enhancing its current NFIP capabilities.		
<b>Climate Change Considerations:</b>	A warmer atmosphere means storms have the potential to be more intense and occur more often, including increased periods of intense rain events. Areas experiencing flooding conditions may increase. Removing structures from the floodplain will reduce the response and recovery costs as a result of these events and decrease the loss of human life as a result of these events. Elevating structures will reduce the recovery costs as a result of these events.		
<b>Mitigation Category</b>	<input checked="" type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) <input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP)		
<b>CRS Category</b>	<input checked="" type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES)		
<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low
<b>Alternatives:</b>	<b>Action</b>	<b>Evaluation</b>	
	No action	Current problem remains	
	Only share opportunities when notified of grant funding	May not be enough time to garner interest or write application	
	Wait for information from the State on flood-damaged properties	May be a delay in notice	





## Action 2025-MontagueTwp-08. NFIP Training

<b>Lead Agency:</b>	Floodplain Administrator		
<b>Supporting Agencies:</b>	Engineering, Construction Department, Township Administration		
<b>Hazard(s) of Concern:</b>	<input type="checkbox"/> Dam Failure <input type="checkbox"/> Disease Outbreak <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Geological Hazards <input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Hurricane <input type="checkbox"/> Infestation <input type="checkbox"/> Nor'easter <input type="checkbox"/> Severe Weather <input type="checkbox"/> Severe Winter Weather <input type="checkbox"/> Wildfire		
<b>Description of the Problem:</b>	The Township does not have any certified floodplain managers (CFM) on staff. Becoming a CFM increases the depth of understanding when dealing with FEMA floodplains. The certifications ensures those that bare it understand the regulatory requirements and procedures needed to make floodplain management work effectively and efficiently at the community level.		
<b>Description of the Solution:</b>	Provide training and/or certification for Township staff with NFIP regulations and floodplain management ordinances. Encourage staff to become Certified Floodplain Managers via the Association of State Floodplain Manager's CFM Certification Program.		
<b>Estimated Cost:</b>	Low		
<b>Potential Funding Sources:</b>	Township		
<b>Implementation Timeline:</b>	Within 5 years		
<b>Goals Met:</b>	1, 2, 3, 5		
<b>Benefits:</b>	This action will increase the NFIP capabilities of the Township and assure the Township's NFIP program has enough staff to accomplish its goals and reach NFIP compliance.		
<b>Impact on Socially Vulnerable Populations:</b>	Officials that are up to date on flood risk are more likely to encourage development outside areas of high flood risk, which is where socially vulnerable populations have historically resided. Safer dwellings may be developed in a less vulnerable location.		
<b>Impact on Future Development:</b>	Officials that understand best practices in floodplain management will have the opportunity to influence future development and prevent unsafe building in flood hazard areas.		
<b>Impact on Critical Facilities/Lifelines:</b>	The opportunity will exist for leaders and operators of utilities and other essential services to attend training and provide direction on ways the prepare for, plan for, and prevent interruptions in service as a result of a flood.		
<b>Impact on Capabilities:</b>	This action will enhance the Township's current NFIP capabilities.		
<b>Climate Change Considerations:</b>	Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action will educate staff on NFIP regulations to assist with the flood hazard.		
<b>Mitigation Category</b>	<input type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) <input type="checkbox"/> Natural Systems Protection (NSP) <input checked="" type="checkbox"/> Education and Awareness Programs (EAP)		
<b>CRS Category</b>	<input type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input checked="" type="checkbox"/> Public Information (PI) <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES)		
<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low
<b>Alternatives:</b>	<b>Action</b>	<b>Evaluation</b>	
	No Action	Current problem remains	
	Hire outside contractors for floodplain administration	Costly	
	Establish shared service agreements for floodplain administration from neighboring municipalities	Neighboring municipalities are unlikely to have the staff capacity to take on this role	



