



1.0 TOWN OF WEST MILFORD

This jurisdictional annex to the Passaic County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of West Milford 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 West Milford, describes who participated in the planning process, assesses West Milford’s risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

1.1 HAZARD MITIGATION PLANNING TEAM

The Town of West Milford identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments. The OEM Coordinator represented the community on the Passaic 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 2-1 summarizes Town officials who participated in the development of the annex and in what capacity. Additional documentation of the Town’s planning activities through Planning Partnership meetings is included in Volume I.

Table 2-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Michael Moscatello, OEM Coordinator Address: 1480 Union Valley Road, West Milford, NJ 07480 Phone Number: (973) 349-7139 Email: Fireoffice2@westmilford.org	Name/Title: Michael Weber, OEM Deputy Coordinator Address: 1480 Union Valley Road, West Milford, NJ 07480 Phone Number: (973) 513-2639 Email: m.weber@wmtpd.org
National Flood Insurance Program Floodplain Administrator	
Name/Title: Michael Gerst, Zoning Address: 1480 Union Valley Road, West Milford, NJ 07480 Phone Number: (973) 728-2759 Email: zoning@westmilford.org	
Additional Contributors	
Name/Title: Michael Moscatello, OEM Coordinator Method of Participation: Provided key input in the planning process by completing worksheets	
Name/Title: Timothy Ligus, Construction Official Method of Participation: Provided key input in the planning process by completing worksheets	
Name/Title: Method of Participation:	
Name/Title: Method of Participation:	
Name/Title: Method of Participation:	



Primary Point of Contact	Alternate Point of Contact
Name/Title: Method of Participation:	

1.2 COMMUNITY PROFILE

1.2.1 Brief History

The Township of West Milford became an incorporated municipality in 1834 from Pompton Township, which was part of Bergen County at the time. In 1937, the Township was incorporated into Passaic County.

1.2.2 Location

According to the U.S. Census Bureau, the Township has a total land area of 80.316 square miles, of which 75.09 square miles is land and 5.226 square miles is water.

1.2.3 Governing Body Format

West Milford is governed by the Mayor/Council/Administrator form of government under the Faulkner Act. In this format, an elected Mayor and Council shall govern a municipality with an appointed Municipal Administrator. The Council consists of the Mayor and six Council people. The Mayor serves a four-year term, and each Council member serves staggered three-year terms with two council seats up for election each year.

1.2.4 Population and Social Vulnerability

According to the U.S. Census, the 2020 population for West Milford was 24,862, a 3.8 percent decrease from the 2010 Census.

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 2020 U.S. Census indicates that 6.6 percent of the population is 5 years of age or younger, 18.8 percent is 65 years of age or older, 1.1 percent is non-English speaking, 3 percent is below the poverty threshold, and 8 percent is considered disabled.

ALICE in Passaic County

ALICE is an acronym for Asset Limited, Income Constrained, Employed – households that earn more than the Federal Poverty Level, but less than the basic cost of living for the County. While conditions have improved for some households, many continue to struggle, especially as wages fail to keep pace with the rising cost of household essentials (housing, child care, food, transportation, health care, and a basic smartphone plan). Households below the ALICE Threshold – ALICE households plus those in poverty – can't afford the essentials.

According to 2021 Point-in-Time-Data from ALICE, 32 percent of the 177,063 households in Passaic County are ALICE households (compared to the state average of 26 percent). The median household income in Passaic is \$75,430, and the County sees a labor force participation rate of 66 percent. Passaic County faces low household



income compared to the state average of \$89,296, and is on par with the state average of 66 percent for labor force participation rates. 15 percent of Passaic households live in poverty, which exceeds the state average of 10 percent.

1.3 JURISDICTIONAL CAPABILITY ASSESSMENT AND INTEGRATION

West Milford 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 West Milford to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

1.3.1 Planning and Regulatory Capability and Integration

Table 2-2 summarizes the planning and regulatory tools that are available to West Milford.



Table 2-2. 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
CODES, ORDINANCES, & REGULATIONS				
Building Code	Yes	Chapter 94 – Unfit Buildings; Chapter 110 – Construction Codes, Uniform	Local	Building Department
<p>How has or will this be integrated with the HMP and how does this reduce risk? Chapter 94: Permits to the fullest extent feasible the use of modern technical methods, devices and improvements, including premanufactured systems, consistent with reasonable requirements for the health, safety and welfare of occupants or users of buildings and structures.</p> <p>Chapter 110: There is hereby established in the Township a State Uniform Construction Code enforcing agency to be known as the "West Milford Township Uniform Construction Code Enforcing Agency," consisting of a Construction Official, building subcode official, plumbing subcode official, electrical subcode official, fire protection 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.</p>				
Zoning/Land Use Code	Yes	Chapter 500 - Zoning	Local	Planning and Zoning
<p>How has or will this be integrated with the HMP and how does this reduce risk? Power to zone, requires all jurisdictions to have current zoning and other land development ordinances after the planning board has adopted the land use element and master plan.</p>				
Subdivision Code	Yes	Chapter 470 – Subdivision of Land and Site Plan Review	Local	Planning and Zoning
<p>How has or will this be integrated with the HMP and how does this reduce risk? Provides for the regulation of land subdivision in the Township and to establish rules, regulations and standards governing such land subdivision in order to promote the public health, safety, convenience, and general welfare of the Township.</p>				
Site Plan Code	Yes	Chapter 470 – Subdivision of Land and Site Plan Review	Local	Planning and Zoning
<p>How has or will this be integrated with the HMP and how does this reduce risk? The board of commissioners of any county having a county planning board shall provide for the review of all subdivisions of land within the county-by-county planning board and for the approval of those subdivisions affecting county road or drainage facilities. 40:27-6.10: Each municipal clerk shall file with the county planning board a copy of the planning and zoning ordinances of the municipality and shall notify the county planning board of the introduction of any revision or amendment of such an ordinance which affects lands adjoining county roads or other county lands, or lands lying within 200 feet of a municipal boundary, or proposed facilities or public lands shown on the county master plan or official county map.</p>				
Stormwater Management Code	Yes	Chapter 325 – Stormwater Management, 2006	Local	DPW
<p>How has or will this be integrated with the HMP and how does this reduce risk? The Stormwater Management Chapter contains restrictions to limit waste disposal in storm sewers, prohibit illicit connections, etc.</p>				
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
<p>How has or will this be integrated with the HMP and how does this reduce risk? N/A</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
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 information about the flood risk of the property and is used by flood insurance providers to determine the appropriate insurance rating for the property.
- 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?
- 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?

