



7. TOWNSHIP OF LOWER

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

7.1 HAZARD MITIGATION PLANNING TEAM

The Township of Lower 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 Office of Emergency Management represented the community on the Cape May County HMP Planning Partnership 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 7-1 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 7-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Gary Douglass, OEM Coordinator Address: 2600 Bayshore Road, Villas, NJ 08251 Phone Number: 609-780-6049 Email: gdouglass@townshipoflower.org	Name/Title: Katie Crecca, Deputy Coordinator Address: 2600 Bayshore Road, Villas, NJ 08251 Phone Number: 609-884-0898 ex. 310 Email: kcrecca@townshipoflower.org
National Flood Insurance Program Floodplain Administrator	
Name/Title: Paul Dietrich, City Manager, City Engineer Address: 643 Washington Street Cape May, NJ 08204 Phone Number: 609-435-2642 Email: pdietrich@capemaycity.com	
Additional Contributors	
Name/Title: Don Ardnt Construction Official Method of Participation: Planning Partner	
Name/Title: Ed Donohue, OEM Coordinator Method of Participation: Assisted in worksheet completion and reviewing materials	
Name/Title: Eileen Kreis, Deputy OEM Coordinator Method of Participation: Assisted in worksheet completion and reviewing materials	
Name/Title: Mike Laffey, Township Manager Method of Participation: Assisted in worksheet completion and reviewing materials	



Name/Title: Christina Lewis, Deputy Township Manager
Method of Participation:

7.2 COMMUNITY PROFILE

The Township of Lower is located within the southern section of Cape May County, New Jersey. It is bounded on the north by the Township of Middle and the Delaware Bay, on the east by the Wildwoods and the Atlantic Ocean, on the south by the City of Cape May, Boroughs of West Cape May and Cape May Point and the Atlantic Ocean, and on the west by the Delaware Bay. It is part of the Ocean City Metropolitan Statistical Area. Diamond Beach, Erma, North Cape May and Villas are census-designated places and unincorporated areas located within Lower Township. Other communities in Lower Township include Cold Spring, Fishing Creek, Schellenger's Landing and Town Bank.

7.2.1 GOVERNING BODY FORMAT

The Township of Lower is governed by a Mayor and a Township Council. The Mayor is responsible for overseeing the executive functions of the township, which includes managing day-to-day operations, implementing policies, and ensuring that municipal services are delivered effectively to the residents. The Mayor also represents the township in various official capacities and works to promote the community's interests.

The Township Council, on the other hand, handles the legislative responsibilities. This includes passing ordinances, which are local laws that address a wide range of issues affecting the community, such as zoning regulations, public safety measures, and community development initiatives. The Council also approves the township's budget, allocating funds to different departments and projects to ensure that the township's needs are met. Additionally, the Council makes decisions on various local matters, such as infrastructure improvements and public services.

The Township Council consists of members who are elected by the residents of Lower Township. These elected officials represent the interests of their constituents and work to ensure the smooth functioning of the township. Together, the Mayor and Township Council collaborate to serve the community and maintain the well-being of Lower Township.

7.2.2 POPULATION AND SOCIAL VULNERABILITY

According to the U.S. Census, the 2020 population for Lower Township was 22,057, a 23.2 percent of the County population.

Research has shown that some populations are at greater risk from hazard events because of decreased resources or physical abilities. These populations can be more susceptible to hazard events based on a number of factors including their physical and financial ability to react or respond during a hazard, and the location and construction quality of their housing. Data from the 2020 U.S. Census indicates that 5.0 percent of the population is 5 years of age or younger, 25.0 percent is 65 years of age or older, 1.0 percent is non-English speaking, 10.7 percent is below the poverty threshold, and 16.5 percent is considered disabled.



7.2.2.1 ALICE IN CAPE MAY COUNTY

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

According to 2021 Point-in-Time-Data from ALICE, 26% of the 48,860 households in Cape May County are ALICE households (on par with the state average of 26%). The median household income in Cape May is \$78,657, and the County sees a labor force participation rate of 57%. Cape May County faces low household income compared to the state average of \$89,296, along with a low labor participation rate of 57% compared to the state average of 66%. 8% of Cape May households live in poverty, which falls below the state average of 10%.

7.3 JURISDICTIONAL CAPABILITY ASSESSMENT AND INTEGRATION

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

7.3.1 PLANNING AND REGULATORY CAPABILITY AND INTEGRATION

Table 7-2 summarizes the planning and regulatory tools that are available to Lower.



Table 7-2. 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	Construction Codes, Uniform, Chapter 235, 1975 and amended through 2017	State and Local	Township Council
How has or will this be integrated with the HMP and how does this reduce risk?				
Zoning/Land Use Code	Yes	Land Development, Chapter 400, 1975 and amended through 2018	Local	Township Council
How has or will this be integrated with the HMP and how does this reduce risk? This is a comprehensive ordinance regulating and limiting the uses of land, the uses and locations of buildings and structures; regulating and restricting the height and bulk of buildings and structures determining the area of yards and other open spaces; regulating and restricting the density of population; dividing the Township of Lower into districts for such purposes; adopting a map of said Township showing boundaries and the classification of such districts; establishing rules, regulations and standards governing the subdivision of land within the Township; establishing a Planning Board and a Board of Adjustment; and prescribing penalties for the violation of its provisions. The purpose and intent of this section is to adopt minimum land use control measures for flood-prone areas in order to comply with the National Flood Insurance Program and qualify the Township and its property owners for the benefits of the program. Such measurements are intended to meet the requirements and criteria of 24 C.F.R. 1910.3(d) in particular, and all other applicable federal laws and regulations. This Chapter contains significant controls on development in the floodplains and wetlands areas of the Township that are mitigation actions.				
Subdivision Code	Yes	Land Development, Chapter 400, 1975 and amended through 2018	Local	Township Council
How has or will this be integrated with the HMP and how does this reduce risk? As stated under the Zoning Code section above, this is a comprehensive Ordinance and include provisions for Subdivision approval. Section 400-75 addresses Minor Subdivision approval and Section 400-76 address Major Subdivision approval and the design requirements				
Site Plan Code	Yes	Land Development, Chapter 400, 1975 and amended through 2018	Local and County	Township Council
How has or will this be integrated with the HMP and how does this reduce risk? As stated under the Zoning Code section above, this is a comprehensive Ordinance and include provisions for Site Plan approval. Section 400-77 addresses Preliminary Site Plan review and the development design standards.				
Stormwater Management Code	Yes	Stormwater Management, Chapter 575, March 20, 2006	Local	Township Council
How has or will this be integrated with the HMP and how does this reduce risk? Flood control, groundwater recharge, and pollutant reduction through nonstructural or low-impact techniques shall be explored before relying on structural BMPs. Structural BMPs should be integrated with nonstructural stormwater management strategies and proper maintenance plans. Nonstructural strategies include both environmentally sensitive site design and source controls that prevent pollutants from being placed on the site or from being exposed to stormwater.				
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 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.	Yes	Senate Bill 3110; P. L. 2023, c. 93, July 3, 2023	State	Sellers and Landlords of commercial or residential property