## Action 2025-MontagueTwp-09. Critical Facilities in the Floodplain

<b>Lead Agency:</b>	Facility Managers
<b>Supporting Agencies:</b>	Emergency Management, Floodplain Administrator, NJDEP
<b>Hazard(s) of Concern:</b>	<div><div><input checked="" type="checkbox"/> Dam Failure <input type="checkbox"/> Disease Outbreak <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Geological Hazards <input type="checkbox"/> Hazardous Materials</div><div><input type="checkbox"/> Hurricane <input type="checkbox"/> Infestation <input type="checkbox"/> Nor'easter <input type="checkbox"/> Severe Weather <input type="checkbox"/> Severe Winter Weather <input type="checkbox"/> Wildfire</div></div>
<b>Description of the Problem:</b>	Critical facilities located in the floodplain are not only susceptible to flood damage but also create unnecessary complications for the municipality during an emergency event and post-disaster recovery. The Biccum Dam, Clove Lake Dam, and Hainesville WMA Dam, all critical infrastructures, are located in the 1- and 0.2-percent flood hazard areas. The Township also has a high-hazard potential dam, the Steenykill Lake Dam, within its jurisdiction. These structures have the potential to impact those living nearby.
<b>Description of the Solution:</b>	<p>Coordinate with the facility managers at Biccum Dam, Clove Lake Dam, and Hainesville WMA Dam in the Township to support the mitigation of vulnerable structures via retrofit (e.g., elevation, flood-proofing) or relocation to protect structures from future damage.</p> <p>Phase 1: Identify most cost-effective mitigation option</p> <p>Phase 2: Work with facility manager to implement selected action based on available funding and local match ability.</p> <p>The Township will work with the owners of the dams to ensure inspections and safety procedures are up to date. EAPs will be collected by Township OEM and shared with the County OEM.</p>
<b>Estimated Cost:</b>	Medium
<b>Potential Funding Sources:</b>	FEMA BRIC, HMGP, Township Budget, Facilities
<b>Implementation Timeline:</b>	5 years
<b>Goals Met:</b>	1, 2, 3, 5, 7
<b>Benefits:</b>	This action will remove or reduce critical facility and community lifeline vulnerability to the flood hazard and remove or reduce safety risks for first responders. This action will improve the safety and security of those who live within the dam inundation areas of the dams and increase the resilience of responding agencies.
<b>Impact on Socially Vulnerable Populations:</b>	Retrofitting or relocating the identified structures will benefit socially vulnerable populations, as individuals within these populations rely on resources from various government facilities, transportation facilities, and medical and senior care facilities. The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to socially vulnerable populations exists.
<b>Impact on Future Development:</b>	Noting the number of facilities located within the flood hazard area may encourage the consideration of relocating critical facilities and lifelines from the flood hazard area and deter the development of any additional facilities in the flood hazard area. Future development near inundation areas will be more secure as safety procedures and inspections are regularly performed on the dams.
<b>Impact on Critical Facilities/Lifelines:</b>	Noting the number of facilities located within the flood hazard area may encourage the consideration of relocating critical facilities and lifelines from the flood hazard area and deter the development of any additional facilities in the flood hazard area. Dams are considered a critical facility. This action will create an understanding of the safety procedures in place for each identified dam.
<b>Impact on Capabilities:</b>	This action will enhance the Township's current NFIP capabilities. This action will improve planning and response capabilities through the understanding of responsibilities and procedures.
<b>Climate Change Considerations:</b>	A warmer atmosphere means storms have the potential to be more intense and occur more often, including increased periods of intense rain events. Climate change may result in an increase in the frequency and severity of weather-related disaster events, which may contribute to the likelihood of a dam failure event. This action will increase the capabilities to respond to these events.



Mitigation Category	<input type="checkbox"/> Local Plans and Regulations (LPR) <input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)		<input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP)
CRS Category	<input type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI)		<input type="checkbox"/> Natural Resource Protection (NR) <input checked="" type="checkbox"/> Structural Flood Control Projects (SP) <input checked="" type="checkbox"/> Emergency Services (ES)
Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low
Alternatives:	Action		Evaluation
	No Action		Current problem remains
	Floodproof existing structures		May not necessarily reduce risk
	Construct floodwalls to stop flood issues		Will most likely interrupt natural floodplain function