This law went into effect in March 2024 during the planning process of this plan update.



	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
Growth Management How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-
Environmental Protection Ordinance(s) How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-
Flood Damage Prevention Ordinance How has or will this be integrated with the HMP and how does this reduce risk? 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: <ul style="list-style-type: none"> A. Protect human life and health; B. Minimize expenditure of public money for costly flood control projects; C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; D. Minimize prolonged business interruptions; E. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, bridges located in areas of special flood hazard; 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; G. Ensure that potential buyers are notified that property is in an area of special flood hazard; and H. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions. The ordinance does not follow the latest model code coordinated ordinance from NJDEP and will require update.	Yes	Chapter 158 – Flood Damage Prevention, 2020	Local	Planning and Zoning
Wellhead Protection How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-
Emergency Management Ordinance How has or will this be integrated with the HMP and how does this reduce risk? An Emergency Management Council, with powers and duties prescribed by general law, is hereby created in the Township and, within the limits of appropriation, shall establish an adequate organization to assist in supervising and coordinating the civilian defense and disaster control activities of the Township. The Council shall consist of no more than 15 persons, who shall be appointed by and who shall serve at the pleasure of the Council. They shall receive no compensation.	Yes	Article 9, Section 15 – Office of Emergency Management	Local	OEM
Climate Change Ordinance How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-
Other How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-



	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
PLANNING DOCUMENTS				
General/Comprehensive Plan	Yes	Highlands Preservation Area Master Plan, 2012	Local	Planning Board
<p>How has or will this be integrated with the HMP and how does this reduce risk? This Plan Element further establishes the open space and environmental preservation goals and objects set forth in the Master Plan and Open Space Plan. In addition to the similar goals between the plans, this Plan Element also promotes the remediation and redevelopment of Brownfield sites where applicable, in place of new developments. The Element also addresses the preservation of the natural environment for stormwater and flood water retention and the difficulties with development on steep slopes and carbonate formations.</p> <p>The West Milford Planning Board adopted an Amendment to the Master Plan Land Use Element on October 28, 2010 with a limited focus to rezone a higher density residential district to a low-density density zone.</p> <p>The Township's Master Plan Land Use Plan Element was updated in December 2017 as a basis for a thorough review and revision of the Township's zone plan and zoning ordinance. Objectives include:</p> <ul style="list-style-type: none"> • Provide methods for reducing storm water runoff and its impact through best storm water management practices • Appropriately zone vacant land adjacent to open bodies of water for minimal development impact • Protect areas of high groundwater recharge value 				
Capital Improvement Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? N/A				
Disaster Debris Management Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? N/A				
Floodplain Management or Watershed Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? N/A				
Stormwater Management Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? N/A				
Stormwater Pollution Prevention Plan	Yes	West Milford Stormwater Pollution Prevention Plan	Local	DPW/Engineering
<p>How has or will this be integrated with the HMP and how does this reduce risk? The plan describes long-term operation and maintenance measures for existing and future stormwater facilities. It also identifies specific stormwater management measures to decrease the impact of existing development. The goals of the plan include reducing flood damage, including life and property (same goal as the HMP); minimize any increase in stormwater runoff from new development; assure the adequacy of existing and proposed culverts and bridges and other in-stream structures. The plan indicates the Township inspects high-risk areas after every major rainstorm.</p>				
Open Space Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? N/A				
Urban Water Management Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? N/A				



	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
Habitat Conservation Plan How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-
Economic Development Plan How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-
Community Wildfire Protection Plan How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-
Community Forest Management Plan How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-
Transportation Plan How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-
Agriculture Plan How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-
Climate Action/ Resilience/Sustainability Plan How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-
Tourism Plan How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-
Business/ Downtown Development Plan How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-
Other How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-
RESPONSE/RECOVERY PLANNING				
Emergency Operations Plan How has or will this be integrated with the HMP and how does this reduce risk? This plan establishes procedures to follow during hazard events to optimize response capabilities and minimize potential damage or harm.	Yes	Town of West Milford Emergency Operations Plan	Local	OEM
Continuity of Operations Plan How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-



	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
Substantial Damage Response Plan How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-
Threat and Hazard Identification and Risk Assessment How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-
Post-Disaster Recovery Plan How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-
Public Health Plan How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-
Other How has or will this be integrated with the HMP and how does this reduce risk? N/A	No	-	-	-

1.3.2 Development and Permitting Capability

Table 2-3 summarizes the capabilities of West Milford to oversee and track development.

Table 2-3. Development and Permitting Capability

	Yes/No	Comment
Do you issue development permits? <ul style="list-style-type: none"> If you issue development permits, what department is responsible? If you do not issue development permits, what is your process for tracking new development? 	Yes N/A	- Building Department/ Planning Board/ZBA/ Environmental Commission/ Highlands Commission Approval
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	-
Do you have a buildable land inventory? <ul style="list-style-type: none"> If you have a buildable land inventory, please describe 	Yes N/A	- Buildable land inventory (2009). Opportunity for future development is limited by environmental factors/Highlands.
Describe the level of buildout in your jurisdiction.	N/A	Intersects with the Highlands Preservation Area, when limits the ability to develop land.

1.3.3 Administrative and Technical Capability

Table 2-4 summarizes potential staff and personnel resources available to West Milford and their current responsibilities that contribute to hazard mitigation.



Table 2-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
ADMINISTRATIVE CAPABILITY		
Planning Board	Yes	<p>The Planning Board shall have the powers listed below in addition to other powers established by law:</p> <ul style="list-style-type: none"> (a) Make, adopt and from time to time amend the Township Master Plan for the physical development of the Township, including any areas outside its boundaries which, in the Planning Board's judgment, bear essential relation to the planning of the Township. (b) Subdivision control and site plan review and approval pursuant to this Land Development Ordinance. (c) Review and comment on the Official Map of the Township prior to its adoption by the Township Council, pursuant to N.J.S.A. 40:55D-25a. (d) Participate in the preparation and review of programs or plans required by state or federal law or regulation. (e) Assemble data on a continuing basis as part of a continuous planning process. (f) Annually prepare a program of municipal capital improvements projects projected over a term of six years and amendments thereto and recommend same to the Township Council. (g) Consider and report to the Township Council within 35 days after referral regarding any proposed development regulation submitted to it and also pass upon other matters specifically referred to the Planning Board by the Township Council.
Zoning Board of Adjustment	Yes	<p>The Board of Adjustment shall have the power to:</p> <ul style="list-style-type: none"> (a) Hear and decide appeals where it is alleged by the appellant that there is error in any order, requirement, decision or refusal made by the administrative officer based or made in the enforcement of any provision of the Land Development Ordinance. (b) Hear and decide, in accordance with the provisions of the Land Development Ordinance, requests for interpretation of the Official Map or Chapter 500, Zoning, or for decisions upon other special questions upon which the Board is authorized to pass by any ordinance or Official Map. (c) Variance of area or yard requirements.
Planning Department	Yes	<p>One of the Comprehensive Planning Division's main functions is to accept development applications for either the Planning Board or Zoning Board of Adjustment. The applications are reviewed for compliance with Township ordinances and the Planning staff makes recommendations as to the plan's feasibility to the respective Boards.</p>



Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Environmental Commission oversees the Wetlands Environmental Center on Maple Road, which is maintained by the Township. We also have collected downloadable information on the impact of our day-to-day activities on stormwater quality and other water issues. The Commission applies for and receives grants from various agencies, among which are the Association of New Jersey Environmental Commissions (ANJEC), the New Jersey Department of Environmental Protection Division of Watershed Management, as well as the Division of Forestry.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	The Economic Development Commission serves as an advisory body to the Township Council and strive to promote economic development activities within the Township.
Public Works/Highway Department	Yes	<p>The Division of Public Property is responsible for maintenance of all public owned buildings.</p> <p>The Division of Streets and Roads maintains and repairs approximately 160 miles of Township streets and roads, including street sweeping, installation of street signs, pavement markings, road repairs, and roadside brush cutting for sight distance. This division is also responsible for installation and maintenance of drainage systems including storm sewers (catch basins).</p> <p>The Division of Snow Removal is responsible for winter storm operations including snow plowing and deicing of roadways.</p> <p>The Division of Fleet Maintenance is responsible for maintenance of all Township vehicles and equipment including Police, DPW and Fire apparatus.</p>
Construction/Building/Code Enforcement Department	Yes	The Building Department is responsible for the enforcement of the Uniform Construction Code as required by the State of New Jersey, as well as for the enforcement of municipal zoning regulations.
Emergency Management/Public Safety Department	Yes	<p>Police Department and Fire Prevention</p> <p>The Fire Marshal and Fire Inspectors are responsible for the enforcement of the New Jersey State Uniform Fire Code, National Fire Protection Association Standards, and Local Ordinances.</p> <p>As well as providing routine patrol, the Police Department has specialized units. The units are a Specialized Operations Unit, Firearms Instructors, Alcohol Beverage Control Unit and an Accident Investigation Unit.</p>



Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	Yes	Police, Fire, EMS, OEM
Human Resources Manual - Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?	No	-
Other	Yes	The Historic Preservation Commission promotes the protection of certain architecturally, historically and archaeologically significant structures, sites or districts for the general welfare of its citizenry.
TECHNICAL/STAFFING CAPABILITY		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Building Dept, Fire Prevention, OEM
Personnel skilled or trained in GIS and/or Hazus applications	Yes	Engineer and IT using GIS for fire inspections
Staff that work with socially vulnerable populations or underserved communities	No	-
Environmental scientists familiar with natural hazards	No	-
Surveyors	No	-
Emergency manager	Yes	Municipal Emergency Management Coordinator
Grant writers	Yes	Township has contracted with a grant writer to seek and write grants for all agencies.
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

1.3.4 Fiscal Capability

Table 2-5 summarizes financial resources available to West Milford.



Table 2-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvement project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
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])	No

1.3.5 Education and Outreach Capability

Table 2-6 summarizes the education and outreach resources available to West Milford.

Table 2-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment
Public information officer or communications office	Yes	Director of Public Safety or Designee
Personnel skilled or trained in website development	Yes	IT Administrator
Hazard mitigation information available on your website	Yes	Links to FEMA flood maps/NJOEM
Social media for hazard mitigation education and outreach	Yes	Facebook
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Environmental Commission, Lakes Committee
Warning systems for hazard events	Yes	Nixle, Reverse911, Municipal Website, social media, local TV station
Natural disaster/safety programs in place for schools	No	
Organizations that conduct outreach to socially vulnerable populations and underserved populations	No	
Public outreach mechanisms / programs to inform citizens on natural hazards, risk, and ways to protect themselves during such events	Yes	The Township's Cable TV Commission coordinates the dissemination of municipal information and events through the Township of West Milford's public, educational and governmental access cable channel, West Milford TV 77.



1.3.6 Community Classifications

Table 2-7 summarizes classifications for community programs available to West Milford.

Table 2-7. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	3	March 2014
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	6	-
National Weather Service StormReady Certification	No	-	-
Firewise Communities classification	No	-	-
New Jersey Sustainable Jersey Community	Yes	-	February 2009
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

N/A = Not applicable

— = Unavailable

1.3.7 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 2-8 summarizes the adaptive capacity for each identified hazard of concern and the Town’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 2-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak
Dam Failure	Moderate
Drought	Moderate
Geological Hazards	Moderate
Extreme Temperature	Moderate
Flood	Moderate
Severe Weather	Moderate
Severe Winter Weather	Moderate
Wildfire	Moderate



1.4 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 2-1 is responsible for maintaining this information.

1.4.1 NFIP Statistics

Table 2-9 summarizes the NFIP policy and claim statistics for West Milford.

Table 2-9. West Milford NFIP Summary of Policy and Claim Statistics

# Claims (Losses)	62
Total Loss Payments	\$1,297,068
# Repetitive Loss Properties (NFIP definition)	10
# Repetitive Loss Properties (FMA definition)	3
# Severe Repetitive Loss Properties (NFIP definition)	3
# Severe Repetitive Loss Properties (FMA definition)	3

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: NJOEM 2024

1.4.2 Flood Vulnerability Summary

Table 2-10 provides a summary of the NFIP program in West Milford.

Table 2-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	Belchers Creek
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
How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	Unknown



NFIP Topic	Comments
Are any RiskMAP projects currently underway in your jurisdiction? If so, state what projects are underway.	No
How do you make Substantial Damage determinations?	Building Department Review & Inspections
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.	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	Zoning Department
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?	No
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?	Yes Floodplain Management Training
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Permit reviews, inspections, engineering
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Building Department review & inspections
What are the barriers to running an effective NFIP program in the community, if any?	Training
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?	Ch. 158 Section 158-1-20
What is the date that your flood damage prevention ordinance was last amended?	2020
Does your floodplain management program meet or exceed minimum requirements? If exceeds, in what ways?	Does not meet, but will once the Town adopts the Code Coordinated Ordinance
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?	Planning & Zoning consider storm water & FHH zones



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

1.5 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 2-11 through Table 2-13.

