



4. TOWNSHIP OF ANDOVER

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

4.1 HAZARD MITIGATION PLANNING TEAM

The Township of Andover 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 Chief of Police 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 4-1 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 4-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Eric Danielson / Chief of Police, EMC Address: 134 Newton Sparta Road Newton, NJ 07860 Phone Number: (973) 383-5544 ext. 123 Email: edanielson@atpd.org	Name/Title: George Laoudis / Deputy EMC Address: 134 Newton Sparta Road Newton, NJ 07860 Phone Number: (973) 383-5544 ext. 123 Email: glaoudis@atpd.org
National Flood Insurance Program Floodplain Administrator	
Name/Title: Cory Stoner, Zoning Officer Address: 134 Newton Sparta Road Newton, NJ 07860 Phone Number: 973-383-4280 x320 Email: zoning@andovertwp.org	
Additional Contributors	
Name/Title: Eric Danielson, Chief of Police / EMC Method of Participation: Attended Planning Partnership meetings and Mitigation Strategy Workshop. Provided information on historical events, previous action status, capability assessment, and NFIP information. Reviewed and signed off on draft annex.	
Name/Title: Patricia Bussow, Administrator / Municipal Clerk Method of Participation: Attended Planning Partnership meetings. Reviewed and signed off on draft annex.	
Name/Title: Stephanie Pizzulo, Land Use Administrator Method of Participation: Attended Planning Partnership meetings.	
Name/Title: Erik Marra, Public Works Supervisor Method of Participation: Reviewed and signed off on draft annex.	



Name/Title: Richard Bartlett, Deputy Emergency Management Coordinator
Method of Participation: Attended Planning Partnership meetings.

Name/Title: Cory Stoner, Zoning Officer / Floodplain Administrator / Engineer
Method of Participation: Reviewed and signed off on draft annex.

4.2 COMMUNITY PROFILE

Andover Township is located in southern Sussex County and bordered to the north by the Townships of Hampton and Lafayette, to the south by the Townships of Green and Byram, to the east by the Township of Sparta and to the west by the Town of Newton and Fredon Township. Brighton, Clearwater, Pinkeyville, Springdale, Whitehall and Wawayanda are unincorporated communities in the Township. It has a total area of 20.7 square miles. Paulins Kill, Kymer Brook, Tar Hill Brook, Pequest River, and Andover Junction Brook are the bodies of water that flow through Andover Township. According to the U.S. Census, the 2020 population for Andover was 5,996, a 5.1 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 2021 American Community Survey 5-Year Population Estimates indicates that 3.7-percent of the population is 5 years of age or younger, 5.4-percent is 65 years of age or older, 0-percent is non-English speaking, 3.6-percent is below the poverty threshold, and 3.3-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 Andover, 25-percent of households earn less than the basic cost of living and are considered socially vulnerable (ALICE 2023).

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

4.3 JURISDICTIONAL CAPABILITY ASSESSMENT AND INTEGRATION

Andover 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 Andover to identify opportunities for integrating mitigation concepts into ongoing Township procedures.

4.3.1 Planning and Regulatory Capability and Integration

Table 4-2 summarizes the planning and regulatory tools that are available to Andover.

Table 4-2. 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 30 Building Construction, adopted August 8, 2011	State and Local	New Jersey Department of Community Affairs
How has or will this be integrated with the HMP and how does this reduce risk? <i>The building code provides guidance on how to design, build, and operate buildings. Modern building codes lead to major reductions in property losses from natural disasters.</i>				
Zoning/Land Use Code	Yes	Chapter 190 Zoning, July 30, 2001	Yes	Chapter 190
How has or will this be integrated with the HMP and how does this reduce risk? <i>The intent of Chapter 190 is to guide the appropriate development of all lands within the Township in a way that promotes public health, safety, and general welfare. The goals of Chapter 190 include, but are not limited to, safety to fire, flood panic, and other natural and man-made disasters. Chapter 190 also encourages and promotes the conservation of open space and natural resources to prevent urban sprawl.</i>				
Subdivision Code	Yes	Chapter 159 Subdivision of Land, December 13, 1973. Readopted November 12, 1984.	Yes	Chapter 159
How has or will this be integrated with the HMP and how does this reduce risk? <i>The purpose of Chapter 159 is to establish rules and regulations to guide land subdivision in the Township that promotes public health, safety, convenience, and general welfare. Chapter 159 is administered to promote orderly growth, development, conservation, protection, and proper use of land with adequate provisions for traffic circulation and utilities and services.</i>				
Site Plan Code	Yes	Chapter 131 Site Plan Review, November 12, 1984	Yes	Chapter 131
How has or will this be integrated with the HMP and how does this reduce risk? <i>The purpose of Chapter 131 is to establish the rules and regulations to guide the review of site plans in order to insure the orderly development of the Township.</i>				
Stormwater Management Code	Yes	Chapter 150, September 24, 2006. Amended February 18, 2021.	Yes	Chapter 150
How has or will this be integrated with the HMP and how does this reduce risk? <i>The intent of Chapter 150 is to establish the minimum stormwater management requirements and control on major development within the Township.</i>				
Post-Disaster Recovery/ Reconstruction Code	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
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?*

Not all provisions of this law have become effective at the time of the writing of this plan.



	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	Yes	Andover Township Master Plan, 2010	Yes	Township Council
How has or will this be integrated with the HMP and how does this reduce risk? <i>The Growth Management Plan is an element in the Andover Township Master Plan.</i>				
Environmental Protection Ordinance(s)	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Flood Damage Prevention Ordinance	Yes	Chapter 55 Flood Damage Prevention, September 11, 2011.	Yes	Construction Official
How has or will this be integrated with the HMP and how does this reduce risk? <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:</i> <ul style="list-style-type: none">• To protect human life and health;• To minimize expenditure of public money for costly flood control projects;• To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;• To minimize prolonged business interruptions;• To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;• To help maintain a stable tax base by providing for the alternate use and development of areas of special flood hazard so as to minimize future flood blight areas;• To ensure that potential buyers are notified that property is in an area of special flood hazard; and• To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.				
Wellhead Protection	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Emergency Management Ordinance	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Climate Change Ordinance	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Other	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
PLANNING DOCUMENTS				
General/Comprehensive Plan	Yes	Andover Township Master Plan, 2010. Examination Report, 2023.	Local	Land Use Board
How has or will this be integrated with the HMP and how does this reduce risk? <i>Several objectives of the plan align with those identified in the HMP update. The Examination Report, completed in 2023, is the Planning Board's assessment of the Master Plan and land development regulations of the Township. This report decides if the Township's needs are needing updating and if they still reflect the goals. If changes are needed, they are discussed in the Examination Report.</i>				



	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
Capital Improvement Plan	Yes	Capital Improvement Plan	Local	Township Manager
How has or will this be integrated with the HMP and how does this reduce risk? <i>The Township's municipal budget outlines the capital budget and improvement program for the next three years. There is a line item for various capital improvements</i>				
Disaster Debris Management Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Floodplain Management or Watershed Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Stormwater Management Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Stormwater Pollution Prevention Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Open Space Plan	Yes	Open Space & Recreation Plan, 2008. Updated in 2021.	Local	Land Use Board
How has or will this be integrated with the HMP and how does this reduce risk? <i>This plan provides a framework for enhancing the Township's quality of life through improvements to open space and recreation opportunities. The Open Space and Recreation Plan is considered an element in the Township's Master Plan and provides the Township legal authority to control future development.</i>				
Urban Water Management Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Habitat Conservation Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Economic Development Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Shoreline Management Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Community Wildfire Protection Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Community Forest Management Plan	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
Transportation Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Agriculture Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Climate Action/ Resilience/Sustainability Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Tourism Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Business/ Downtown Development Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Other	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
RESPONSE/RECOVERY PLANNING				
Emergency Operations Plan	Yes	Andover Township Emergency Operation Plan, Adopted 2021. Expire in 2025.	Local	Andover Township Emergency Management
How has or will this be integrated with the HMP and how does this reduce risk?				
<i>The Emergency Operations Plan defines the scope of preparedness and emergency management activities necessary in the Township. This document assigns responsibility to organizations and individuals for carrying out specific actions that exceed routine responsibility at projected times and places during an emergency; sets lines of authority and organizational relationships and shows how all actions will be coordinated; identifies how people and property are protected; and identifies personnel, equipment, facilities, supplies, and other resources available within the jurisdiction or by agreement with other jurisdictions.</i>				
Continuity of Operations Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Substantial Damage Response Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Threat and Hazard Identification and Risk Assessment	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Post-Disaster Recovery Plan	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
Public Health Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Other	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				

4.3.2 Development and Permitting Capability

Table 4-3 summarizes the capabilities of Andover to oversee and track development.