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
Growth Management How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
Environmental Protection Ordinance(s) How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
Flood Damage Prevention Ordinance How has or will this be integrated with the HMP and how does this reduce risk? The flood hazard areas of the Township of Lower are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protections and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare. These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazard which increase flood heights and velocities, and when inadequately anchored, causes damage in other areas. Uses that are inadequately floodproofed, elevated or otherwise protected from flood damage also contribute to the flood loss. It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to mitigate future flooding.	Yes	Flood Damage Prevention, Chapter 351, March 17, 2014	Federal, State, County and Local	Township Council
Wellhead Protection How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
Emergency Management Ordinance How has or will this be integrated with the HMP and how does this reduce risk? The Township of Lower does hereby create a Local Defense/Emergency Management Council which shall establish an adequate organization to assist in supervising and conducting the civil defense and disaster control activities of the Township. The Local Defense/Emergency Management Council shall assist the Township of Lower in establishing the various local volunteer agencies needed to meet the requirements of all local civilian defense and disaster control activities in accordance with the rules and regulations established by the Governor of the State of New Jersey.	Yes	Local Defense/Emergency management Council, Chapter 56, March 18, 2019	Local	Township Council
Climate Change Ordinance How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
Other How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
PLANNING DOCUMENTS				
General/Comprehensive Plan How has or will this be integrated with the HMP and how does this reduce risk?	Yes			
Capital Improvement Plan How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
Disaster Debris Management Plan How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
Floodplain Management or Watershed Plan How has or will this be integrated with the HMP and how does this reduce risk? Requires elevation certifications for homes within special flood zone areas	Yes		Local	Construction Department
Stormwater Management Plan How has or will this be integrated with the HMP and how does this reduce risk?	Yes	-	Local	-
Open Space Plan How has or will this be integrated with the HMP and how does this reduce risk? According to the NRPA, natural resource areas are defined as "lands set aside for preservation of significant natural resources, open space, and visual aesthetics." Acquisition of natural resource areas and preserves serves to enhance the quality of the community by maintaining a portion of its natural amenities. Based on these standards, additional unstructured open space should be planned into any new or expanded park.	Yes	Open Space Recreation Plan, Five Year Master Plan Update, August 2014	Local	Recreation Advisory Board
Urban Water Management Plan How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
Habitat Conservation Plan How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
Shoreline Management Plan	No	Article 34, Environmental Conservation Law, Coastal Erosion Hazard Areas 6 NYCRR Part 505, Coastal Erosion Management Regulations	-State, Local	-
Economic Development Plan How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
Community Wildfire Protection Plan How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
Community Forest Management Plan How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
Transportation Plan How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
Agriculture Plan How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
Climate Action/ Resilience/Sustainability Plan How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
Tourism Plan How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
Business/ Downtown Development Plan How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
Other How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
RESPONSE/RECOVERY PLANNING				
Emergency Operations Plan How has or will this be integrated with the HMP and how does this reduce risk?	Yes		Local	OEM
Continuity of Operations Plan How has or will this be integrated with the HMP and how does this reduce risk?	Yes		Local	OEM
Substantial Damage Response Plan How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
Threat and Hazard Identification and Risk Assessment How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
Post-Disaster Recovery Plan How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-
Public Health Plan How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
Other How has or will this be integrated with the HMP and how does this reduce risk?	No	-	-	-

7.3.2 DEVELOPMENT AND PERMITTING CAPABILITY

Table 7-3 summarizes the capabilities of Lower to oversee and track development.

Table 7-3. Development and Permitting Capability

	Yes/No	Comment
Do you issue development permits? - 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	Construction Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Construction Department
Do you have a buildable land inventory? If you have a buildable land inventory, please describe	No	-
Describe the level of buildout in your jurisdiction.	N/A	There is space available for further build out within the Township.

7.3.3 ADMINISTRATIVE AND TECHNICAL CAPABILITY

Table 7-4 summarizes potential staff and personnel resources available to Lower and their current responsibilities that contribute to hazard mitigation.

Table 7-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
ADMINISTRATIVE CAPABILITY		
Planning Board	Yes	Planning Board; Zoning Board
Zoning Board of Adjustment	Yes	Planning Board; Zoning Board
Planning Department	Yes	Planning Board; Zoning Board
Mitigation Planning Committee	Yes	OEM
Environmental Board/Commission	Yes	Environmental Commission; Council
Open Space Board/Committee	Yes	Open Space Review Board; County



Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Public Works
Construction/Building/Code Enforcement Department	Yes	Planning Board; Zoning Board
Emergency Management/Public Safety Department	Yes	OEM/Police Department
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Planning Board; Zoning Board
Mutual aid agreements	Yes	Fire Districts, Fire Vol. Companies, Police
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	Planning, Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineer
Planners or engineers with an understanding of natural hazards	Yes	Planning, Engineer
Staff with expertise or training in benefit/cost analysis	Yes	Finance/ CFO
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazus applications	Yes	Assessor's Office/Staff
Staff that work with socially vulnerable populations or underserved communities	No	-
Environmental scientists familiar with natural hazards	Yes	Marc DeBlasio and Associates Engineering
Surveyors	Yes	Marc DeBlasio and Associates Engineering
Emergency manager	Yes	OEM
Grant writers	Yes	Finance/Grants
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

7.3.4 FISCAL CAPABILITY

Table 7-5 summarizes financial resources available to Lower.


Table 7-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvement project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	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	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

7.3.5 EDUCATION AND OUTREACH CAPABILITY

Table 7-6 summarizes the education and outreach resources available to Lower.