Table 2-11. 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
2020				
Total Permits	10	0	0	10
Permits within SFHA	0	0	0	0
2021				
Total Permits	12	0	0	12
Permits within SFHA	0	0	0	0
2022				
Total Permits	15	0	0	15
Permits within SFHA	0	0	0	0
2023				
Total Permits	12	0	1	13
Permits within SFHA	0	0	0	0

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

Table 2-12. Recent Major Development and Infrastructure from 2017 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
None Identified					

* Only location-specific hazard zones or vulnerabilities identified.



Table 2-13. 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
None Identified					

1.6 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 West Milford’s risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

1.6.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Town are shown in Figure 2-1 through Figure 2-2. 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 West Milford has significant exposure. The maps show the location of potential new development, where available.



Figure 2-1. West Milford NEHRP Hazard Area Extent and Location Map

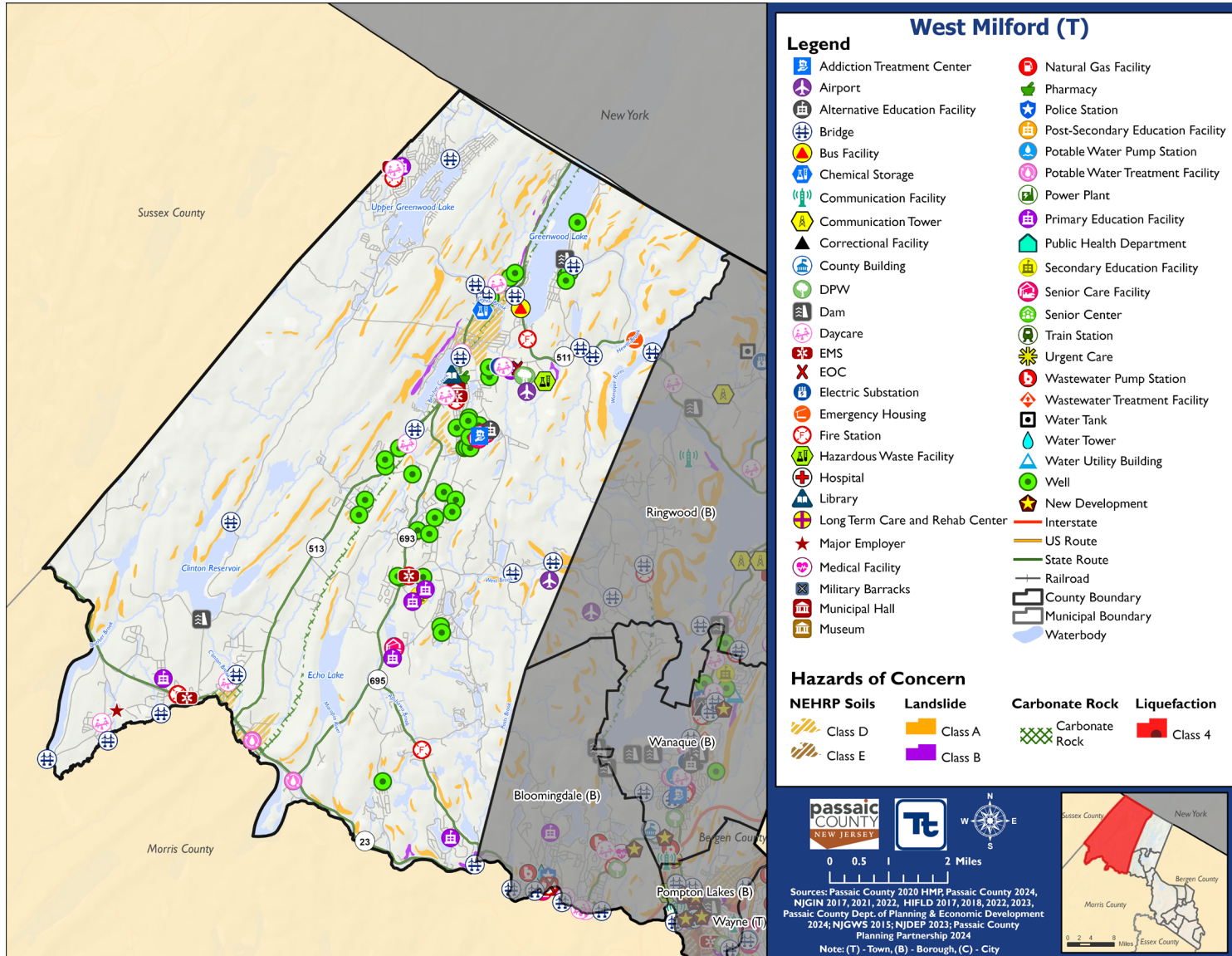
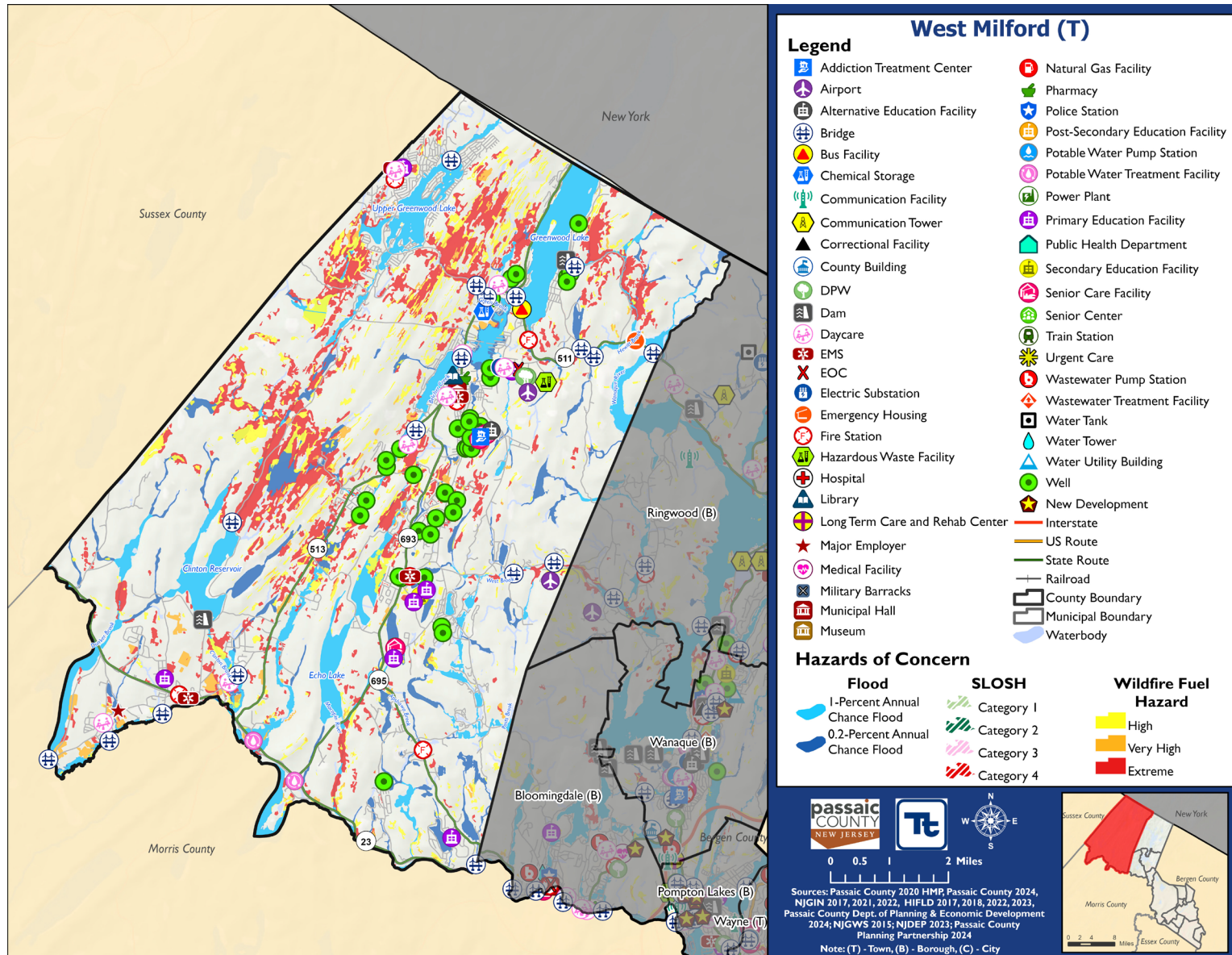