Table 4-3. 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	The Construction Official grants the permits per Chapter 55 of the Municipal Code
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? <ul style="list-style-type: none"> If you have a buildable land inventory, please describe 	No	The 2016 Housing Element & Fair Share Plan stated that the estimated total housing units in 2014 was 2,168 and due to current land use and NJDEP restrictions, any additional development would be limited
Describe the level of buildout in your jurisdiction.	N/A	There is available space for development within the Township.

4.3.3 Administrative and Technical Capability

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

Table 4-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
ADMINISTRATIVE CAPABILITY		



Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
Planning Board	Yes	The Land Use Board has the responsibility to guide development in the Township in accordance with the NJ Municipal Land Use Law and other State and local regulations. The Board reviews and grants approvals of applications for subdivisions and site plans and hears appeals and grants variances from a strict application of the Township Zoning Ordinance in particular cases. The Board is responsible for development of the Township Master Plan and for making recommendations to the Township Committee for new ordinances or revisions of existing ordinances.
Zoning Board of Adjustment	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Andover Township Environmental Commission is a citizen advisory group that makes recommendations to the Land Use Board regarding environmental issues within the Township. The Commissioners represent residents' long-term interests by acting as advocates for the environment, reviewing development applications, sponsoring public awareness programs, and evaluating the impact of potential environmental problems. The mission of the Andover Township Environmental Commission is to foster, protect, preserve, and maintain the natural resources and rural character of the township by encouraging environmentally healthy and sound development, and promoting awareness of nature-friendly practices and options among municipal officials, residents, and business people.
Open Space Board/Committee	Yes	Open space committee is responsible for designating and planning open space lands within the Township.
Economic Development Commission/Committee	Yes	The Economic Development Advisory Committee of Andover Township is dedicated to attracting, expanding, and retaining diversified economic opportunities in Andover Township; help build the current and future business income potential, by stabilizing and expanding our local tax base and enhance the quality of life for the township and its citizens.
Public Works/Highway Department	Yes	The Department of Public Works is responsible for clearing and maintaining 63 miles of roads year-round, as well as caring for the grounds, recreation facilities, and public buildings in the Township.
Construction/Building/Code Enforcement Department	Yes	The Building Department is serviced by the New Jersey Department of Community Affairs. The Township maintains a Construction Office and Zoning/Code Enforcement Office.
Emergency Management/Public Safety Department	Yes	The Office of Emergency Management is located within the Andover Township Police Department, with the Chief of Police acting as the Township's Emergency Management Coordinator.



Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The Department of Public Works is responsible for clearing and maintaining 63 miles of roads year-round, as well as caring for the grounds, recreation facilities, and public buildings in the Township.
Mutual aid agreements	Yes	Police/Fire/EMS/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	-
TECHNICAL/STAFFING CAPABILITY		
Planners or engineers with knowledge of land development and land management practices	Yes	The Township Planner and the Township Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	DCA is Township construction officials
Planners or engineers with an understanding of natural hazards	Yes	DCA
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	Utilize the Sussex County GIS Department
Staff that work with socially vulnerable populations or underserved communities	No	-
Environmental scientists familiar with natural hazards	No	-
Surveyors	No	-
Emergency manager	Yes	Office of Emergency Management
Grant writers	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

4.3.4 Fiscal Capability

Table 4-5 summarizes financial resources available to Andover.

Table 4-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community Development Block Grants (CDBG, CDBG-DR)	No



Financial Resources	Accessible or Eligible to Use? (Yes/No)
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	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state funding programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

4.3.5 Education and Outreach Capability

Table 4-6 summarizes the education and outreach resources available to Andover.

Table 4-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment
Public information officer or communications office	Yes	Township Manager
Personnel skilled or trained in website development	Yes	Township Manager
Hazard mitigation information available on your website	Yes	The Township hosts a municipal website (https://www.andovertwp.org/) which includes a municipal directory, announcements, and other community information.
Social media for hazard mitigation education and outreach	Yes	Facebook, Instagram.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Police Dispatch Center
Natural disaster/safety programs in place for schools	Yes	Disaster/safety programs in/for schools
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	No	-

4.3.6 Community Classifications

Table 4-7 summarizes classifications for community programs available to Andover.



Table 4-7. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Unknown	Unknown
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	5	2014
National Weather Service StormReady Certification	No	-	-
Firewise Communities classification	No	-	-
New Jersey Sustainable Jersey Community	Yes	None	March 8, 2010
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

N/A = Not applicable

— = Unavailable

4.3.7 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 4-8 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 4-8. Adaptive Capacity

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



4.4 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 4-1 is responsible for maintaining this information.

4.4.1 NFIP Statistics

Table 4-9 summarizes the NFIP policy and claim statistics for Andover.

Table 4-9. Andover NFIP Summary of Policy and Claim Statistics

# Policies	3
# Claims (Losses)	2
Total Loss Payments	\$ 303.65
# Repetitive Loss Properties (NFIP definition)	0
# 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 2024

4.4.2 Flood Vulnerability Summary

Table 4-10 provides a summary of the NFIP program in Andover.

Table 4-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	<p>Stretch of Hemlock Avenue in the Lake Lenape section of the Township where this is no drainage system in place. This also impacts Old Creamery Road due to no drainage. In the winter time due to no drainage there is a continuous icing condition which has to be addressed on a daily basis by the Township DPW. Flooding exacerbates the issue.</p> <p>Stretch of Pierce Road near Lafayette border which has no drainage system in place. Run-off continues to erode the sides of the road and the banks to the point</p>



NFIP Topic	Comments
	where tree root systems are exposed. Due to no drainage a continuous icing condition exists in the winter. Flooding exacerbates the issue.
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?	<p>At present we no longer have any specific properties involving structures which are prone to flooding issues. In the past we had a residence on Limecrest Road prone to flooding, however, the property owner has since taken measures to move the structure to a higher elevation on the property.</p> <p>Basement flooding occurs from time to time which then prompts requests for the fire department to respond and pump out basements. These records are available within our CAD system. These requests usually occur under an extreme amount of rain within a short period of time.</p>
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?	Any structures damaged from any type of weather event are reported to the construction / building official. The construction official / building official follows up on requests from either the fire department or police department as needed. Our Township uses the State of NJ Code Officials as a shared service.
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	No recent determinations made for Substantial Damage.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? If there are mitigation properties, how were the projects funded?	One property located along Limecrest Road was mitigated by the property owner via moving the structure to a higher elevation. This was funded via the property owner.
Do your flood hazard maps adequately address the flood risk within your jurisdiction? If not, state why.	The flood maps do adequately address the flood risk based on where our lakes, rivers and streams are. However, any issue can arise at anytime based on improvements or developments being proposed in which we rely upon our professional services to address at the time of an application being proposed (ie Land Use Board).
NFIP Compliance	
What local department is responsible for floodplain management?	The Township Engineer which is a contracted position year to year.
Are any certified floodplain managers on staff in your jurisdiction?	Township Engineer
Do you have access to resources to determine possible future flooding conditions from climate change?	None known at this time.