## Action 2025-MontagueTwp-10. Critical Facility Emergency Generators

<b>Lead Agency:</b>	Engineering		
<b>Supporting Agencies:</b>	Public Works, Emergency Management, Township Administration, School Administration, Fire Department		
<b>Hazard(s) of Concern:</b>	<div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> Dam Failure  <input checked="" type="checkbox"/> Disease Outbreak  <input checked="" type="checkbox"/> Drought  <input checked="" type="checkbox"/> Earthquake  <input checked="" type="checkbox"/> Flood  <input checked="" type="checkbox"/> Geological Hazards  <input checked="" type="checkbox"/> Hazardous Materials </div> <div> <input checked="" type="checkbox"/> Hurricane  <input type="checkbox"/> Infestation  <input checked="" type="checkbox"/> Nor'easter  <input checked="" type="checkbox"/> Severe Weather  <input checked="" type="checkbox"/> Severe Winter Weather  <input checked="" type="checkbox"/> Wildfire </div> </div>		
<b>Description of the Problem:</b>	The Montague Township Elementary School, located at 475 Route 206, has been identified as a sheltering location but lacks a backup power source. The new fire station/community center/shelter, located at 274 Clover Road, is a lifeline for the Township and provides essential services to the municipality and its residents. It currently does not have a backup generator to provide continuity of operations during a power outage and serve as a shelter to the community.		
<b>Description of the Solution:</b>	The Engineer will research what size generator is needed to power the Montague Township Elementary School and the Fire Station. The Township will then purchase and install the selected generator and necessary electrical components to supply backup power to the Montague Township Elementary School and Fire Station.		
<b>Estimated Cost:</b>	Medium		
<b>Potential Funding Sources:</b>	HMGP, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Annual Budget		
<b>Implementation Timeline:</b>	Within 5 years		
<b>Goals Met:</b>	1, 2, 5, 6, 7		
<b>Benefits:</b>	This action protects public health and safety and ensures continued operation of a critical facility and its essential functions during a power outage.		
<b>Impact on Socially Vulnerable Populations:</b>	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.		
<b>Impact on Future Development:</b>	This action results in protection of a critical facility that could support future development.		
<b>Impact on Critical Facilities/Lifelines:</b>	This action protects public health and safety and ensures continued operation of a critical facility and its essential functions during a power outage.		
<b>Impact on Capabilities:</b>	This action ensures continuity of operations to maintain capabilities.		
<b>Climate Change Considerations:</b>	Climate change is likely to increase severe weather events such as flooding, wind, and extreme temperatures that result in power failures. This action accounts for a likely increase in power failure events.		
<b>Mitigation Category</b>	<input type="checkbox"/> Local Plans and Regulations (LPR) <input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP) <input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP)		
<b>CRS Category</b>	<input type="checkbox"/> Preventative Measures (PR) <input checked="" type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input checked="" type="checkbox"/> Emergency Services (ES)		
<b>Priority</b>	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low		
<b>Alternatives:</b>	<b>Action</b>	<b>Evaluation</b>	
	No Action	Current problem remains	
	Microgrid	Costly and difficult to implement.	
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.	