Figure 2-2. West Milford Flood and Wildfire Hazard Area Extent and Location Map





1.6.2 Hazard Event History

The history of natural and non-natural hazard events in West Milford is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 2-14 provides details on loss and damage in West Milford during hazard events since the last hazard mitigation plan update.

Table 2-14. Hazard Event History in West Milford

Dates of Event	Event Type (Disaster Declaration)	County Designated?	Summary of Event	Summary of Damage and Losses in West Milford
December 17-23, 2023	Flood	N/A	Over 5 inches of rainfall resulted in major flooding and power outages in the region. State of emergency and evacuations were declared during the initial storm and subsequent riverine flooding.	No major closures. Some roadway closures due to minor flooding.
April 12-15, 2023	Fire	N/A	Kanouse Mountain wildfires. 972 + acres of forest land burned. Fire resulted in some residential evacuations and over 100 livestock animals.	Roadway closures, 972+ acres of wildland destroyed, large amount of Local, County, and state resources utilized.
January 20, 2020 – May 11, 2023	Covid-19 Pandemic (EM-3451-NJ, DR-4488-NJ)	Yes	As of September 26, 2023, Passaic County accounted for 7,530 positive cases of COVID-19, and 32 reported deaths (State of New Jersey, 2023).	Temporary closure of non-essential municipal offices. Township sustained some revenue losses. Some essential personnel out due to being infected. Local state of emergency declared. Costs incurred for PPE and decontamination supplies for all municipal services.
September 1-3, 2021	Remnants of Hurricane Ida (EM-3573-NJ, DR-4614-NJ)	Yes	The remnants of Hurricane Ida produced heavy rainfall and riverine and flash floods. Rainfall totals exceed 3 inches in parts of County; 4 water rescues occurred due to flash flooding.	The Township had numerous roadway closures.

EM = Emergency Declaration (FEMA)

FEMA = Federal Emergency Management Agency

DR = Major Disaster Declaration (FEMA)

N/A = Not applicable

1.6.3 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 West Milford .



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. West Milford 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 Town indicated the following:

- The Town updated the Wildfire ranking from Low to Medium due to the significant amount of wildfire fuel present in the jurisdiction. Additionally, in November 2024, during the planning process, the Town of West Milford was affected by the Jennings Creek Wildfire, which spread rapidly due to extremely dry conditions at the time.

Table 2-15 shows West Milford’s final hazard rankings for identified hazards of concern. Mitigation action development uses the ranking to target hazards with the highest risk.

Table 2-15. Hazard Ranking

Hazard	Rank
Dam Failure	Medium
Drought	Medium
Geological Hazards	Low
Extreme Temperature	Medium
Flood	Medium
Severe Weather	Medium
Severe Winter Weather	Medium
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 2-16 identifies critical facilities in the community located in the 1 percent and 0.2 percent annual chance floodplains.

Table 2-16. Critical Facilities Flood Vulnerability

Name	Type	Vulnerability	
		1% Annual Chance Event	0.2% Annual Chance Event
1600049	Bridge	X	X
1600175	Bridge	X	X
1600247	Bridge	X	X
1600255	Bridge	X	X
1600368	Bridge	X	X



Name	Type	Vulnerability	
		1% Annual Chance Event	0.2% Annual Chance Event
1600430	Bridge	X	X
1600432	Bridge	X	X
1600446	Bridge	-	X
1600460	Bridge	X	X
1600467	Bridge	X	X
1600033 (P)1400140 (M)	Bridge	X	X
1600036 (P)1400323 (M)	Bridge	X	X
1600037 (P)1400957 (M)	Bridge	X	X
1600038 (P)1400956 (M)	Bridge	X	X
Well P2	Well	-	X
Well T3	Well	-	X

Source: Passaic County 2020 HMP, Passaic County 2024, NJGIN 2017, 2021, 2022, HIFLD 2017, 2018, 2022, 2023, Passaic County Dept. of Planning & Economic Development 2024

In addition to critical facilities that are exposed to flooding, the Town of West Milford contains at least one high hazard dam; however, this information is considered sensitive by the County and site-specific information is not provided.