Table 7-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment
Public information officer or communications office	Yes	OEM/Paid Information Person
Personnel skilled or trained in website development	Yes	Shared service with local school
Hazard mitigation information available on your website	Yes	The Township is a class 7 CRS community and contains hazard mitigation information on township website to maintain credits.
Social media for hazard mitigation education and outreach	Yes	The Township is a class 7 CRS community and develops and posts hazard mitigation through social media platforms to maintain credits.
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Hazard Mitigation Planning Team
Warning systems for hazard events	Yes	Dept of Public Safety through text, email alerts
Natural disaster/safety programs in place for schools	Yes	Local school districts
Organizations that conduct outreach to socially vulnerable populations and underserved populations	Yes	Cape May County Human Services
Public outreach mechanisms / programs to inform citizens on natural hazards, risk, and ways to protect themselves during such events	Yes	Social Media/RAVE alerts



7.3.6 COMMUNITY CLASSIFICATIONS

Table 7-7 summarizes classifications for community programs available to Lower.

Table 7-7. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Community Rating System (CRS)	Yes	7	October 1, 2018
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	4-3	2019
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	4-10	2015
National Weather Service StormReady Certification	No	-	-
Firewise Communities classification	No	-	-
New Jersey Sustainable Jersey Community	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

N/A = Not applicable

— = Unavailable

7.3.7 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 7-8 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 7-8. Adaptive Capacity

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



7.4 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 7-1 is responsible for maintaining this information.

7.4.1 NFIP STATISTICS

Table 7-9 summarizes the NFIP policy and claim statistics for Lower.

Table 7-9. Lower NFIP Summary of Policy and Claim Statistics

# Policies	2,118
# Claims (Losses)	277
Total Loss Payments	\$3,942,372.83
# Repetitive Loss Properties (NFIP definition)	7
# Repetitive Loss Properties (FMA definition)	1
# Severe Repetitive Loss Properties (NFIP definition)	3
# Severe Repetitive Loss Properties (FMA definition)	4

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

7.4.2 FLOOD VULNERABILITY SUMMARY

Table 7-10 provides a summary of the NFIP program in Lower.

Table 7-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	The Township is prone to flooding during severe storm events.
Do you maintain a list of properties that have been damaged by flooding?	Yes, the Township maintains a list of properties damaged by flooding.
Do you maintain a list of property owners interested in flood mitigation?	Yes, the Township maintains a list of property owners who are interested in flood mitigation.



NFIP Topic	Comments
How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	There are currently no homeowners that are interested in elevation and acquisition.
Are any RiskMAP projects currently underway in your jurisdiction? If so, state what projects are underway.	No, not at this time.
How do you make Substantial Damage determinations?	Flood control officer to determine if damage exceeds 50% or more of structure value
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	There were no substantial damage determinations declared for recent flood events.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? If there are mitigation properties, how were the projects funded?	There have not been any mitigated properties to date.
Do your flood hazard maps adequately address the flood risk within your jurisdiction? If not, state why.	Yes, the flood maps adequately address flood risk within he Township.
NFIP Compliance	
What local department is responsible for floodplain management?	Construction Department is responsible for floodplain management within the Township.
Are any certified floodplain managers on staff in your jurisdiction?	No, not at this time.
Do you have access to resources to determine possible future flooding conditions from climate change?	Yes, the Township has access to climate change resources.
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	Yes, NFIP basics & CFM certification training
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Permit review, elevation certificate review, annual flood outreach letters, flood information portal on website via forerunner
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Improvement is 50% or more of structures assessed value
What are the barriers to running an effective NFIP program in the community, if any?	General knowledge on the subject by both the public and interdepartmentally
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, state the violations.	No, not at this time.
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	No recent CAV visit at this time.
What is the local law number or municipal code of your flood damage prevention ordinance?	Ord. No. 2014-04/ municipal code chapter 351
What is the date that your flood damage prevention ordinance was last amended?	3/17/2014
Does your floodplain management program meet or exceed minimum requirements? If exceeds, in what ways?	Meets minimum requirements



NFIP Topic	Comments
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?	No, not at this time.
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Community is a member of CRS program and interested in improving classification from a class 7 to a class 6.

7.5 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 7-11 through Table 7-13.

Table 7-11. Number of Building Permits for New Construction Issued Since the Previous HMP

	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
2020				
Total Permits	39	2	2	43
Permits within SFHA	11	2	0	13
2021				
Total Permits	44	0	14	45
Permits within SFHA	11	0	0	11
2022				
Total Permits	44	0	2	46
Permits within SFHA	9	0	0	9
2023				
Total Permits	43	2	2	47
Permits within SFHA	11	2	0	13
2024				
Total Permits	39	10	1	50
Permits within SFHA	14	10	0	24

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

**Table 7-12. Recent Major Development and Infrastructure from 2017 to Present**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zones*	Description / Status of Development
-	-	0	0	0	0

* Only location-specific hazard zones or vulnerabilities identified.

Table 7-13. 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
-	-	0	0	0	0

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

7.6.1 HAZARD AREA

Hazard area maps provided below illustrate the probable hazard areas impacted within the Township are shown in Figure 7-1 through Figure 7-23. 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 Lower has significant exposure. The maps show the location of potential new development, where available.

Figure 7-1. Lower Sea Level Rise and FEMA Flood Hazard Area Extent and Location Map1