## Action 2025-MontagueTwp-11. Code Coordinated Ordinance

<b>Lead Agency:</b>	Floodplain Administrator																
<b>Supporting Agencies:</b>	Building Department, Township Administration, NFIP State Coordinator, FEMA Regional Office																
<b>Hazard(s) of Concern:</b>	<table><tr><td><input type="checkbox"/> Dam Failure</td><td><input type="checkbox"/> Hurricane</td></tr><tr><td><input type="checkbox"/> Disease Outbreak</td><td><input type="checkbox"/> Infestation</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input type="checkbox"/> Nor'easter</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input type="checkbox"/> Severe Weather</td></tr><tr><td><input checked="" type="checkbox"/> Flood</td><td><input type="checkbox"/> Severe Winter Weather</td></tr><tr><td><input type="checkbox"/> Geological Hazards</td><td><input type="checkbox"/> Wildfire</td></tr><tr><td><input type="checkbox"/> Hazardous Materials</td><td></td></tr></table>			<input type="checkbox"/> Dam Failure	<input type="checkbox"/> Hurricane	<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation	<input type="checkbox"/> Drought	<input type="checkbox"/> Nor'easter	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Severe Weather	<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather	<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Hazardous Materials	
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<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather																
<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire																
<input type="checkbox"/> Hazardous Materials																	
<b>Description of the Problem:</b>	<p>The Township's current flood damage prevention ordinance was last adopted in 2011. It currently does not have a freeboard requirement and does not meeting New Jersey's minimum requirement. A recent audit of New Jersey's model ordinances by FEMA for conformance with NFIP, resulted in a review of existing local flood damage prevention ordinances. Based upon FEMA's review, specific language related to NFIP regulations was not consistent. Additionally, it was determined that better coordination was needed between the three sets of regulations that regulate development and construction in the floodplain. These regulations are: the NFIP implemented by local floodplain administrators, the New Jersey Flood Hazard Area Control Act (FHACA) implemented at the State level by the NJDEP, and the Uniform Construction Code (UCC) implemented by the local Construction Official. NJDEP used this feedback to develop a model Code Coordinated Ordinance and continues to work with municipalities to update flood damage prevention ordinances to the Code Coordinated Ordinance.</p>																
<b>Description of the Solution:</b>	<p>After obtaining the appropriate review and concurrence by the NFIP State Coordinator and the FEMA Regional Office, the municipality will update and adopt the Code Coordinated Ordinance.</p>																
<b>Estimated Cost:</b>	Staff time																
<b>Potential Funding Sources:</b>	Municipal budget																
<b>Implementation Timeline:</b>	Within 5 years																
<b>Goals Met:</b>	2, 5																
<b>Benefits:</b>	<p>The updated ordinance will improve floodplain management, meet NFIP requirements, and increase resilience of new and substantially improved structures in the floodplain.</p>																
<b>Impact on Socially Vulnerable Populations:</b>	<p>The action will result in better regulation of construction standards within the Special Flood Hazard Area where significant risk to socially vulnerable populations exists.</p>																
<b>Impact on Future Development:</b>	<p>The action will result in stronger regulation of construction standards for future development in the Special Flood Hazard Area.</p>																
<b>Impact on Critical Facilities/Lifelines:</b>	<p>Critical facilities and lifelines located in the Special Flood Hazard Area will be required to meet the same requirements as general building construction that are set forth in the ordinance.</p>																
<b>Impact on Capabilities:</b>	<p>This action will improve floodplain management capabilities through better outlining of responsibilities and administrative procedures.</p>																
<b>Climate Change Considerations:</b>	<p>The updated ordinance includes the State's higher standards that are in place to address heightened flood risk due to climate change such as those for floodway rise and mandatory freeboard have been incorporated in these new model ordinances.</p>																
<b>Mitigation Category</b>	<table><tr><td><input checked="" type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input checked="" type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
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<b>CRS Category</b>	<table><tr><td><input checked="" type="checkbox"/> Preventative Measures (PR)</td><td><input type="checkbox"/> Natural Resource Protection (NR)</td></tr><tr><td><input type="checkbox"/> Property Protection (PP)</td><td><input type="checkbox"/> Structural Flood Control Projects (SP)</td></tr><tr><td><input type="checkbox"/> Public Information (PI)</td><td><input type="checkbox"/> Emergency Services (ES)</td></tr></table>			<input checked="" type="checkbox"/> Preventative Measures (PR)	<input type="checkbox"/> Natural Resource Protection (NR)	<input type="checkbox"/> Property Protection (PP)	<input type="checkbox"/> Structural Flood Control Projects (SP)	<input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Emergency Services (ES)								
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<input type="checkbox"/> Property Protection (PP)	<input type="checkbox"/> Structural Flood Control Projects (SP)																
<input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Emergency Services (ES)																
<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
<b>Alternatives:</b>	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>Current problem exists</td></tr></table>	Action	Evaluation	No Action	Current problem exists												
Action	Evaluation																
No Action	Current problem exists																



	Modify existing flood damage prevention ordinance	Time intensive
	Leave NFIP	Residents lose flood insurance coverage





## Action 2025-MontagueTwp-12. Impact Resistant Windows and Shutters for Municipal Hall

<b>Lead Agency:</b>	Public Works		
<b>Supporting Agencies:</b>	Emergency Management		
<b>Hazard(s) of Concern:</b>	<div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Dam Failure  <input type="checkbox"/> Disease Outbreak  <input type="checkbox"/> Drought  <input type="checkbox"/> Earthquake  <input type="checkbox"/> Flood  <input type="checkbox"/> Geological Hazards  <input type="checkbox"/> Hazardous Materials </div> <div> <input checked="" type="checkbox"/> Hurricane  <input type="checkbox"/> Infestation  <input checked="" type="checkbox"/> Nor'easter  <input checked="" type="checkbox"/> Severe Weather  <input checked="" type="checkbox"/> Severe Winter Weather  <input type="checkbox"/> Wildfire </div> </div>		
<b>Description of the Problem:</b>	It is unknown if the windows of the municipal hall, located at 277 Clover Road, are impact resistant. Impact resistant windows provide a barrier during severe weather and severe winter weather events. High winds associated with these hazards can blow debris into windows, potentially endangering those inside the structure, as well as damaging the structure itself, if the windows are not impact resistant.		
<b>Description of the Solution:</b>	The Township will conduct a study to determine whether the windows of the Township hall are impact resistant. If not, the Township will retrofit municipal building with impact resistant windows and shutters.		
<b>Estimated Cost:</b>	High		
<b>Potential Funding Sources:</b>	HMGP, BRIC, USDA Community Facilities Grant Program, Township Budget		
<b>Implementation Timeline:</b>	Within 5 years		
<b>Goals Met:</b>	2, 6		
<b>Benefits:</b>	This action will protect the Municipal Hall, a critical facility and community lifelines, from wind damage associated with severe weather, severe winter weather, hurricanes, nor'easters, and any debris which the winds may elevate.		
<b>Impact on Socially Vulnerable Populations:</b>	The Municipal Hall may be utilized by the public. This action will protect the individuals and groups within this structure from outside impacts.		
<b>Impact on Future Development:</b>	Not applicable		
<b>Impact on Critical Facilities/Lifelines:</b>	This action will protect the Municipal Hall from potential wind damages caused by debris.		
<b>Impact on Capabilities:</b>	Not applicable		
<b>Climate Change Considerations:</b>	Climate change is likely to increase severe weather events such as hurricanes, nor'easters, winter storms, and winds. This action accounts for a likely increase in flying debris which may damage windows.		
<b>Mitigation Category</b>	<input type="checkbox"/> Local Plans and Regulations (LPR) <input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP) <input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP)		
<b>CRS Category</b>	<input type="checkbox"/> Preventative Measures (PR) <input checked="" type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES)		
<b>Priority</b>	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low		
<b>Alternatives:</b>	<b>Action</b>	<b>Evaluation</b>	
	No action	Current problem continues	
	Build new municipal hall	Costly, unnecessary	
	Replace all windows without conducting the study	May be unnecessary, costly	