1.6.4 Identified Issues

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

- 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 13 repetitive loss properties and three severe repetitive loss, but other nearby properties may be impacted by flooding as well.
- The following critical facilities are municipally owned and located in the special flood hazard area:
 - Highway Bridge:1600049
 - Highway Bridge:1600175
 - Highway Bridge:1600247
 - Highway Bridge:1600255
 - Highway Bridge:1600368
 - Highway Bridge:1600430
 - Highway Bridge:1600432
 - Highway Bridge:1600446
 - Highway Bridge:1600460
 - Highway Bridge:1600467
 - Highway Bridge:1600033 (P)1400140 (M)
 - Highway Bridge:1600036 (P)1400323 (M)



- Highway Bridge:1600037 (P)1400957 (M)
- Highway Bridge:1600038 (P)1400956 (M)
- Well P2
- Well T3
- Major disaster events can result in large amounts of debris that overwhelm normal trash collection operations. Depending on the amount generated, temporary staging areas for debris collection may be needed. The municipality does not have a disaster debris management plan in place. During a disaster that results in debris, a plan with outlined responsibilities is needed to adequately address post-disaster cleanup operations.
- 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.
- There are multiple dams, which are critical infrastructures, located in the 1- and 0.2-percent flood hazard areas. The Town also has multiple high-hazard potential dams located in the Town, including: the Echo Lake Spillway Dam, Greenwood Lake Dam, River Wall Dam, Upper Mount Glen Lake Dam, Macopin Reservoir Dam, Green Turtle Pond Dam, Upper Greenwood Lake Dam, Lookover Lake Dam, West Milford Lake Dam, Charlotteburg Dam, Gordon Lakes Dam, Echo Lake Intake Dam, Clinton Reservoir Dam, Lake Arcadia Dam #1, Pinecliff Lake Dam, and Lindy's Dam. These structures have the potential to impact those living nearby.
- The Town has many high hazard potential dams as well as other dams that may lead to flooding, property damage, and loss of life in a potential dam failure situation.
- The bridge condition rating is poor, and the streambank is eroding and may need to be reconstructed. Project has been delayed due to legal issues.
- The Town has some critical facilities that do not have permanent backup power and the Town needs to compile a list of facilities that need backup power. The Town also needs to install a generator at the Rec Center so it can continue to operate as a hazard shelter for the Town.
- The Town has not updated NJDEP's model Code Coordinated Ordinance and will need to adopt it to comply with the NFIP.

1.7 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.

1.7.1 Past Mitigation Action Status

Table 2-17 indicates progress on the Town's mitigation strategy identified in the 2020 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.



1.7.2 Additional Mitigation Efforts

In addition to the mitigation actions completed in Table 2-17, West Milford did not identify additional mitigation efforts completed since the last plan.



Table 2-17. 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.
2020-West Milford-001		Flood	Township Emergency Manager	Perform a feasibility study to determine the vulnerability of properties in the dam inundation area as well as potential mitigation actions and implement the most cost-effective solution.	1.No Progress 2.	1.Include 2. Flooding, property damage, and loss of life potential in the event of a dam failure 3. N/A
2020-West Milford-002		Flood	Township Engineer	Harden the bridge and implement streambank stabilization to reduce or eliminate the potential increased flooding.	1.In Progress 2.	1.Include 2. Bridge condition rating is poor. Streambank is eroding and may need to be reconstructed. Bridge is under capital improvement. Project is delayed due to legal issues. This is increasing potential for flooding of nearby structures 3. N/A
2020-West Milford-003			NFIP Floodplain Administrator	Conduct outreach to flood-prone property owners, including RL/SRL property owners and in the vicinity of Belcher's Creek, and provide information on mitigation acquisitions. After	1.No Progress 2.	1.Include 2. Township has flood prone properties of which some are repetitive loss properties including homes near Belchers Creek that experience intermittent flooding 3. N/A



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.
				interest is identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition in the flood prone area that experience frequent flooding (high risk areas).		
2020-West Milford-004		Flood	Township Engineer	Evaluate the current condition of the dam and determine what mitigation is needed to increase life/health/safety and property protection should there be a failure. Identify mitigation alternatives and apply for funding, if needed, to implement and harden the dam.	1.In Progress 2.	1.Include 2. Dam failure would lead to life safety and flood issues. 3. N/A
2020-West		Flood	Township Engineer	Increase the capacity of the	1.No Progress 2.	1.Discontinue 2.N/A



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.
Milford-005				drainage system on Cherry Ridge Road to alleviate roadway flooding during heavy rain events		3. This is no longer an issue for the Township.
2020-West Milford-006		All Hazards	Township Engineer; Emergency Coordinator	Install permanent generators at critical facilities and lifelines including the Rec Center (all-hazard shelter)	1. In Progress 2.	1. Include 2. Critical facilities and lifelines need permanent generators to ensure continuity of operations at the time of disaster. This includes the Rec Center which is the all-hazard shelter for the Township 3. N/A



1.7.3 Proposed Hazard Mitigation Actions for the HMP Update

West Milford 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 West Milford 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 Town priorities.

Table 2-18 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 2-19 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.



Table 2-18. 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
Drought	X	X			X					X
Geological Hazards	X	X			X					X
Extreme Temperature	X	X			X					X
Flood	X	X			X	X			X	X
Severe Weather	X	X			X	X				X
Severe Winter Weather	X	X			X					X
Wildfire	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 2-19. 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	
Action 2025-WestMilfordT-001	Repetitive Loss Property Mitigation	1	1	1	1	1	0	1	1	1	1	1	1	0	1	12	High
Action 2025-WestMilfordT-002	Critical Facilities in the Floodplain	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
Action 2025-WestMilfordT-003	Disaster Debris Management Plan	0	1	1	1	1	0	1	1	1	1	1	1	0	1	11	High
Action 2025-WestMilfordT-004	Substantial Damage Management Plan	0	1	1	1	1	0	1	1	1	1	1	1	0	1	11	High
Action 2025-WestMilfordT-005	Dam Owner Partnership	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
Action 2025-WestMilfordT-006	Dam Inundation Feasibility Study	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High
Action 2025-WestMilfordT-007	Bridge Mitigation	1	1	1	1	1	0	1	1	1	1	1	1	0	1	12	High
Action 2025-WestMilfordT-008	Generators at Critical Facilities	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High