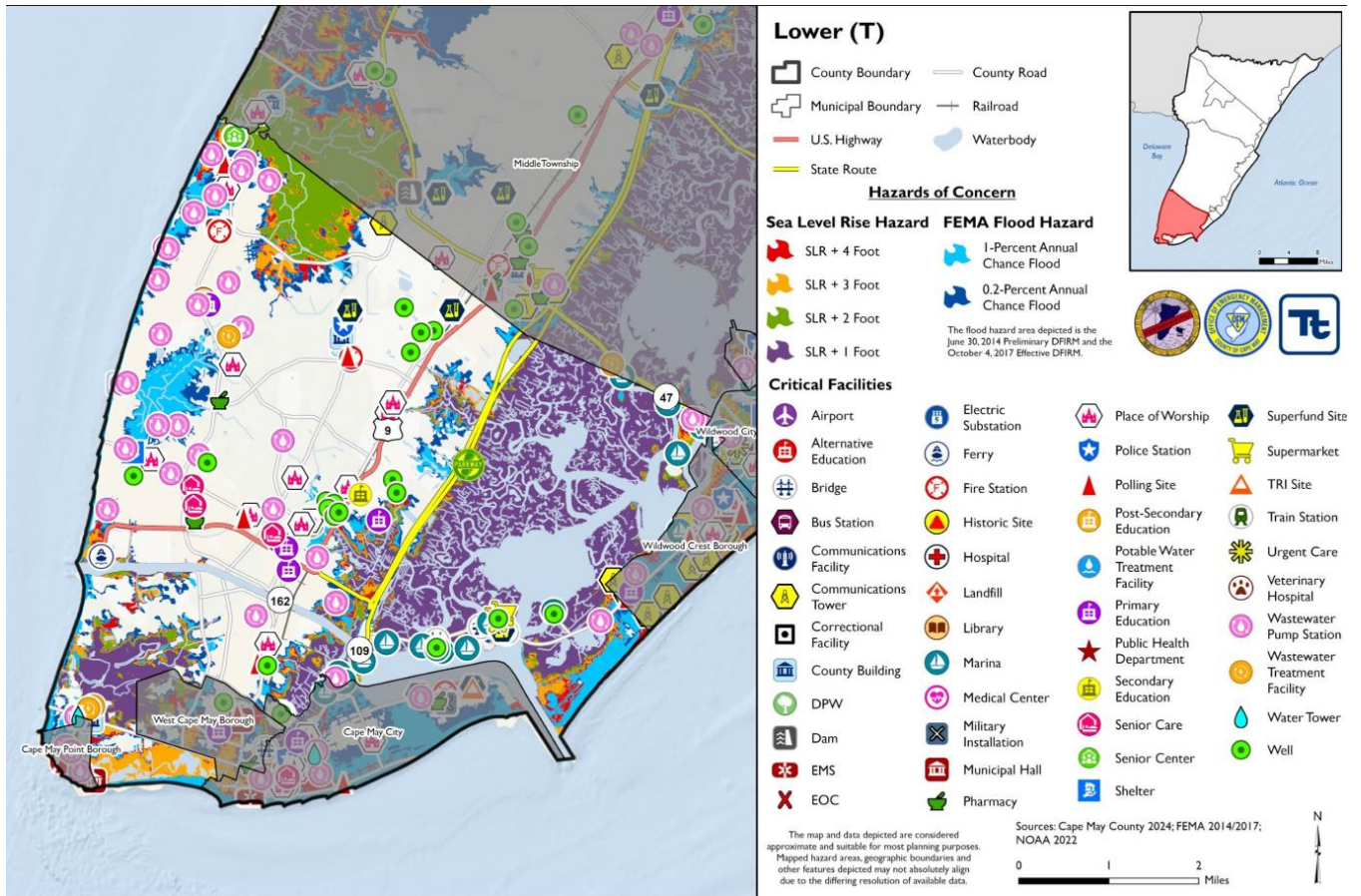
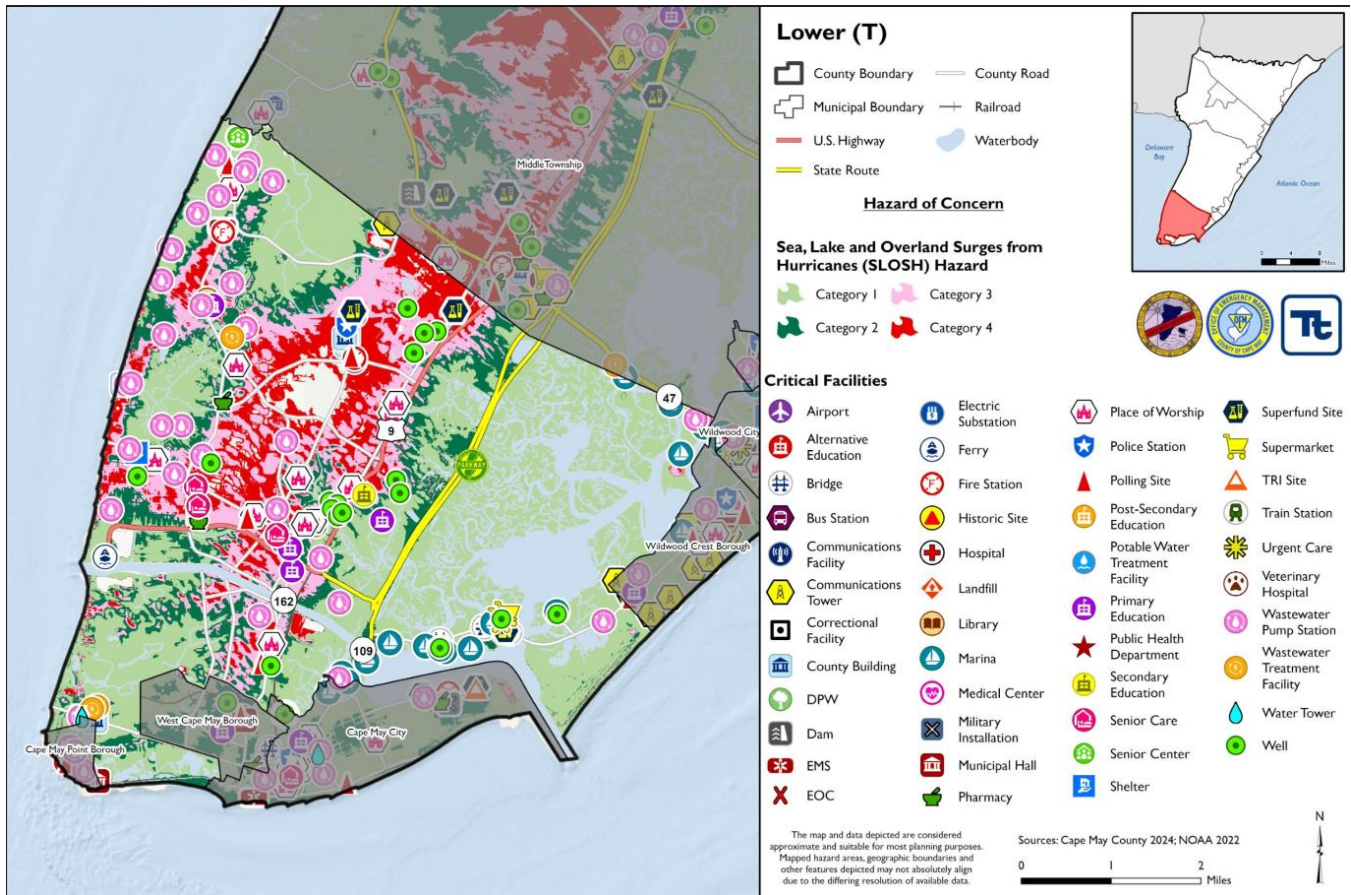


Figure 7-3. Lower WUI and Coastal Erosion Hazard Area Extent and Location Map

Figure 7-2. Lower SLOSH Hazard Area Extent and Location Map



7.6.2 HAZARD EVENT HISTORY

The history of natural and non-natural hazard events in Lower is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 7-14 provides details on loss and damage in Lower during hazard events since the last hazard mitigation plan update.