NFIP Topic	Comments
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?	Training should always be ongoing and therefore this would never be turned down. As for the specific training needed this is not known at this time.
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Services such as permit review, GIS and inspections fall within the Township Engineer and Land Use Board purview.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Improvements to an existing structure are defined by local ordinances and State code. An application process occurs and a review deems the application complete or not.
What are the barriers to running an effective NFIP program in the community, if any?	The biggest barrier is the public becoming complacent due to the frequency of a flooding occurrence.
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)?	November 24, 1987
What is the local law number or municipal code of your flood damage prevention ordinance?	Chapter 55 of the Local Ordinance
What is the date that your flood damage prevention ordinance was last amended?	July 11, 2011
Does your floodplain management program meet or exceed minimum requirements? If exceeds, in what ways?	The program meets the minimum requirements. Floodplain regulations are enforced via Local Ordinance Chapter 55 and compliance is monitored through the construction official and Township Engineer as needed.
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?	Local ordinances in Chapter 55 have Floodplain Management Regulations along with the Land Use Board, Township Engineer and various other contracted professionals all review proposed plans for development and construction etc.
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Our community would take into consideration the CRS program.

4.5 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 4-11 through Table 4-13.

Table 4-11. 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
2019				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0



	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
2020				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
2021				
Total Permits	1	0	0	1
Permits within SFHA	0	0	0	0
2022				
Total Permits	1	0	0	1
Permits within SFHA	0	0	0	0
2023				
Total Permits	3	0	0	3
Permits within SFHA	0	0	0	0

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

Table 4-12. 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
None Identified.					

* Only location-specific hazard zones or vulnerabilities identified.

Table 4-13. 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 Anticipated.					

4.6 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 Andover's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

4.6.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Township are shown in Figure 4-1 through Figure 4-3. 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 Andover has significant exposure. The maps show the location of potential new development, where available.