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



Action 2025-WestMilfordT-001. Repetitive Loss Property Mitigation

Lead Agency:	Planning	
Supporting Agencies:	Building Department	
Hazard(s) of Concern:	Severe Storm, Flood	
Description of the Problem:	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 13 repetitive loss properties and three severe repetitive loss, but other nearby properties may be impacted by flooding as well.	
Description of the Solution:	Conduct outreach to 30 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).	
Estimated Cost:	Staff Time	
Potential Funding Sources:	BRIC, FMA, HMGP, match from property owners	
Implementation Timeline:	Within 5 Years	
Goals Met:	1,2,7	
Benefits:	Eliminates flood damage to homes and residences, which creating an open space for the municipality and increasing flood storage.	
Impact on Socially Vulnerable Populations:	Removing homes from the floodplain immediately removes the risk to life and property. Socially vulnerable populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	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.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Removing the risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed.	
Climate Change Considerations:	Climate change is likely to increase the frequency and severity of severe rainfall, flash flooding, riverine flooding, and coastal flooding from sea level rise and storm surge events. 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.	
Mitigation Category	Structure and Infrastructure Project	
CRS Category	Property Protection	
Priority	High	
Alternatives:	Action	Evaluation
	No Action	-
	Levee around floodplain	Costly, not enough room



1.0. Town of West Milford

	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.
--	---------------------------	--



Action 2025- WestMilfordT -002. Critical Facilities in the Floodplain

Lead Agency:	Planning
Supporting Agencies:	Building Department
Hazard(s) of Concern:	Flood
Description of the Problem:	<p>The following critical facilities are municipally owned and located in the special flood hazard area:</p> <ul style="list-style-type: none"> • Highway Bridge:1600049 • Highway Bridge:1600175 • Highway Bridge:1600247 • Highway Bridge:1600255 • Highway Bridge:1600368 • Highway Bridge:1600430 • Highway Bridge:1600432 • Highway Bridge:1600446 • Highway Bridge:1600460 • Highway Bridge:1600467 • Highway Bridge:1600033 (P)1400140 (M) • Highway Bridge:1600036 (P)1400323 (M) • Highway Bridge:1600037 (P)1400957 (M) • Highway Bridge:1600038 (P)1400956 (M) • Well P2 • Well T3
Description of the Solution:	<p>The Township will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the facilities listed above to protect each to the 500-year flood level. Options include:</p> <ul style="list-style-type: none"> • Elevation of facility • Floodproofing of facility • Mobile flood barriers <p>Once the most cost-effective option is identified, the Township will carry out the option.</p>
Estimated Cost:	TBD based on facility and floodproofing measure decided upon
Potential Funding Sources:	FEMA HMGP and PDM, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Township Budget
Implementation Timeline:	Within 5 Years and then ongoing
Goals Met:	2,5,6
Benefits:	Ensures continuity of operations of the critical facilities listed above.
Impact on Socially Vulnerable Populations:	Protection of critical facilities provides an opportunity for first responders and emergency managers to maintain critical services that socially vulnerable populations rely on.
Impact on Future Development:	The risk of significant damage occurring to the structure will be reduced, which will allow critical operations to be maintained or only briefly interrupted in severe events. This provides continued support to both current and future development in the service area.
Impact on Critical Facilities/Lifelines:	This action will protect the critical facilities listed above which maintains the critical services that each provides.
Impact on Capabilities:	This action improves continuity of operations during a flood event, allows for a more rapid return to pre-disaster capabilities after a flood event, and faster deployment of post disaster capabilities.



Climate Change Considerations:	This action addresses anticipated increases in flooding frequency and severity through protection to the 500-year (0.2-percent annual chance) flood level.	
Mitigation Category	Structure and Infrastructure Projects	
CRS Category	Emergency Services, Property Protection	
Priority	High	
Alternatives:	Action	Evaluation
	No Action	-
	Relocate facility	Relocation is expensive and results in loss or delay of critical services in the immediate area
	Establish plans to enter into MOU with neighboring critical facilities to provide service during flood events	Reduction in response times and delay of critical services in the immediate area.



Action 2025-WestMilfordT-003. Disaster Debris Management Plan

Lead Agency:	Planning	
Supporting Agencies:	Building Department	
Hazard(s) of Concern:	Dam Failure, Drought, Geological Hazards, Extreme Temperature, Flood, Severe Weather, Severe Winter Weather, Wildfire	
Description of the Problem:	Major disaster events can result in large amounts of debris that overwhelm normal trash collection operations. Depending on the amount generated, temporary staging areas for debris collection may be needed. The municipality does not have a disaster debris management plan in place. During a disaster that results in debris, a plan with outlined responsibilities is needed to adequately address post-disaster cleanup operations.	
Description of the Solution:	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.	
Estimated Cost:	Staff time	
Potential Funding Sources:	Municipal budget	
Implementation Timeline:	Within 5 years	
Goals Met:	5	
Benefits:	The action will result in increased quicker and more efficient cleanup after disaster events.	
Impact on Socially Vulnerable Populations:	N/A	
Impact on Future Development:	N/A	
Impact on Critical Facilities/Lifelines:	N/A	
Impact on Capabilities:	The action will result in increased post disaster capabilities.	
Climate Change Considerations:	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.	
Mitigation Category	Local Plans and Regulations	
CRS Category	Emergency Services	
Priority	High	
Alternatives:	Action	Evaluation
	No Action	-
	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-WestMilfordT-004. Substantial Damage Management Plan

Lead Agency:	Planning
Supporting Agencies:	Building Department
Hazard(s) of Concern:	Dam Failure, Drought, Geological Hazards, Extreme Temperature, Flood, Severe Weather, Severe Winter Weather, Wildfire
Description of the Problem:	<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"> • Determine where the damage occurred within the community and if the damaged structures are in an SFHA. • Determine what to use for “market value” and cost to repair; uniformly applying regulations will protect against liability and promote equitable administration. • Determine if repairing plus improving the damaged structure equals or exceeds 50% of the structure’s pre-damage value. • Require permits for floodplain development. <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>
Description of the Solution:	<p>The municipality will develop a Substantial Damage Management Plan, following the six step planning process in 2021 Developing a Substantial Damage Management Plan (https://crsresources.org/files/500/developing_subst_damage_mgmt_plan.pdf). This plan will outline responsibilities for Substantial Damage determinations, determining market value, and permit approval processes following a disaster event.</p>
Estimated Cost:	Low
Potential Funding Sources:	Municipal budget
Implementation Timeline:	Within 5 years to develop the plan; ongoing to maintain and update the plan
Goals Met:	5
Benefits:	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.
Impact on Socially Vulnerable Populations:	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.
Impact on Future Development:	A Substantial Damage Management Plan would include all existing, current, and future development in the municipality.
Impact on Critical Facilities/Lifelines:	A Substantial Damage Management Plan would include all critical facilities and lifelines in the municipality.
Impact on Capabilities:	This action improves disaster recovery capabilities.
Climate Change Considerations:	Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action provides additional planning for disaster recovery.
Mitigation Category	Local Plans and Regulations