Table 7-14. Hazard Event History in Lower

Dates of Event	Event Type (Disaster Declaration)	County Designated?	Summary of Event	Summary of Damage and Losses in Lower
February 11, 2021	Severe Winter Weather (4597-DR-NJ)	Yes	Widespread snow fell and accumulate between 3 to 5 inches across the County, with some amounts locally a little higher. The County was eligible for Public Assistance through Federal Declaration.	No damages and losses were recorded for the Township.
September 1-3, 2021	Remnants of Hurricane Ida (EM-3573-NJ, DR-4614-NJ)	Yes	The remnants of Hurricane Ida produced heavy rainfall through the County. The County was eligible for Public Assistance through Federal Declaration.	No damages and losses were recorded for the Township.



Dates of Event	Event Type (Disaster Declaration)	County Designated?	Summary of Event	Summary of Damage and Losses in Lower
January 13, 2021	Severe Winter Weather, Flood	No	A quick moving winter storm impacted Cape May County where a widespread 6 to 12 inches of snow fell. Moderate coastal flooding in the tidal areas of Cape May County occurred around the time of the morning high tide causing numerous road closures.	Unbudgeted overtime wear and tear of equipment/vehicles
April 1, 2023	Severe Weather	No	Thunderstorms produced damaging winds and small to medium-sized hail. Multiple trees downed on Corson Tavern Road and Route 9 in Dennis Township. A structure fire was caused by lightning in Rio Grande.	No damages and losses were recorded for the Township.
September 23, 2023	Severe Weather	No	Tropical Storm Ophelia resulted in a steady onshore flow along the coast, causing widespread tidal flooding. There were numerous road closures. Many homes and other buildings were surrounded by flood waters with some minor property damage occurring.	No damages and losses were recorded for the Township.
January 19, 2024	Severe Winter Weather	No	A winter storm brought widespread light to moderate snowfall accumulations across the region. Snowfall totals ranged largely from around 3 to 4 across much of the zone. The highest snowfall report was from Dennis Township with 4.9.	Unbudgeted overtime wear and tear of equipment/vehicles
1/6/25-1/7/25	Winter snow storm	NO	Heavy snowfall of 8-10 inches	Unbudgeted overtime wear and tear of equipment/vehicles

EM = Emergency Declaration (FEMA)

FEMA = Federal Emergency Management Agency

DR = Major Disaster Declaration (FEMA)

N/A = Not applicable

7.6.3 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 Lower .

7.6.3.1 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. Lower reviewed the County hazard ranking



and individual results to assess the relative risk of the hazards of concern to the community. Table 7-15 shows Lower's final hazard rankings for identified hazards of concern. Mitigation action development uses the ranking to target hazards with the highest risk.

Table 7-15. Hazard Ranking

Hazard	Rank
Dam Failure	Low
Drought	Medium
Earthquake	Low
Extreme Temperature	Medium
Flood	Medium
Severe Weather	High
Severe Winter Weather	Medium
Wildfire	High

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

7.6.3.2 CRITICAL FACILITIES

Table 7-16 identifies critical facilities in the community located in the 1 percent and 0.2 percent annual chance floodplains.

Table 7-16. Critical Facilities Flood Vulnerability

Name	Type	Vulnerability	
		1% Annual Chance Event	0.2% Annual Chance Event
CAPE MAY AIRPORT (WWD)	Airport	N	
Middle Thorofare Bridge (CMCBC)	Bridge	Y	
Upper Thorofare Bridge	Bridge	Y	
Mill Creek Bridge	Bridge	Y	
Lafayette Street Bridge	Bridge	Y	
Fare Free Transportation	County Building	N	
Airport Center	County Building	N	
Airport Senior and Nutrition Center	County Building	N	
Millman Senior and Nutrition Center	Senior Center	Y	Y
ERMA VOLUNTEER FIRE COMPANY	Fire Station	N	
VILLAS VOLUNTEER FIRE COMPANY	Fire Station	N	
Sterling Harbor Marina	Marina	Y	Y
Shawcrest Marina	Marina	Y	Y
Light House Point Marina	Marina	Y	Y



Name	Type	Vulnerability	
		1% Annual Chance Event	0.2% Annual Chance Event
Utsch's Marina	Marina	Y	Y
Canyon Club Resort Marina	Marina	Y	Y
Harbor View Marina	Marina	Y	Y
BreeZee Lee Yacht Basin	Marina	Y	Y
Hinch Marina	Marina	Y	Y
Two Mile Landing	Marina	Y	Y
Snug Harbor Marina	Marina	Y	Y
Miss Chris Marina	Marina	Y	Y
Windmill Marina	Marina	Y	Y
South Jersey Marina	Marina	Y	Y
Schooner Island Marina	Marina	Y	Y
Victoria Commons	Senior Care	N	
North Cape Center	Senior Care	N	
Victoria Manor Nursing Center	Senior Care	N	
Lower Township Police Department	Police Station	N	
BEACHCOMBER CG-WELL	Well	N	
BEACHCOMBER CG-WELL	Well	N	
CHRLDREN'S SEASHORE LEARNING	Well	N	
HISTORIC COLD SPG VLG DENNISVI	Well	N	
HISTORIC COLD SPG VLG OLD GRAN	Well	N	
HISTORIC COLD SPG VLG MUSEUM	Well	N	
HISTORIC COLD SPG VLG ICE CREA	Well	N	
HISTORIC COLD SPG VLG HAND PUM	Well	N	
COLD SPRING VILLAGE-RESTROOMS	Well	N	
LAKE LAURIE CG-WELL 1 &	Well	N	
LAKE LAURIE CG-WELL #2	Well	N	
Mua Rd Pump Station	Wastewater Pump Station	N	
Wilson Rd Pump Station	Wastewater Pump Station	Y	
Waste Water Plant	Wastewater Treatment Facility	N	
Cape May Regional Wtf	Wastewater Treatment Facility	N	
Lower Township Mua	Wastewater Treatment Facility	N	
CAPE MAY COUNTY AIRPORT	Airport	N	
WUERKER NEW ACRES FARM	Superfund Site	N	
CAPE MAY COUNTY	Superfund Site	N	