## Action 2025-MontagueTwp-13.Firewise Program Participation

<b>Lead Agency:</b>	Fire Department		
<b>Supporting Agencies:</b>	Township Administration		
<b>Hazard(s) of Concern:</b>	<div><input type="checkbox"/> Dam Failure</div> <div><input type="checkbox"/> Disease Outbreak</div> <div><input type="checkbox"/> Drought</div> <div><input type="checkbox"/> Earthquake</div> <div><input type="checkbox"/> Flood</div> <div><input type="checkbox"/> Geological Hazards</div> <div><input type="checkbox"/> Hazardous Materials</div> <div><input type="checkbox"/> Hurricane</div> <div><input type="checkbox"/> Infestation</div> <div><input type="checkbox"/> Nor'easter</div> <div><input type="checkbox"/> Severe Weather</div> <div><input type="checkbox"/> Severe Winter Weather</div> <div><input checked="" type="checkbox"/> Wildfire</div>		
<b>Description of the Problem:</b>	Montague Township is located within the northwest corner of the State and sits along the Delaware River. Several state and national parks are located within the Township, providing acres of forested land. This creates an increased risk of wildfires to residents who border the forested areas.		
<b>Description of the Solution:</b>	The Township will follow the proper steps in applying for and becoming a Firewise community. This includes forming a board/committee, obtaining a wildfire risk assessment, developing an action plan, and hosting outreach events and programs. The Township will also create an education program and set up outreach meetings.		
<b>Estimated Cost:</b>	Low		
<b>Potential Funding Sources:</b>	Municipal Budget		
<b>Implementation Timeline:</b>	3 years		
<b>Goals Met:</b>	1, 2, 3, 4, 5		
<b>Benefits:</b>	The national Firewise USA recognition program provides a collaborative framework to help neighbors in a geographic area get organized, find direction, and take action to increase the ignition resistance of their homes and community and to reduce wildfire risks at the local level.		
<b>Impact on Socially Vulnerable Populations:</b>	Socially vulnerable populations in the Township may be located within very high and high fuel risk areas for wildfires. Participation in the Firewise Program will assist in the Township's efforts to educate populations on how to increase the ignition resistance of their home and property.		
<b>Impact on Future Development:</b>	Participation in this program requires a community wildfire assessment to be completed, which should be a community-wide view that identifies areas of successful wildfire risk reduction and areas where improvements could be made. This assessment may identify areas which the Township would like to restrict future development.		
<b>Impact on Critical Facilities/Lifelines:</b>	Participation in this program requires a community wildfire assessment to be completed, which should be a community-wide view that identifies areas of successful wildfire risk reduction and areas where improvements could be made, which could include relocating various critical facilities or lifelines.		
<b>Impact on Capabilities:</b>	This action will increase wildfire risk reduction and response capabilities for the Township.		
<b>Climate Change Considerations:</b>	Higher temperatures are expected to increase the amount of moisture that evaporates from land and water. These changes have the potential to lead to more frequent and severe droughts, which, in turn, increases the likelihood of wildfires.		
<b>Mitigation Category</b>	<div><input type="checkbox"/> Local Plans and Regulations (LPR)</div> <div><input type="checkbox"/> Structure and Infrastructure Project (SIP)</div> <div><input type="checkbox"/> Natural Systems Protection (NSP)</div> <div><input checked="" type="checkbox"/> Education and Awareness Programs (EAP)</div>		
<b>CRS Category</b>	<div><input type="checkbox"/> Preventative Measures (PR)</div> <div><input type="checkbox"/> Property Protection (PP)</div> <div><input checked="" type="checkbox"/> Public Information (PI)</div> <div><input type="checkbox"/> Natural Resource Protection (NR)</div> <div><input type="checkbox"/> Structural Flood Control Projects (SP)</div> <div><input type="checkbox"/> Emergency Services (ES)</div>		
<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low
<b>Alternatives:</b>	<b>Action</b>	<b>Evaluation</b>	
	No Action	The Township does not participate in the Firewise Program	
	Complete half of the program requirements	The Township would not be eligible to participate in the Firewise Program	