Figure 4-1. Andover Flood and Sinkhole Hazard Area Extent and Location Map

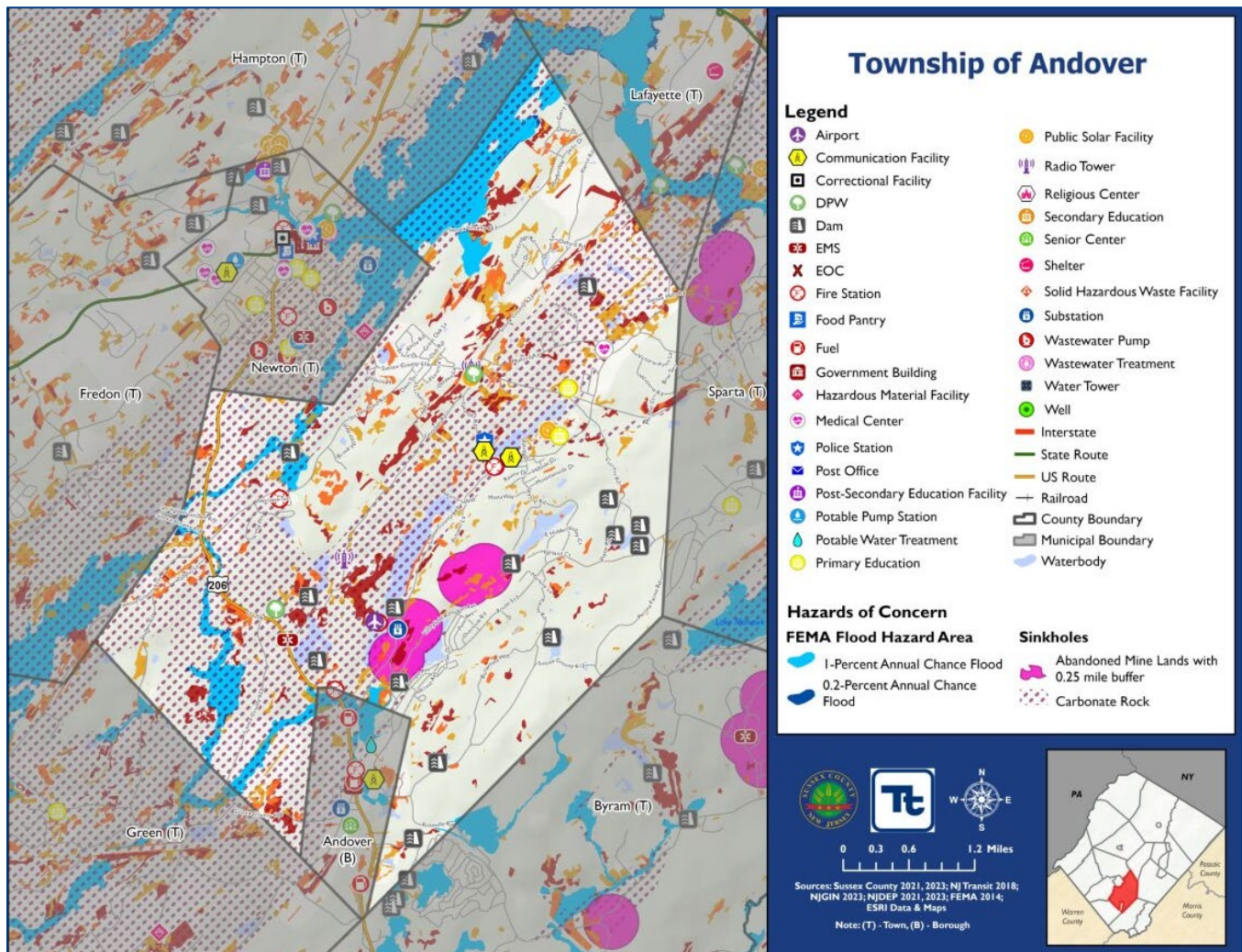


Figure 4-2. Andover Wildfire and HAZMAT Hazard Area Extent and Location Map

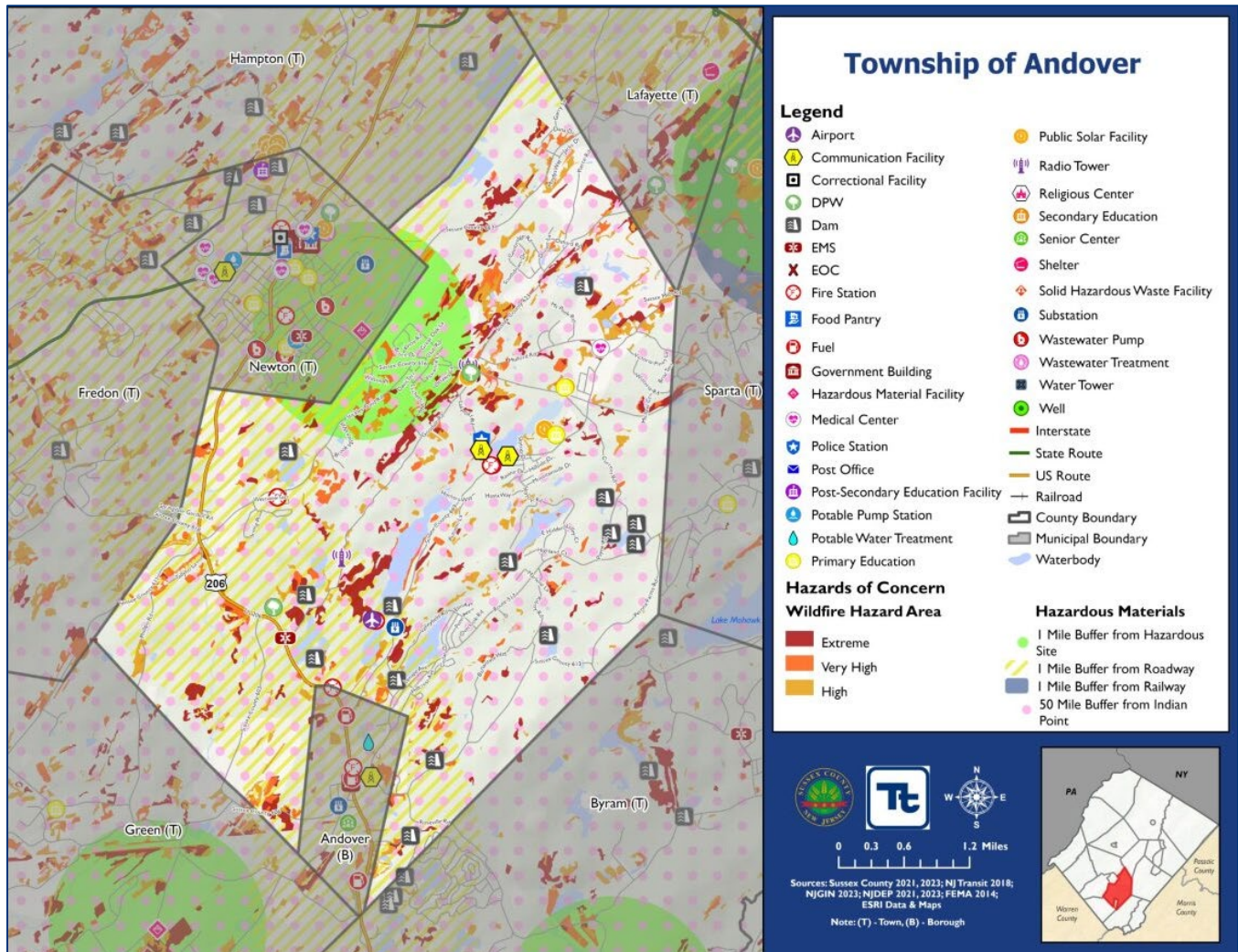
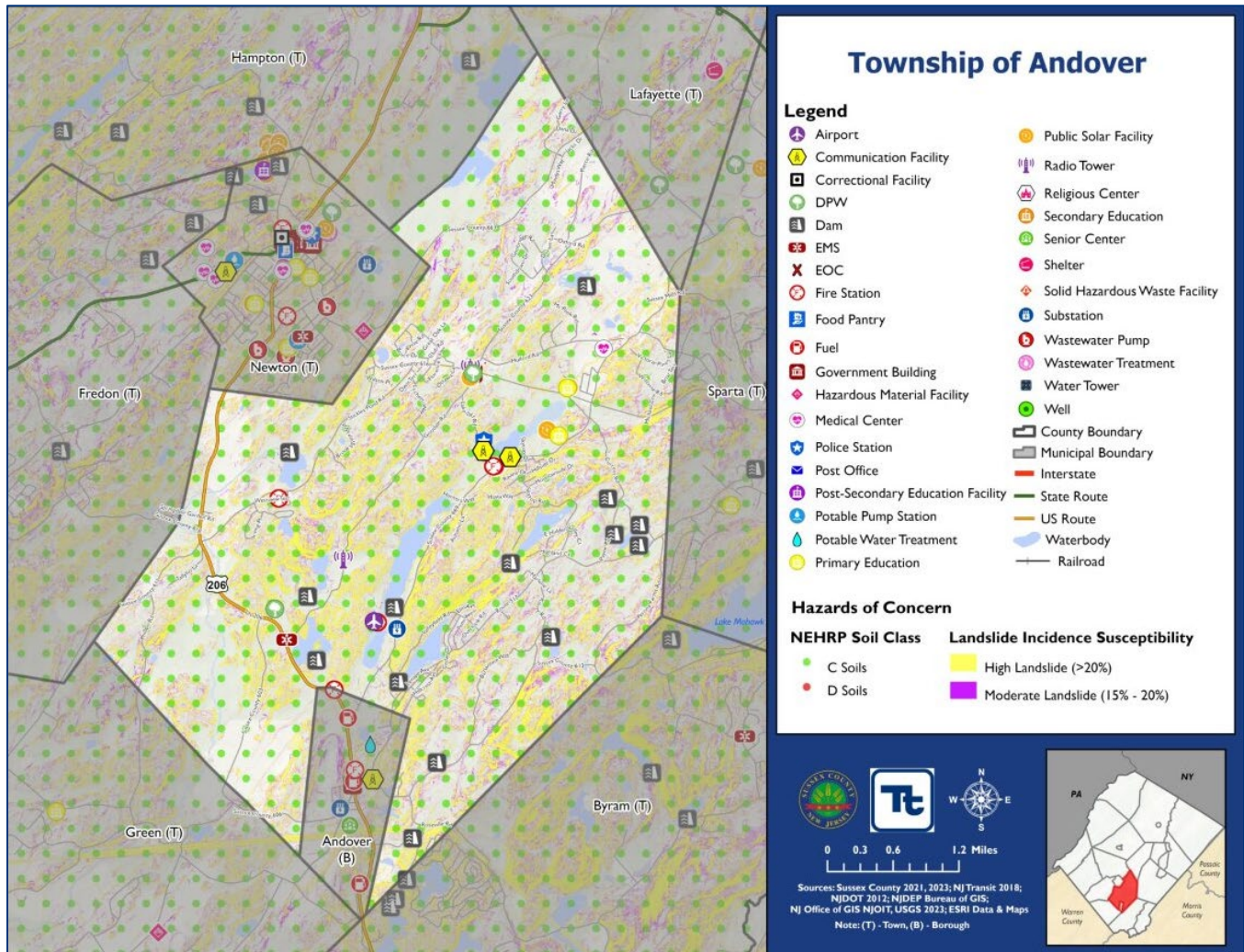


Figure 4-3. Andover NEHRP and Landslide Hazard Area Extent and Location Map





4.6.2 Hazard Event History

The history of natural and non-natural hazard events in Andover is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 4-14 provides details on loss and damage in Andover during hazard events since the last hazard mitigation plan update.

Table 4-14. Hazard Event History in Andover

Dates of Event	Event Type (Disaster Declaration)	County Designated?	Summary of Event	Summary of Damage and Losses in Andover
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.	Township sustained a substantial tax revenue loss due to the closure of a long-term care facility specifically from the impact of Covid-19.
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.	No records found with CFO office.
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.	No records found with CFO office.
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.	No records found with CFO office

EM = Emergency Declaration (FEMA)

FEMA = Federal Emergency Management Agency

DR = Major Disaster Declaration (FEMA)

N/A = Not applicable

4.6.3 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 Andover .



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. Andover 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 following:

- The Township accepts the hazard rankings outlined in Table 4-15.

Table 4-15 shows Andover's final hazard rankings for identified hazards of concern. Mitigation action development uses the ranking to target hazards with the highest risk.

Table 4-15. 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 4-16 identifies critical facilities in the community located in the 1 percent and 0.2 percent annual chance floodplains.

Table 4-16. 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		
There are no critical facilities in the 1% and/or 0.2% floodplain.					



Source: *Sussex County 2021, 2023; NJGIN 2023*

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

- Lake Lenape Dam
- Forest Lake Dam

4.6.4 Identified Issues

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

- Residents have noted that there are drainage issues on Springdale Gardens Road. This has been an ongoing issue due to lack of funding to install an updated drainage system. There is flooding along the secondary road from runoff on State Highway (Rt 206) during severe storm events. The pitch of the road and lack of curbing causes the excess water to remain for days and weeks. There are large amounts of water which prevent residents from leaving their homes.
- The Township also has two high-hazard potential dams, the Lake Lenape Dam and Forest Lake Dam, within its jurisdiction. These structures have the potential to impact those living nearby and within inundation areas, as a rush of flood waters would overcome structures in the path of the dam failure.
- Stormwater flooding is a problem at Pierce Road and the intersection of Old Creamery Road and Hemlock Avenue. Currently, funding is limited or not available. The Township is under strict spending constraints due to losing a one million dollar ratable. Flooded roadways can impact evacuation routes, prevent emergency responders from reaching a location, and impede on necessary medical appointments or needs for vulnerable populations.
- The Township has drafted a Continuity of Operations Plan (COOP). The draft plan needs to be reviewed by stakeholders. A COOP is a policy and guidance document that ensures that essential functions for an agency or organization are continued in the event of an emergency. The COOP addresses emergencies from an all-hazards approach, including natural, manmade, or technological disasters.
- 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. The Township has wildfire risk but is currently not part of the Firewise program.
- 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.
- 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.
- 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. 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. The Township's ordinance requires update.