7. Township of Lower

Name	Type	Vulnerability	
		1% Annual Chance Event	0.2% Annual Chance Event
SNOWS DOXSEE INC(BUMBLE BEE FOODS)	Superfund Site	Y	
LTMUA	Wastewater Pump Station	Y	
COXHALL CREEK FLOOD	County Building	Y	
CAPE MAY CANAL	Ferry	N	
CMCMUA	Wastewater Pump Station	Y	
LOWER TOWNSHIP RESCUE SQUAD	EMS	N	
LOWER TOWNSHIP RESCUE SQUAD	EMS	N	
TOWN BANK FIRE STATION	Shelter	N	
HARBORVIEW MARINA	Well	Y	
ATLANTIC CAPE FISHERIES	Well	Y	
TWO MILE	Well	Y	
BEACHCOMBER CG-WELL	Well	N	
BUMBLE BEE	Supermarket	Y	
HARBORVIEW MARINA	Marina	Y	
LT PUBLIC WORKS	DPW	N	
LTMUA	Wastewater Pump Station	Y	
LTMUA	Wastewater Pump Station	Y	
LTMUA	Wastewater Pump Station	Y	
LTMUA	Wastewater Pump Station	Y	
LTMUA	Wastewater Pump Station	Y	
LTMUA	Wastewater Pump Station	Y	
LTMUA	Wastewater Pump Station	N	
LTMUA	Wastewater Pump Station	N	
LTMUA	Wastewater Pump Station	Y	
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LTMUA	Wastewater Pump Station	Y	
LTMUA	Wastewater Pump Station	N	
LTMUA	Wastewater Pump Station	N	
LTMUA	Wastewater Pump Station	N	
LTMUA	Wastewater Pump Station	Y	
LTMUA	Wastewater Pump Station	N	
LTMUA	Wastewater Pump Station	Y	
LTMUA	Wastewater Pump Station	N	



Name	Type	Vulnerability	
		1% Annual Chance Event	0.2% Annual Chance Event
LTMUA	Wastewater Pump Station	Y	
LTMUA	Wastewater Pump Station	N	
LTMUA	Wastewater Pump Station	Y	
LTMUA	Well	N	
LTMUA	Wastewater Pump Station	N	
LTMUA	Wastewater Pump Station	N	
LTMUA	Well	N	
Lund's Fisheries	Supermarket	Y	
Well 8	Well	N	
1st Assembly of God	Place of Worship	N	N
Tabernacle United Methodist Church	Place of Worship	N	N
St John of God Roman Catholic Church	Place of Worship	N	N
Covenant Bible Church	Place of Worship	N	N
Cape May Holiness Association Erma Camp	Place of Worship	N	N
St Raymond's Roman Catholic Church	Place of Worship	N	N
St Barnabas By the Sea	Place of Worship	N	N
Cold Spring Presbyterian Church	Place of Worship	N	N
New Hope Baptist Church	Place of Worship	N	N
First Assembly of God	Place of Worship	N	N
Good Samaritan Baptist Church	Place of Worship	N	N
Seashore Community Church of the Nazarene	Place of Worship	N	N
Shore Points Presbyterian Fellowship	Place of Worship	N	N
Lower Twp Library	Library	N	N
Lower Cape May Regional High School	Secondary Education	N	
Richard M. Teitelman Middle School	Primary Education	N	
Carl T. Mitnick Elementary School	Primary Education	N	
Maud H. Abrams Elementary School	Primary Education	N	
Memorial Elementary School	Primary Education	N	
Sandman Consolidated Elementary School	Primary Education	N	
ST RAYMONDS CHURCH AUD	Polling Site	N	N
TOWNSHIP MUNICIPAL BLDG	Polling Site	N	N
TOWNBANK VOL. FIRE COMPANY	Polling Site	N	N
ST JOHN OF GOD AUD	Polling Site	N	N
ERMA VOLUNTEER FIRE CO	Polling Site	N	N
FIRST ASSEMBLY OF GOD CHURCH	Polling Site	N	N
OLDE PHILLY PHARMACY	Pharmacy	N	
REDNER'S MARKETS	Pharmacy	N	



Source: Cape May County 2022, 2024; HIFLD 2024; USACE 2024

In addition to critical facilities that are exposed to flooding, there are no dams or high hazard dams located within the Township.

7.6.4 IDENTIFIED ISSUES

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

- High tidal flow from the Atlantic Ocean and Delaware Bay raises the water level in the harbor, causing flooding over the bulkheads in the area.
- Continued erosion has reduced the volume on beaches and resulted in increased risk from wave damage. The latest FEMA maps resulted in a V zone designation due to lack of protective dune height and volume.
- Lower Township has six repetitive loss and two severe repetitive loss properties. Many of these structures were built without flood design standards. These properties require mitigation to prevent future losses and prevent loss of life and property damage. Progress has been made on elevating buildings and reconstructing new buildings that are more resistant to flooding.
- CR-621 is a designated County evacuation route for the Wildwoods, including Diamond Beach in Lower Township. The Route traverses a low-lying stretch of marsh that is vulnerable to tidal and nuisance flooding. Additionally, the Route is served by several bridges that are beyond their useful lives.
- Sunset Boulevard (CR-606) is a county road connecting Cape May Point and Cape May Point State Park to West Cape May, Cape May, and evacuation routes to the north. The road is low-lying and has portions that can flood with water levels as little as one foot above high tide.
- Lower Township features a dense forest cover that covers a significant portion of the Township. Approximately 56% of the Township resides in the wildland-urban interface (WUI), and approximately 125 residents (or 0.5% of the population) reside in an area with high to extreme wildfire fuel hazard. Approximately 56% of the Township's buildings are in the WUI, representing \$4.7 billion in RCV. The Township has identified a need to enhance public outreach relating to wildfire risk in the Township.
- The Township lacks a Disaster Debris Management Plan.
- Lack of high water vehicles for flood prone areas to evacuate residents
- Community warming/cooling center is deficient of backup power.
- Ohio Avenue stormwater pump station is deficient of backup power.
- Failing major stormwater infrastructure in the North Cape May section of Lower Township.
- Senior housing developments evacuation abilities
- Inability to reach/inform all residents of hazards, emergencies, and awareness.