CRS Category	Emergency Services, Preventative	
Priority	High	
Alternatives:	Action	Evaluation
	No Action	-
	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 responsibility is still necessary to prevent missing important requirements



Action 2025-WestMilfordT-005. Dam Owner Partnership

Lead Agency:	Public Works	
Supporting Agencies:	Dam Owner and Managers	
Hazard(s) of Concern:	Dam Failure	
Description of the Problem:	There are multiple dams, which are critical infrastructures, located in the 1- and 0.2-percent flood hazard areas. The Township also has multiple high-hazard potential dams located in the Township, including: the Echo Lake Spillway Dam, Greenwood Lake Dam, River Wall Dam, Upper Mount Glen Lake Dam, Macopin Reservoir Dam, Green Turtle Pond Dam, Upper Greenwood Lake Dam, Lookover Lake Dam, West Milford Lake Dam, Charlotteburg Dam, Gordon Lakes Dam, Echo Lake Intake Dam, Clinton Reservoir Dam, Lake Arcadia Dam #1, Pinecliff Lake Dam, and Lindy's Dam. These structures have the potential to impact those living nearby.	
Description of the Solution:	The Township will work with the owners and managers of the dams to ensure inspections and safety procedures are up to date. EAPs will be collected by the Township OEM and shared with the County OEM.	
Estimated Cost:	Low	
Potential Funding Sources:	Municipal Budget	
Implementation Timeline:	Within 5 Years	
Goals Met:	5,9	
Benefits:	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.	
Impact on Socially Vulnerable Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to socially vulnerable populations exists.	
Impact on Future Development:	N/A	
Impact on Critical Facilities/Lifelines:	Dams are considered a critical facility. This action will create an understanding of the safety procedures in place for each identified dam.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Climate Change Considerations:	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	Local Plans and Regulations	
CRS Category	Preventative Measures	
Priority	High	
Alternatives:	Action	Evaluation
	No Action	-
	Utilize information from NJDEP	Owners may not be required to submit a safety plan to the State
	Utilize information from the National Inventory of Dams	Not all dams are listed on the inventory



Action 2025-WestMilfordT-006. Dam Inundation Feasibility Study

Lead Agency:	Planning	
Supporting Agencies:	Dam Owners and Managers	
Hazard(s) of Concern:	Dam Failure	
Description of the Problem:	The Township has many high hazard potential dams as well as other dams that may lead to flooding, property damage, and loss of life in a potential dam failure situation.	
Description of the Solution:	The Township will perform a feasibility study to determine the vulnerability of properties in the dam inundation area as well as potential mitigation actions and implement the most cost-effective solution.	
Estimated Cost:	TBD	
Potential Funding Sources:	HMGP, FMA, BRIC, Municipal Budget	
Implementation Timeline:	Within 5 Years	
Goals Met:	1,2,5,7,9	
Benefits:	This action prepares the Township for how to be better prepared in the event of a dam failure.	
Impact on Socially Vulnerable Populations:	Some socially vulnerable populations may be greater impacted by a dam failure.	
Impact on Future Development:	Any incoming development would be notified of what dam inundation zones they may be impacted by.	
Impact on Critical Facilities/Lifelines:	Any incoming development would be able to be better prepared in the event of a specific dam failure incident.	
Impact on Capabilities:	This action would strengthen the Township's ability to handle dam failure.	
Climate Change Considerations:	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	Education and Awareness Programs	
CRS Category	Public Information, Emergency Services	
Priority	High	
Alternatives:	Action	Evaluation
	No Action	-
	Purchase moveable flood barriers	Does not prepare people for what to do when a specific dam breaks
	Rely on FEMA/State	Delay in response



Action 2025-WestMilfordT-007. Bridge Mitigation

Lead Agency:	Planning	
Supporting Agencies:	Building Department	
Hazard(s) of Concern:	Flood	
Description of the Problem:	The bridge condition rating is poor, and the streambank is eroding and may need to be reconstructed. Project has been delayed due to legal issues.	
Description of the Solution:	The Township will harden the bridge and implement streambank stabilization to reduce or eliminate the potential increased flooding.	
Estimated Cost:	TBD after Study	
Potential Funding Sources:	BRIC, FMA, HMGP, Township budget	
Implementation Timeline:	Within 5 Years	
Goals Met:	5,8	
Benefits:	The Township will no longer have to be concerned with a failing bridge.	
Impact on Socially Vulnerable Populations:	Socially vulnerable populations may be disproportionately impacted by the out bridge.	
Impact on Future Development:	N/A	
Impact on Critical Facilities/Lifelines:	The bridge may be a key access point to critical facilities and for emergency vehicles.	
Impact on Capabilities:	This action strengthens the Township's capability to handle flooding events.	
Climate Change Considerations:	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	Structure and Infrastructure Projects	
CRS Category	Structural Flood Control Projects	
Priority	High	
Alternatives:	Action	Evaluation
	No Action	-
	Rebuild and elevate bridge	May not be needed
	Purchase moveable flood barriers	Does not solve position



Action 2025-WestMilfordT-008. Generators at Critical Facilities

Lead Agency:	Planning	
Supporting Agencies:	Building Department	
Hazard(s) of Concern:	Dam Failure, Drought, Geological Hazards, Extreme Temperature, Flood, Severe Weather, Severe Winter Weather, Wildfire	
Description of the Problem:	The Township has some critical facilities that do not have permanent backup power and the Town needs to compile a list of facilities that need backup power. The Township also needs to install a generator at the Rec Center so it can continue to operate as a hazard shelter for the Township.	
Description of the Solution:	The Township will conduct a generator study to determine the right sized generator needed at Rec Center. The Township will install permanent generators at critical facilities, including the Rec Center, so that they may maintain a continuity of operations.	
Estimated Cost:	TBD after generator study	
Potential Funding Sources:	HMGP, FMA, BRIC	
Implementation Timeline:	Within 5 Years	
Goals Met:	1,5,6,7	
Benefits:	This action ensures the continuity of operations during power outages.	
Impact on Socially Vulnerable Populations:	Socially vulnerable populations may be reliant on the Rec Center as a hazard shelter.	
Impact on Future Development:	N/A	
Impact on Critical Facilities/Lifelines:	This action is dealing with critical facilities.	
Impact on Capabilities:	This action improves the capabilities of the critical facilities during the power outages.	
Climate Change Considerations:	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	Structure and Infrastructure Projects	
CRS Category	Emergency Services	
Priority	High	
Alternatives:	Action	Evaluation
	No Action	-
	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.