- 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 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:
 - Whites Pond Dam (poor)
 - Hemlock Lake Dam (poor)
 - Lake Valentine Dam (poor)
 - Lake Aeroflex Dam (poor)
- Although the Township has flood exposure, the Township does not participate in the Community Rating System (CRS) program. By participating in the CRS program, the Township can reduce and avoid flood damage to insurable property, strengthen and support the insurance aspects of the National Flood Insurance Program, and foster comprehensive floodplain management. Township residents which have flood insurance through the NFIP may see a decrease in flood insurance rates.
- Forest Lake Dam is a Class I High Hazard Dam that is located on Forest Lake. The dam is owned by the Forest Lakes Club. Failure of the dam could result in inundation of forested lands, densely populated areas, and local roadways including Forest Lake Drive and Club Lake Road, and potentially impact State Route 206. Although the dam was last inspected in 2022 and found to be in satisfactory condition, the risk of dam failure warrants an engineering evaluation to determine if retrofits of the dam would result in safer conditions.
- Lake Lenape Dam is a Class I High Hazard Dam that is located on Lake Lenape. The dam is owned by the Lake Lenape Association Board of Trustees. Failure of the dam could result in inundation of densely populated areas and local roadways including Old Creamery Road, Lenape Avenue, Limecrest Road, and Sussex Avenue. Although the dam was last inspected in 2024 and found to be in satisfactory condition, the risk of dam failure warrants an engineering evaluation to determine if retrofits of the dam would result in safer conditions.

4.7 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.

4.7.1 Past Mitigation Action Status

Table 4-17 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.



4.7.2 Additional Mitigation Efforts

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

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Table 4-17. 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-AndoverT-001	Pierce Road Stormwater Retention Basin	Flood, Severe Weather	Engineer, Public Works	Problem: Stormwater flooding is a problem at Pierce Road. Solution: The Township will design and install a stormwater retention basin on Pierce Road.	1. No Progress 2. Currently funding is limited or not available. Township is under strict spending constraints due to losing a one million dollar ratable.	1. Include in update 2. The Township will conduct a feasibility assessment and explore funding opportunities to design and install a stormwater retention basin on Pierce Road. 3. Not applicable
2021-AndoverT-002	Old Creamery Rd & Hemlock Ave Stormwater Retention Basin	Flood, Severe Weather	Engineer, Public Works	Problem: Stormwater flooding is a problem at Old Creamery Road & Hemlock Avenue. Solution: The Township will design and install a stormwater retention basin on Old Creamery Road & Hemlock Avenue.	1. No Progress 2. Township is under strict spending limits currently due to loss of ratable totaling over one million dollars.	1. Include in update 2. The Township will conduct a feasibility assessment and explore funding opportunities to design and install a stormwater retention basin on Old Creamery Road and Hemlock Avenue. 3. Not applicable
2021-AndoverT-003	Incorporate Hazard Mitigation in Budgeting	All Hazards	OEM Director and Township Administrator	Problem: The Township requires funding to fund mitigation projects in house or provide match for grants. Solution: The Township will budget for future mitigation projects in both the Township budget and Capital Improvement Budget.	1. No Progress 2. Township has significant financial constraints due to closing of facility causing loss of revenue over 1 million dollars.	1. Discontinued 2. Not applicable 3. Township has significant financial constraints due to closing of facility causing loss of revenue over 1 million dollars.
2021-AndoverT-004	Resilience Committee and Advisor	All Hazards	OEM Director, Township Administrator	Problem: The Township requires better coordination and staff knowledge on community resilience to inform hazard	1. No Progress. 2. Overly challenging to find volunteers at the municipal level to fill other various positions within the Township currently.	1. Discontinued 2. Not applicable 3. Overly challenging to find volunteers at the municipal level to fill



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.
				mitigation planning and project implementation. Solution: The Township will establish a community resilience committee and advisor.		other various positions within the Township currently.
2021-AndoverT-005	Continuity of Operations Plan	All Hazards	OEM, Administration	Problem: The Township lacks a Continuity of Operations Plan. Solution: The Township will develop and adopt a Continuity of Operations Plan.	1. In Progress 2. Draft copy of Continuity of Operations Plan completed. Same to be reviewed by stakeholders at a future date to be determined.	1. Include in update 2. The Township will work with stakeholders to review the Draft Continuity of Operations Plan to finalize and implement the plan. 3. Not applicable
2021-AndoverT-006	FireWise Program	Wildfire	Township Fire and OEM	Problem: The Township has wildfire risk but is not enrolled in the FireWise program. Solution: The Township will enroll and maintain status within the FireWise program. Will seek to enroll and work with the Andover Twp Fire Department on putting information on their website along with the Township's website.	1. In Progress 2. The Township has within a very close proximity the NJ State Forest Fire HQ and works currently in partnership with them and the local fire department to bring about educational information regarding wilderness fires.	1. Include in update 2. The Township will continue to work with the NJ State Forest Fire HQ to enroll and maintain status participation in the FireWise program. The Township Fire Department make sure the necessary information is accessible by the community on the Township website. 3. Not applicable
2021-AndoverT-007	Hazard Outreach Improvements	All Hazards	OEM	Problem: The Township's outreach on hazard mitigation topics requires expansion. Solution: The Township will expand mitigation education and outreach efforts through	1. No Progress 2. Continue to utilize various social media platforms to educate the community.	1. Include in update 2. The Township will continue to utilize various social media platforms to educate the community on hazard information. 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.
				handouts, newsletters, social media, and the Township website.		
2021-AndoverT-008	Disaster Debris Management Plan	Extreme Weather	DPW	Problem: The Township lacks a Disaster Debris Management Plan. Solution: The Township will develop and adopt a Disaster Debris Management Plan.	1. No Progress 2. Considered to be a dynamic process due to various regulations concerning debris removal	1. Include in update 2. The Township will review the mitigation needs for debris removal and develop a Disaster Debris Management Plan. 3. Not applicable
2021-AndoverT-009	Flood Damage Prevention Ordinance Update	Flood	FPA, Administration	Problem: The Township's Flood Damage Prevention Ordinance lacks the state mandated freeboard requirement. Solution: The Township will update the Flood Damage Prevention Ordinance to include the freeboard requirement.	1. No Progress 2. continuing to review with Township engineer.	1. Include in updateT 2. The Township will continue to work with the Township Engineer to update the Flood Damage Prevention Ordinance to include the freeboard requirement. 3. Not applicable



4.7.3 Proposed Hazard Mitigation Actions for the HMP Update

Andover 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 Andover 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 4-18 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 4-19 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.