	Participate in the program, but do not utilize resources	The Township would miss opportunities to strengthen communication and safety skills
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## Action 2025-MontagueTwp-14. Delaware River Study

<b>Lead Agency:</b>	Engineering																
<b>Supporting Agencies:</b>	Floodplain Administrator																
<b>Hazard(s) of Concern:</b>	<table><tr><td><input type="checkbox"/> Dam Failure</td><td><input type="checkbox"/> Hurricane</td></tr><tr><td><input type="checkbox"/> Disease Outbreak</td><td><input type="checkbox"/> Infestation</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input type="checkbox"/> Nor'easter</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input type="checkbox"/> Severe Weather</td></tr><tr><td><input checked="" type="checkbox"/> Flood</td><td><input type="checkbox"/> Severe Winter Weather</td></tr><tr><td><input type="checkbox"/> Geological Hazards</td><td><input type="checkbox"/> Wildfire</td></tr><tr><td><input type="checkbox"/> Hazardous Materials</td><td></td></tr></table>			<input type="checkbox"/> Dam Failure	<input type="checkbox"/> Hurricane	<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation	<input type="checkbox"/> Drought	<input type="checkbox"/> Nor'easter	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Severe Weather	<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather	<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Hazardous Materials	
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<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation																
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<input type="checkbox"/> Earthquake	<input type="checkbox"/> Severe Weather																
<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather																
<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire																
<input type="checkbox"/> Hazardous Materials																	
<b>Description of the Problem:</b>	Montague Township is located within the northwest corner of the State and sits along the Delaware River. Properties located along the Delaware River are susceptible to flooding and damages.																
<b>Description of the Solution:</b>	Conduct a study along the riverbanks of the Delaware River to identify areas that need to be elevated or acquired to reduce flooding impacts. Once identified, cost-effective actions will be carried out.																
<b>Estimated Cost:</b>	Dependent on the number of identified structures needing to be elevated or acquired.																
<b>Potential Funding Sources:</b>	FEMA BRIC, HMGP, FMA, Township Budget																
<b>Implementation Timeline:</b>	5 years																
<b>Goals Met:</b>	1, 2																
<b>Benefits:</b>	This action will produce results to identify which parcels of land are susceptible to flooding from the Delaware River; furthermore, the action will reduce the flooding impacts felt by the Township from the Delaware River once cost-effective actions are identified and implemented.																
<b>Impact on Socially Vulnerable Populations:</b>	This action will assist socially vulnerable populations whose properties are impacted by flooding from the Delaware River. Furthermore, this action will assist in keeping roadways clear of flood waters for the populations which may need to attend medical appointments or require medical attention from first responders.																
<b>Impact on Future Development:</b>	This action will identify parcels of land which may be susceptible to flooding from the Delaware River. Should the Township choose to, these parcels could be selected for open space preservation and zoned to prevent any future development.																
<b>Impact on Critical Facilities/Lifelines:</b>	This action will assist in the reduction of roadway flooding from the Delaware River, permitting first responders to traverse the roadways safely.																
<b>Impact on Capabilities:</b>	Not applicable																
<b>Climate Change Considerations:</b>	A warmer atmosphere means storms have the potential to be more intense and occur more often, including increased periods of intense rain events.																
<b>Mitigation Category</b>	<table><tr><td><input checked="" type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input checked="" type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
<input checked="" type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)																
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<input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Emergency Services (ES)																
<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
<b>Alternatives:</b>	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No action</td><td>Current problem remains</td></tr><tr><td>Raise banks of creek to increase storage capacity</td><td>Cost prohibitive</td></tr><tr><td>Construct floodwall along creek</td><td>Cost prohibitive</td></tr></table>	Action	Evaluation	No action	Current problem remains	Raise banks of creek to increase storage capacity	Cost prohibitive	Construct floodwall along creek	Cost prohibitive								
Action	Evaluation																
No action	Current problem remains																
Raise banks of creek to increase storage capacity	Cost prohibitive																
Construct floodwall along creek	Cost prohibitive																