Table 4-18. 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
Disease Outbreak	X			X			X			X
Drought	X			X			X			X
Earthquake	X			X			X			X
Flood	X	X		X	X		X		X	X
Geological Hazards	X			X			X			X
Hazardous Materials	X			X			X			X
Hurricane	X			X			X			X
Infestation	X			X			X			X
Nor'easter	X			X			X			X
Severe Weather	X	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 4-19. 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-AndoverTwp-01	Drainage Improvement Study to Springsdale Gardens Road	1	1	1	1	1	1	0	0	0	1	1	1	1	1	11	High
2025-AndoverTwp-02	Dam Owner Partnership	1	1	1	1	0	1	1	0	1	1	1	1	1	1	12	High
2025-AndoverTwp-03	Flood Prone Roads	1	1	1	1	1	1	0	0	0	1	1	1	1	1	11	High
2025-AndoverTwp-04	Continuity of Operations Plan	1	0	1	1	1	1	0	0	1	1	1	0	1	1	10	Medium
2025-AndoverTwp-05	Firewise Program Participation	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High
2025-AndoverTwp-06	Public Education and Outreach	1	1	1	1	1	1	0	1	1	1	1	1	0	1	12	High
2025-AndoverTwp-07	Disaster Debris Management Plan	1	0	0	1	1	0	1	0	1	1	1	1	1	1	10	Medium
2025-AndoverTwp-08	Code Coordinated Ordinance	1	1	1	1	1	1	0	0	1	1	1	1	1	1	12	High
2025-AndoverTwp-09	NJDEP Dam Repair	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2025-AndoverTwp-10	Substantial Damage Management Plan	0	1	1	1	1	1	0	1	1	1	1	1	1	0	11	High
2025-AndoverTwp-11	Forest Lake Dam Rehab	1	1	1	1	0	0	1	1	1	0	1	1	1	1	11	High
2025-AndoverTwp-12	Lake Lenape 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-AndoverTwp-01. Drainage Improvement Study to Springsdale Gardens Road

Lead Agency:	Township Engineer		
Supporting Agencies:	Public Works		
Hazard(s) of Concern:	<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		
Description of the Problem:	Residents have noted that there are drainage issues on Springsdale Gardens Road. This has been an ongoing issue due to lack of funding to install an updated drainage system. There is flooding along the secondary road from runoff on State Highway (Rt 206) during severe storm events. The pitch of the road and lack of curbing causes the excess water to remain for days and weeks. There are large amounts of water which prevent residents from leaving their homes.		
Description of the Solution:	The Township Engineer will conduct a drainage improvement study to Springsdale Gardens Road to address flooding and runoff issues. Once potential methods have been identified, the most cost-effective option will be implemented by Public Works.		
Estimated Cost:	High (> \$100,000)		
Potential Funding Sources:	HMGP, BRIC, Township budget		
Implementation Timeline:	Long Term (5+ yrs.)		
Goals Met:	1, 2, 3		
Benefits:	Future mitigation projects may be identified that will further increase overall community resiliency to flooding and other hazard events.		
Impact on Socially Vulnerable Populations:	Areas vulnerable to flooding will be made aware to Township leadership and first responders which can place an emphasis on controlled future development. Socially vulnerable populations located in these at risk areas will be protected against flood impacts through the identification and implementation of flood mitigation actions.		
Impact on Future Development:	Flood insurance costs may decrease as a result of the study and reduced flood exposure.		
Impact on Critical Facilities/Lifelines:	Transportation routes, such as Springsdale Gardens Road will be more likely to remain open if flooding is mitigated along them.		
Impact on Capabilities:	This study will identify opportunities for mitigation funding to be spent in the areas in which it is most needed to increase resiliency and decrease damage from flood events.		
Climate Change Considerations:	Consideration should be taken to ensure any projects conducted have accounted for increased extreme rainfall 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 type="checkbox"/> Emergency Services (ES)		
Priority	<input type="checkbox"/> High	<input checked="" type="checkbox"/> Medium	<input type="checkbox"/> Low
Alternatives:	Action	Evaluation	
	No action	Problem persists	
	Remove road	Not an option, costly	
	Relocate residents	Not publically accepted, costly.	



Action 2025-AndoverTwp-02. Dam Owner Partnership

Lead Agency:	Township OEM																
Supporting Agencies:	NJDEP, Dam Owners																
Hazard(s) of Concern:	<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	
<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																	
Description of the Problem:	The Township also has two high-hazard potential dams, the Lake Lenape Dam and Forest Lake Dam, within its jurisdiction. These structures have the potential to impact those living nearby and within inundation areas, as a rush of flood waters would overcome structures in the path of the dam failure.																
Description of the Solution:	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.																
Estimated Cost:	Low																
Potential Funding Sources:	Municipal budget																
Implementation Timeline:	Within 5 years																
Goals Met:	1, 2, 3, 5, 7																
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:	Future development near inundation areas will be more secure as safety procedures and inspections are regularly performed on the dams.																
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	<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)																
<input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)																
CRS Category	<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 type="checkbox"/> Structural Flood Control Projects (SP)</td></tr><tr><td><input type="checkbox"/> Public Information (PI)</td><td><input checked="" 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 type="checkbox"/> Structural Flood Control Projects (SP)	<input type="checkbox"/> Public Information (PI)	<input checked="" type="checkbox"/> Emergency Services (ES)								
<input 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 checked="" type="checkbox"/> Emergency Services (ES)																
Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
Alternatives:	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>Township will be unaware of any safety concerns for the dam or its condition</td></tr><tr><td>Utilize information from NJDEP</td><td>Owners may not be required to submit a safety plan to the State</td></tr><tr><td>Utilize information from the National Inventory of Dams</td><td>Not all dams are listed on the inventory</td></tr></table>	Action	Evaluation	No Action	Township will be unaware of any safety concerns for the dam or its condition	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	Evaluation																
No Action	Township will be unaware of any safety concerns for the dam or its condition																
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-AndoverTwp-03. Flood Prone Roads

Lead Agency:	Engineer										
Supporting Agencies:	Public Works										
Hazard(s) of Concern:	<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 checked="" type="checkbox"/> Severe Weather</div> <div><input type="checkbox"/> Severe Winter Weather</div> <div><input type="checkbox"/> Wildfire</div>										
Description of the Problem:	Stormwater flooding is a problem at Pierce Road and the intersection of Old Creamery Road and Hemlock Avenue. Currently, funding is limited or not available. The Township is under strict spending constraints due to losing a one million dollar ratable. Flooded roadways can impact evacuation routes, prevent emergency responders from reaching a location, and impede on necessary medical appointments or needs for vulnerable populations.										
Description of the Solution:	The Township Engineer will conduct a feasibility assessment and explore funding opportunities to design and install a stormwater retention basin on Pierce Road and at the intersection of Old Creamery Road and Hemlock Avenue. Once evaluated, the most cost-effective method will be implemented by Public Works.										
Estimated Cost:	High (> \$100,000)										
Potential Funding Sources:	HMGP, BRIC, Township budget										
Implementation Timeline:	Short Term (<5yrs.)										
Goals Met:	2										
Benefits:	This action would reduce the flooding impacts felt by the Township along Pierce Road and the intersection of Old Creamery Road and Hemlock Avenue.										
Impact on Socially Vulnerable Populations:	Socially vulnerable populations, such as the elderly or disabled, who reside or use Pierce Road, Old Creamery Road, and Hemlock Avenue will be protected against flood concerns. Socially vulnerable populations have a higher risk to flood impacts due to the challenges with responding and evacuating capabilities.										
Impact on Future Development:	Future development planned for Pierce Road, Old Creamery Road, and Hemlock Avenue will be protected against flood and stormwater runoff.										
Impact on Critical Facilities/Lifelines:	Pierce Road is critical infrastructure for the Township. This action would ensure it is safely operable during a severe storm or flood event.										
Impact on Capabilities:	This action would strengthen EMS and first responder capabilities to access neighborhoods and homes by ensuring Pierce Road, Old Creamery Road, and Hemlock Avenue are functional during a flood event.										
Climate Change Considerations:	Climate change is increasing the severity and frequency of flood and storm events. This action will protect the surrounding area from future flood events.										
Mitigation Category	<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>										
CRS Category	<div><input type="checkbox"/> Preventative Measures (PR)</div> <div><input 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>										
Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low								
Alternatives:	<table><thead><tr><th>Action</th><th>Evaluation</th></tr></thead><tbody><tr><td>No action</td><td>Problem persists</td></tr><tr><td>Remove road</td><td>Not an option, costly</td></tr><tr><td>Raise the roadway</td><td>Costly</td></tr></tbody></table>	Action	Evaluation	No action	Problem persists	Remove road	Not an option, costly	Raise the roadway	Costly		
Action	Evaluation										
No action	Problem persists										
Remove road	Not an option, costly										
Raise the roadway	Costly										