## Action 2025-MontagueTwp-15. Substantial Damage Management Plan

<b>Lead Agency:</b>	Floodplain Administrator		
<b>Supporting Agencies:</b>	Emergency Management, Building Department		
<b>Hazard(s) of Concern:</b>	<input checked="" type="checkbox"/> Dam Failure <input type="checkbox"/> Disease Outbreak <input type="checkbox"/> Drought <input checked="" type="checkbox"/> Earthquake <input checked="" type="checkbox"/> Flood <input checked="" type="checkbox"/> Geological Hazards <input checked="" type="checkbox"/> Hazardous Materials	<input checked="" type="checkbox"/> Hurricane <input checked="" type="checkbox"/> Infestation <input checked="" type="checkbox"/> Nor'easter <input checked="" type="checkbox"/> Severe Weather <input checked="" type="checkbox"/> Severe Winter Weather <input checked="" type="checkbox"/> Wildfire	
<b>Description of the Problem:</b>	<p>Officials in NFIP-participating communities are responsible for regulating all development in SFHAs by issuing permits and enforcing local floodplain requirements, including Substantial Damage, for the repairs of damaged buildings. After any disaster event, they must:</p> <ul style="list-style-type: none"> <li>Determine where the damage occurred within the community and if the damaged structures are in an SFHA.</li> <li>Determine what to use for "market value" and cost to repair; uniformly applying regulations will protect against liability and promote equitable administration.</li> <li>Determine if repairing plus improving the damaged structure equals or exceeds 50% of the structure's pre-damage value.</li> <li>Require permits for floodplain development.</li> </ul> <p>The municipality does not have a Substantial Damage Management Plan in place, nor do they have a formal process in place when conducting substantial damage determinations. The municipality is in need of a formal process and plan to provide a framework for conducting such inspections and determinations.</p>		
<b>Description of the Solution:</b>	<p>The municipality will develop a Substantial Damage Management Plan, following the six step planning process in 2021 Developing a Substantial Damage Management Plan (<a href="https://crsresources.org/files/500/developing_subst_damage_mgmt_plan.pdf">https://crsresources.org/files/500/developing_subst_damage_mgmt_plan.pdf</a>). This plan will outline responsibilities for Substantial Damage determinations, determining market value, and permit approval processes following a disaster event.</p>		
<b>Estimated Cost:</b>	Low		
<b>Potential Funding Sources:</b>	Municipal budget		
<b>Implementation Timeline:</b>	Within 5 years to develop the plan; ongoing to maintain and update the plan		
<b>Goals Met:</b>	2, 5		
<b>Benefits:</b>	This plan will provide a process in making Substantial Damage Determinations and allow the municipality to make these determinations and meet NFIP requirements more quickly.		
<b>Impact on Socially Vulnerable Populations:</b>	Substantially damaged structures are required to be rebuilt to be compliance with current codes. Socially vulnerable populations may not have the financial means to make these improvements. This action may allow for the identification of potential resources to address substantial damages to structures owned by socially vulnerable populations.		
<b>Impact on Future Development:</b>	A Substantial Damage Management Plan would include all existing, current, and future development in the municipality.		
<b>Impact on Critical Facilities/Lifelines:</b>	A Substantial Damage Management Plan would include all critical facilities and lifelines in the municipality.		
<b>Impact on Capabilities:</b>	This action improves disaster recovery capabilities.		
<b>Climate Change Considerations:</b>	Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action provides additional planning for disaster recovery.		
<b>Mitigation Category</b>	<input checked="" type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP)	
<b>CRS Category</b>	<input checked="" type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input checked="" type="checkbox"/> Emergency Services (ES)	
<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low
<b>Alternatives:</b>	<b>Action</b>	<b>Evaluation</b>	



	No Action	Current problem remains
	Rely on state or federal resources following disaster events	Resources may not be available during major widespread events
	Establish MOUs with outside agencies to conduct Substantial Damage Determinations	A plan outlining responsibilities is still necessary to prevent missing important requirements