Action 2025-AndoverTwp-04. Continuity of Operations Plan

Lead Agency:	OEM										
Supporting Agencies:	Township Administration										
Hazard(s) of Concern:	<div><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 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</div></div>										
Description of the Problem:	The Township has drafted a Continuity of Operations Plan (COOP). The draft plan needs to be reviewed by stakeholders. A COOP is a policy and guidance document that ensures that essential functions for an agency or organization are continued in the event of an emergency. The COOP addresses emergencies from an all-hazards approach, including natural, manmade, or technological disasters.										
Description of the Solution:	The Township will work with stakeholders to review the Draft Continuity of Operations Plan to finalize and implement the plan.										
Estimated Cost:	Low (< \$10,000)										
Potential Funding Sources:	Township budget										
Implementation Timeline:	Short Term (<5yrs.)										
Goals Met:	3, 5, 6										
Benefits:	This action will ensure critical facilities and community lifelines remain open and operational before, during, and after an emergency event.										
Impact on Socially Vulnerable Populations:	The implementation of the COOP will assist in ensuring government programs which support socially vulnerable populations will be operational in the event of an emergency.										
Impact on Future Development:	Future development will be supported by continual government operations in the event of an emergency.										
Impact on Critical Facilities/Lifelines:	Critical facilities and lifelines will stay in operation during a hazard event by following the Township official plans for continuity of operations.										
Impact on Capabilities:	This plan will strengthen the Township's capabilities to remain safely operable during the time of a hazard event.										
Climate Change Considerations:	Climate change is increasing the severity and frequency of natural hazard events, such as severe storms and flooding. This action would help to lessen the impacts of future hazard events on Township operation and capabilities.										
Mitigation Category	<div><input checked="" type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP)</div> <div><input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP)</div>										
CRS Category	<div><input type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI)</div> <div><input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input checked="" type="checkbox"/> Emergency Services (ES)</div>										
Priority	<input type="checkbox"/> High	<input checked="" type="checkbox"/> Medium	<input type="checkbox"/> Low								
Alternatives:	<table><thead><tr><th>Action</th><th>Evaluation</th></tr></thead><tbody><tr><td>No action</td><td>Problem persists</td></tr><tr><td>Adopt without stakeholder review</td><td>Not an option, risk of inaccuracy.</td></tr><tr><td>Delay adoption of plan</td><td>Risk to hazards during events.</td></tr></tbody></table>	Action	Evaluation	No action	Problem persists	Adopt without stakeholder review	Not an option, risk of inaccuracy.	Delay adoption of plan	Risk to hazards during events.		
Action	Evaluation										
No action	Problem persists										
Adopt without stakeholder review	Not an option, risk of inaccuracy.										
Delay adoption of plan	Risk to hazards during events.										



Action 2025-AndoverTwp-05. Firewise Program Participation

Lead Agency:	Fire Department		
Supporting Agencies:	Township Administration		
Hazard(s) of Concern:	<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>		
Description of the Problem:	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. The Township has wildfire risk but is currently not part of the Firewise program.		
Description of the Solution:	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.		
Estimated Cost:	Low		
Potential Funding Sources:	Municipal Budget		
Implementation Timeline:	3 years		
Goals Met:	1, 2, 3, 4, 5		
Benefits:	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.		
Impact on Socially Vulnerable Populations:	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.		
Impact on Future Development:	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.		
Impact on Critical Facilities/Lifelines:	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.		
Impact on Capabilities:	This action will increase wildfire risk reduction and response capabilities for the Township.		
Climate Change Considerations:	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.		
Mitigation Category	<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>		
CRS Category	<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>		
Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low
Alternatives:	Action	Evaluation	
	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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DRAFT



Action 2025-AndoverTwp-06. Public Education and Outreach

Lead Agency:	Emergency Management										
Supporting Agencies:	Township Administration, Sussex County										
Hazard(s) of Concern:	<div><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 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</div></div>										
Description of the Problem:	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.										
Description of the Solution:	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.										
Estimated Cost:	Low										
Potential Funding Sources:	Municipal Budget										
Implementation Timeline:	2 years										
Goals Met:	1, 2, 3, 7										
Benefits:	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.										
Impact on Socially Vulnerable Populations:	Socially vulnerable populations will learn how to prepare for and mitigate the various hazards which may impact them in the Township.										
Impact on Future Development:	Not applicable										
Impact on Critical Facilities/Lifelines:	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.										
Impact on Capabilities:	This action would build upon the Township's already existing public education and outreach program.										
Climate Change Considerations:	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.										
Mitigation Category	<div><input type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP)</div> <div><input type="checkbox"/> Natural Systems Protection (NSP) <input checked="" type="checkbox"/> Education and Awareness Programs (EAP)</div>										
CRS Category	<div><input type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input checked="" type="checkbox"/> Public Information (PI)</div> <div><input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES)</div>										
Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low								
Alternatives:	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No action</td><td>Current methods remain the only ones used</td></tr><tr><td>Rely on state or federal resources</td><td>Resources may be generalized and not specific to the risks in the Township</td></tr><tr><td>Use only a few methods for distribution</td><td>Using only a few methods of distribution may hinder socially vulnerable populations from receiving the guidance</td></tr></table>	Action	Evaluation	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	Evaluation										
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-AndoverTwp-07. Disaster Debris Management Plan

Lead Agency:	Emergency Management																
Supporting Agencies:	Public Works, Township Administration																
Hazard(s) of Concern:	<table><tr><td><input checked="" 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 checked="" type="checkbox"/> Wildfire</td></tr><tr><td><input checked="" type="checkbox"/> Hazardous Materials</td><td></td></tr></table>			<input checked="" 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 checked="" type="checkbox"/> Wildfire	<input checked="" type="checkbox"/> Hazardous Materials	
<input checked="" type="checkbox"/> Dam Failure	<input checked="" type="checkbox"/> Hurricane																
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<input checked="" type="checkbox"/> Flood	<input checked="" type="checkbox"/> Severe Winter Weather																
<input checked="" type="checkbox"/> Geological Hazards	<input checked="" type="checkbox"/> Wildfire																
<input checked="" type="checkbox"/> Hazardous Materials																	
Description of the Problem:	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.																
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:	Not Applicable																
Impact on Future Development:	Not Applicable																
Impact on Critical Facilities/Lifelines:	Not Applicable																
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	<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)																
<input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)																
CRS Category	<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 type="checkbox"/> Structural Flood Control Projects (SP)</td></tr><tr><td><input type="checkbox"/> Public Information (PI)</td><td><input checked="" 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 type="checkbox"/> Structural Flood Control Projects (SP)	<input type="checkbox"/> Public Information (PI)	<input checked="" type="checkbox"/> Emergency Services (ES)								
<input 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 checked="" type="checkbox"/> Emergency Services (ES)																
Priority	<table><tr><td><input checked="" type="checkbox"/> High</td><td><input type="checkbox"/> Medium</td><td><input type="checkbox"/> Low</td></tr></table>			<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low											
<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low															
Alternatives:	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>Current problem remains</td></tr><tr><td>Rely on federal cleanup</td><td>These services may or may not be available</td></tr><tr><td>Rely on state cleanup</td><td>These services may or may not be available</td></tr></table>			Action	Evaluation	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	Evaluation																
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-AndoverTwp-08. Code Coordinated Ordinance

Lead Agency:	Floodplain Administrator																
Supporting Agencies:	Construction Official, Building Department, Township Administration, NFIP State Coordinator, FEMA Regional Office																
Hazard(s) of Concern:	<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																	
Description of the Problem:	<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 meet 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. The Township's ordinance requires update.</p>																
Description of the Solution:	<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>																
Estimated Cost:	Staff time																
Potential Funding Sources:	Municipal budget																
Implementation Timeline:	Within 5 years																
Goals Met:	1, 2, 5,7																
Benefits:	<p>The updated ordinance will improve floodplain management, meet NFIP requirements, and increase resilience of new and substantially improved structures in the floodplain.</p>																
Impact on Socially Vulnerable Populations:	<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>																
Impact on Future Development:	<p>The action will result in stronger regulation of construction standards for future development in the Special Flood Hazard Area.</p>																
Impact on Critical Facilities/Lifelines:	<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>																
Impact on Capabilities:	<p>This action will improve floodplain management capabilities through better outlining of responsibilities and administrative procedures.</p>																
Climate Change Considerations:	<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>																
Mitigation Category	<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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CRS Category	<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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Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
Alternatives:	<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

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Action 2025-AndoverTwp-09. NJDEP Dam Repair

Lead Agency:	Engineer																
Supporting Agencies:	Dam Manager, NJDEP Bureau of Dam Safety, County Engineer																
Hazard(s) of Concern:	<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	
<input checked="" type="checkbox"/> Dam Failure	<input type="checkbox"/> Hurricane																
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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																	
Description of the Problem:	<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. 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">Whites Pond Dam (poor)Hemlock Lake Dam (poor)Lake Valentine Dam (poor)Lake Aeroflex Dam (poor)																
Description of the Solution:	<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>																
Estimated Cost:	Low for initial assessment of options, TBD for total cost based on mitigation actions selected																
Potential Funding Sources:	HMGP, BRIC, FMA, NJDEP, Annual Budget																
Implementation Timeline:	Within 5 years																
Goals Met:	1, 2, 3																
Benefits:	<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>																
Impact on Socially Vulnerable Populations:	<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>																
Impact on Future Development:	<p>Future development downstream of dams will also be protected from dam failure.</p>																
Impact on Critical Facilities/Lifelines:	<p>Critical roads and utilities will be protected from potential damage or loss from unintended dam releases.</p>																
Impact on Capabilities:	Not applicable																
Climate Change Considerations:	<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>																
Mitigation Category	<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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Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
Alternatives:	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>Risk of dam failure remains or increases over time</td></tr></table>	Action	Evaluation	No Action	Risk of dam failure remains or increases over time												
Action	Evaluation																
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

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Action 2025-AndoverTwp-10. Community Rating System Program Participation

Lead Agency:	Floodplain Administrator		
Supporting Agencies:	Township Administration, Emergency Management		
Hazard(s) of Concern:	<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		
Description of the Problem:	Although the Township has flood exposure, the Township does not participate in the Community Rating System (CRS) program. By participating in the CRS program, the Township can reduce and avoid flood damage to insurable property, strengthen and support the insurance aspects of the National Flood Insurance Program, and foster comprehensive floodplain management. Township residents which have flood insurance through the NFIP may see a decrease in flood insurance rates.		
Description of the Solution:	The Township will evaluate the benefits and costs of participating in CRS program. If feasible, the Township will join the program and begin implementing standards that exceed NFIP requirements.		
Estimated Cost:	Low		
Potential Funding Sources:	Municipal Budget		
Implementation Timeline:	2 years		
Goals Met:	2, 5		
Benefits:	The participation in the CRS benefits communities by offering discounted rates for flood insurance premiums, which addresses the three goals of the program: reduce and avoid flood damage to insurable property, strengthen and support the insurance aspects of the National Flood Insurance Program, and foster comprehensive floodplain management.		
Impact on Socially Vulnerable Populations:	The participation in the Community Rating System (CRS) benefits communities by offering discounted rates for flood insurance premiums, which may be more affordable for some socially vulnerable populations.		
Impact on Future Development:	Future development would need to adhere to any increased standards established as part of joining the CRS program such as increased freeboard and elevation certificate requirements.		
Impact on Critical Facilities/Lifelines:	Not applicable		
Impact on Capabilities:	This action would enhance the Township's floodplain management capabilities.		
Climate Change Considerations:	A warmer atmosphere means storms have the potential to be more intense and occur more often, including increased periods of intense rain events. These changes are likely to increase flood risks.		
Mitigation Category	<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)		
CRS Category	<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)		
Priority	<input type="checkbox"/> High	<input checked="" type="checkbox"/> Medium	<input type="checkbox"/> Low
Alternatives:	Action		Evaluation
	No action		-
	Adopt aspects of the CRS program into the floodplain management program		Increased floodplain management capabilities but no reduction in flood insurance premiums
	Abandon any floodplain management practices not required by NFIP		Reduction in floodplain management capabilities and increase in risk.



Action 2025-AndoverTwp-11. Forest Lake Dam Rehab

Lead Agency:	Forest Lakes Club																
Supporting Agencies:	County Engineer, County OEM, NJDEP, Municipal Engineer																
Hazard(s) of Concern:	<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	
<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																	
Description of the Problem:	Forest Lake Dam is a Class I High Hazard Dam that is located on Forest Lake. The dam is owned by the Forest Lakes Club. Failure of the dam could result in inundation of forested lands, densely populated areas, and local roadways including Forest Lake Drive and Club Lake Road, and potentially impact State Route 206. Although the dam was last inspected in 2022 and found to be in satisfactory condition, the risk of dam failure warrants an engineering evaluation to determine if retrofits of the dam would result in safer conditions.																
Description of the Solution:	The Municipal Engineer will work with the Forest Lakes Club to complete an engineering study of Forest 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 Forest Lakes Club will pursue funding support, permit approval from NJDEP, and implement the cost-effective measures.																
Estimated Cost:	High																
Potential Funding Sources:	FEMA BRIC, HHPD																
Implementation Timeline:	Within 5 years																
Goals Met:	1, 2, 8																
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:	Future development located in or near the dam inundation area will be further protected from a dam failure event.																
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 and strengthen the structural integrity of dam, as needed.																
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 due to projected increases in precipitation. This action will increase the capabilities to respond to these events.																
Mitigation Category	<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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Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
Alternatives:	<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 Forest 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 Forest 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 Forest 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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Action 2025-AndoverTwp-12. Lake Lenape Dam Rehab

Lead Agency:	Lake Lenape Association Board of Trustees																
Supporting Agencies:	County Engineer, County OEM, NJDEP, Municipal Engineer																
Hazard(s) of Concern:	<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"/> 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																	
Description of the Problem:	Lake Lenape Dam is a Class I High Hazard Dam that is located on Lake Lenape. The dam is owned by the Lake Lenape Association Board of Trustees. Failure of the dam could result in inundation of densely populated areas and local roadways including Old Creamery Road, Lenape Avenue, Limecrest Road, and Sussex Avenue. Although the dam was last inspected in 2024 and found to be in satisfactory condition, the risk of dam failure warrants an engineering evaluation to determine if retrofits of the dam would result in safer conditions.																
Description of the Solution:	The Municipal Engineer will work with the Lake Lenape Association Board of Trustees to complete an engineering study of Lake Lenape 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 Lake Lenape Association Board of Trustees will pursue funding support, permit approval from NJDEP, and implement the cost-effective measures.																
Estimated Cost:	High																
Potential Funding Sources:	FEMA BRIC, HHPD																
Implementation Timeline:	Within 5 years																
Goals Met:	1, 2, 8																
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:	Future development located in or near the dam inundation area will be further protected from a dam failure event.																
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 and strengthen the structural integrity of dam, as needed.																
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 due to projected increases in precipitation. This action will increase the capabilities to respond to these events.																
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Alternatives:	<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 Lake Lenape 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 Lake Lenape 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 Lake Lenape 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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