## Action 2025-MontagueTwp-16. Steenycill Lake Dam Rehab

<b>Lead Agency:</b>	New Jersey Division of Parks and Forestry																
<b>Supporting Agencies:</b>	County Engineer, County OEM, NJDEP, Municipal Engineer																
<b>Hazard(s) of Concern:</b>	<table><tr><td><input checked="" type="checkbox"/> Dam Failure</td><td><input type="checkbox"/> Hurricane</td></tr><tr><td><input type="checkbox"/> Disease Outbreak</td><td><input type="checkbox"/> Infestation</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input type="checkbox"/> Nor'easter</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input type="checkbox"/> Severe Weather</td></tr><tr><td><input type="checkbox"/> Flood</td><td><input type="checkbox"/> Severe Winter Weather</td></tr><tr><td><input type="checkbox"/> Geological Hazards</td><td><input type="checkbox"/> Wildfire</td></tr><tr><td><input type="checkbox"/> Hazardous Materials</td><td></td></tr></table>			<input checked="" type="checkbox"/> Dam Failure	<input type="checkbox"/> Hurricane	<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation	<input type="checkbox"/> Drought	<input type="checkbox"/> Nor'easter	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Severe Weather	<input type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather	<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Hazardous Materials	
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<input type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather																
<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire																
<input type="checkbox"/> Hazardous Materials																	
<b>Description of the Problem:</b>	Steenycill Lake Dam is a Class I High Hazard Dam that is located on Steeny Kill Lake. The dam is owned by the New Jersey Division of Parks and Forestry. Failure of the dam could result in inundation of forested areas, recreational areas, and roadways including State Route 23. The dam was last inspected in 2022 and found to be in poor condition, meaning the risk of dam failure warrants an engineering evaluation to determine if retrofits of the dam would result in safer conditions.																
<b>Description of the Solution:</b>	The Municipal Engineer will work with the New Jersey Division of Parks and Forestry to complete an engineering study of Steenycill Lake Dam. The Township will also request information and input from its Public Works/Highway department and the County regarding impacted roadways. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the Township and the New Jersey Division of Parks and Forestry will pursue funding support, permit approval from NJDEP, and implement the cost-effective measures.																
<b>Estimated Cost:</b>	High																
<b>Potential Funding Sources:</b>	FEMA BRIC, HHPD																
<b>Implementation Timeline:</b>	Within 5 years																
<b>Goals Met:</b>	1, 2, 8																
<b>Benefits:</b>	This action will improve the safety and security of those who live within the dam inundation areas of the dams and increase the resilience of responding agencies.																
<b>Impact on Socially Vulnerable Populations:</b>	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to socially vulnerable populations exists.																
<b>Impact on Future Development:</b>	Future development located in or near the dam inundation area will be further protected from a dam failure event.																
<b>Impact on Critical Facilities/Lifelines:</b>	Dams are considered a critical facility. This action will create an understanding of the safety procedures in place for each identified dam and strengthen the structural integrity of dam, as needed.																
<b>Impact on Capabilities:</b>	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.																
<b>Climate Change Considerations:</b>	Climate change may result in an increase in the frequency and severity of weather-related disaster events, which may contribute to the likelihood of a dam failure event due to projected increases in precipitation. This action will increase the capabilities to respond to these events.																
<b>Mitigation Category</b>	<table><tr><td><input type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
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<b>CRS Category</b>	<table><tr><td><input type="checkbox"/> Preventative Measures (PR)</td><td><input type="checkbox"/> Natural Resource Protection (NR)</td></tr><tr><td><input type="checkbox"/> Property Protection (PP)</td><td><input checked="" type="checkbox"/> Structural Flood Control Projects (SP)</td></tr><tr><td><input type="checkbox"/> Public Information (PI)</td><td><input type="checkbox"/> Emergency Services (ES)</td></tr></table>			<input type="checkbox"/> Preventative Measures (PR)	<input type="checkbox"/> Natural Resource Protection (NR)	<input type="checkbox"/> Property Protection (PP)	<input checked="" type="checkbox"/> Structural Flood Control Projects (SP)	<input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Emergency Services (ES)								
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<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
<b>Alternatives:</b>	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>Current problem continues</td></tr><tr><td>Decommission Dam</td><td>High cost, flood risk for nearby infrastructure increased, loss of Steeny Kill Lake as an environmental and recreational resource.</td></tr></table>	Action	Evaluation	No Action	Current problem continues	Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss of Steeny Kill Lake as an environmental and recreational resource.										
Action	Evaluation																
No Action	Current problem continues																
Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss of Steeny Kill Lake as an environmental and recreational resource.																



	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions
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