7.7 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.

7.7.1 PAST MITIGATION ACTION STATUS

Table 7-17 indicates progress on the Township's mitigation strategy identified in the 2017 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.

7.7.2 ADDITIONAL MITIGATION EFFORTS

In addition to the mitigation actions completed in Table 7-17, Lower identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, Lower has made significant mitigation progress in the following areas:

- 2020-Lower Twp-001 : Drainage and Roadway part complete. The Township will elevate bulkheads to reduce the rate that floodwater spreads across the area.
- 2020-Lower Twp-003: 4 repetitive properties 0 of them severe. Township sent out general outreach information.



Table 7-17. 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 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-Lower Twp-001	Wilson Drive Drainage and Roadway Elevation		Public Works, Engineer	Problem: High tidal flow from the Atlantic Ocean and Delaware Bay raises the water level in the harbor, causing flooding over the bulkheads in the area. Solution: The Township will elevate bulkheads to reduce the rate that floodwater spreads across the area. The Township will also raise the elevation of Wilson Drive and revise drainage accordingly.	1. In progress 2. Drainage and Roadway part complete. 3. The Township will elevate bulkheads to reduce the rate that floodwater spreads across the area	1. Include 2. The Township will work to elevate bulkheads to reduce the rate that floodwater spreads across the area. Currently drainage and roadway part of the project has been completed. 3. N/A
2020-Lower Twp-002	Dune and Beach Replenishment		Engineer, USACE, FEMA	Problem: Continued erosion has reduced the volume on beaches and resulted in increased risk from wave damage. The latest FEMA maps resulted in a V zone designation due to lack of protective dune height and volume. Solution: The Township will work with NJ DEP, FEMA, and the US Army Corps on mitigation to build secondary dunes to alleviate the V zone designation.	1. No Progress. 2. Obstacles with multi governmental agencies.	1. Include 2. The Township will continue to work with NJ DEP, FEMA, and the US Army Corps on mitigation to build secondary dunes to alleviate the V zone designation. This project will include the Hereford Inlet to Cape May Inlet, NJ Hurricane and Storm Damage Reduction Project, and will result in the construction of measures in an effort to reduce flooding and storm damage risks in areas of the Atlantic Coast. 3. N/A



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-Lower Twp-003	Repetitive Loss Mitigation		NFIP Floodplain Administrator, supported by homeowners	Problem: Lower Township has six repetitive loss and two severe repetitive loss properties. Many of these structures were built without flood design standards. These properties require mitigation to prevent future losses and prevent loss of life and property damage. Progress has been made on elevating buildings and reconstructing new buildings that are more resistant to flooding. Solution: The Township will conduct outreach to the RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).	1. In progress 2. 4 repetitive properties 0 of them severe. 3. Township sent out general outreach information.	1. Include 2. The Township will continue to conduct outreach to the RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas). 3. N/A



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-Lower Twp-004	CR-621 Pacific Ave/Ocean Drive		County Engineering, Lower Township Administration	Problem: CR-621 is a designated County evacuation route for the Wildwoods, including Diamond Beach in Lower Township. The Route traverses a low-lying stretch of marsh that is vulnerable to tidal and nuisance flooding. Additionally, the Route is served by several bridges that are beyond their useful lives. Solution: The Township will support the County in the replacement of three (3) bridges and elevation of 2.7 miles of County Route 621 in Lower Township. The projects are currently in the concept development stage and have been submitted to NJDOT for preliminary engineering.	1. In Progress 2. County Project	1. Include 2. The Township will continue to support the County in the replacement of three (3) bridges and elevation of 2.7 miles of County Route 621 in Lower Township. The projects are currently in the concept development stage and have been submitted to NJDOT for preliminary engineering. 3. N/A



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-Lower Twp-005	CR-606/Sunset Boulevard		County Engineering, Lower Township Administration	Problem: Sunset Boulevard (CR-606) is a county road connecting Cape May Point and Cape May Point State Park to West Cape May, Cape May, and evacuation routes to the north. The road is low-lying and has portions that can flood with water levels as little as one foot above high tide. Solution: The Township will support the County in the elevation of ~1.5 miles of CR-606 (Sunset Boulevard) through the South Cape May Meadows (Lower and WCM). Preliminary work has been completed for drainage and the project is in concept design.	1. In progress 2. County Project	1. Include 2. The Township will continue to support the County in the elevation of ~1.5 miles of CR-606 (Sunset Boulevard) through the South Cape May Meadows (Lower and WCM). Preliminary work has been completed for drainage and the project is in concept design. 3. N/A



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-Lower Twp-006	Firewise Program Participation		NJ State Forest Fire Service; Cape May County Fire Chiefs Association; Lower Twp fire districts; Township of Lower	Problem: Lower Township features a dense forest cover that covers a significant portion of the Township. Approximately 56% of the Township resides in the wildland-urban interface (WUI), and approximately 125 residents (or 0.5% of the population) reside in an area with high to extreme wildfire fuel hazard. Approximately 56% of the Township's buildings are in the WUI, representing \$4.7 billion in RCV. The Township has identified a need to enhance public outreach relating to wildfire risk in the Township. Solution: The Township seeks a status as a Firewise community through the facilitation of public outreach/awareness projects and fire risk reduction activities. The Township will also participate in State/County actions and trainings to enhance public outreach and knowledge of wildfire and potential mitigation measures. This will entail the participation of Township officials in trainings and seminars and the enhancement of wildfire prevention and response capabilities.	1. No Progress .	1. Include 2. The Township will continue to seek status as a Firewise community through the facilitation of public outreach/awareness projects and fire risk reduction activities. 3. N/A



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-Lower Twp-007	Disaster Debris Management Plan		Public Works, OEM	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. Knowledge to complete	1. Include 2. The Township will conduct disaster debris management training to selected staff in 2025 to educate on the process. The Township will work towards developing and adopting a Disaster Debris Management Plan. 3. N/A



7.7.3 PROPOSED HAZARD MITIGATION ACTIONS FOR THE HMP UPDATE

Lower 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 Lower 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 7-18 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 7-19 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.





Table 7-18. 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
Drought	X									X
Earthquake	X									X
Extreme Temperature	X									X
Flood	X	X		X		X	X		X	X
Severe Weather	X	X		X		X	X		X	X
Severe Winter Weather	X	X				X			X	X
Wildfire	X			X		X	X			X

Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.

Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct structures to reduce the impact of hazards.

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

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

Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.

Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.

Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.

Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.

Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 7-19. 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-Lower Twp-001	Wilson Drive Drainage and Roadway Elevation	0	1	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2025-Lower Twp-002	Dune and Beach Replenishment	0	1	1	1	1	0	0	1	1	1	1	0	1	1	10	High
2025-Lower Twp-003	Repetitive Loss Mitigation	1	1	1	1	1	1	0	1	0	0	1	0	1	1	10	High
2025-Lower Twp-004	CR-621 Pacific Ave/Ocean Drive	1	1	1	1	1	0	0	1	1	1	1	0	1	1	11	High
2025-Lower Twp-005	CR-606/Sunset Boulevard	1	1	1	1	1	0	0	1	1	1	1	0	1	1	11	High
2025-Lower Twp-006	Firewise Program Participation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2025-Lower Twp-007	Disaster Debris Management Plan	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13	High
2025-Lower Twp-008	Higher CRS rating	0	0	1	1	1	1	0	0	1	1	0	1	1	1	9	Medium
2025-Lower Twp-009	NFIP and CFM training and certification	0	0	1	1	1	1	0	0	1	1	0	1	1	1	9	Medium



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-Lower Twp-010	Substantial Damage Management Plan	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13	High
2025-Lower Twp-011	Higher Water Rescue Vehicles for Emergency Services	1	0	1	1	0	1	1	1	1	1	1	1	1	1	12	High
2025-Lower Twp-012	Backup power for Community cooling/warming centers	1	1	1	0	0	1	1	1	1	1	1	1	1	1	12	High
2025-Lower Twp-013	Ohio Ave Stormwater pump station	1	1	1	0	0	1	1	1	1	1	1	1	1	1	12	High
2025-Lower Twp-014	North Cape May Stormwater Infrastructure	1	1	1	0	0	1	1	1	1	1	1	1	1	1	12	High
2025-Lower Twp-015	Higher Water Rescue Vehicles for Senior Housing	1	0	1	1	0	1	1	1	1	1	1	1	1	1	12	High
2025-Lower Twp-016	Dam Inundation Modeling in High Risk areas	1	1	1	0	0	1	1	1	1	1	1	1	1	1	12	High
2025-Lower Twp-017	Emergency Communication System	1	0	1	1	1	0	0	1	1	1	1	0	1	1	10	Medium

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



Action 2025-LowerTwp-01 Wilson Drive Drainage and Roadway Elevation

Lead Agency:	Public Works	
Supporting Agencies:	Engineer	
Hazards of Concern:	Flood, Severe Weather, Severe Winter Weather	
Description of the Problem:	During periods of high tide, particularly in the spring and fall, the Atlantic Ocean and Delaware Bay strong tidal flows raise the water level significantly, causing it to spill over the bulkheads. The flooding disrupts local operations, damages infrastructure, and poses safety risks, prompting the need for improved flood mitigation strategies.	
Description of the Solution:	The Township will be seeking funding to elevate bulkheads in the harbor area to reduce the frequency and severity of tidal flooding. This project builds upon recent infrastructure improvements, including completed drainage and roadway upgrades, which have already enhanced the area's resilience to stormwater and tidal events.	
Estimated Cost:	High	
Potential Funding Sources:	HMGP, State Aid, Township Budget	
Implementation Timeline:	6-9 months	
Goals Met:	1	
Benefits:	Flooding will be reduced in hazard prone areas. Ecosystems will be protected from future damage due to coastal erosion.	
Impact on Socially Vulnerable Populations:	Less damage to property and decreased loss of life will occur in hazard prone areas, and lead to reduced recovery costs and flood insurance claims.	
Impact on Future Development:	Reduced flood insurance costs will encourage further development and improve overall community resiliency to flooding events. If sea level rise is prevented from infiltrating land, a community may remain in place for a longer period of time until migration is required. Plant and animal life will face less damage to their habitats and their ecosystems will remain hospitable for a longer period of time.	
Impact on Critical Facilities/Lifelines:	Ensures transportation routes remain open and accessible to the public for daily use and evacuation needs. Protects existing communications infrastructure from loss due to flooding. Reduces the risk of water systems becoming contaminated and unusable for potable water purposes.	
Impact on Capabilities:	Increases community resiliency to flooding events in vulnerable areas that would normally be at high risk of property damage or loss of life and reduces recovery time.	
Climate Change Considerations:	Ensure new bulkhead can withstand water capacity at a higher elevation than anticipated as sea levels rise and extreme rain events increase in frequency.	
Mitigation Category	Structure and Infrastructure Project	
CRS Category	Structural Flood Control Projects	
Priority	High	
Alternatives	Action	Evaluation
	No action	Flooding will continue to disrupt local operations, damage infrastructure, and pose safety risks. Repeated losses may increase over time as sea levels rise.



	Utilize temporary flood barriers	Temporary barriers (e.g., inflatable or modular systems) may help during known high-tide events but require frequent labor, storage, and may not withstand severe storms or long-term sea level rise.
	Elevate adjacent roadways and properties only	Protects certain structures but does not prevent water from overtopping bulkheads and spreading throughout the area. May redirect floodwaters elsewhere and be less effective without bulkhead elevation.



Action 2025-LowerTwp-02 Dune and Beach Replenishment

Lead Agency:	Engineer	
Supporting Agencies:	USACE, FEMA	
Hazards of Concern:	Flood	
Description of the Problem:	Continued erosion has reduced the volume on beaches and resulted in increased risk from wave damage. The latest FEMA maps resulted in a V zone designation due to lack of protective dune height and volume.	
Description of the Solution:	The Township will continue to work with NJ DEP, FEMA, and the US Army Corps on mitigation to build secondary dunes to alleviate the V zone designation. This project will include the Hereford Inlet to Cape May Inlet, NJ Hurricane and Storm Damage Reduction Project, and will result in the construction of measures in an effort to reduce flooding and storm damage risks in areas of the Atlantic Coast.	
Estimated Cost:	High	
Potential Funding Sources:	HMGP, USACE, NJ DEP	
Implementation Timeline:	Within 5 years	
Goals Met:	5, 6	
Benefits:	Enhances long-term shoreline stability, reduces wave impact, protects structures and infrastructure, and may lower NFIP premiums through floodplain reclassification.	
Impact on Socially Vulnerable Populations:	Helps protect coastal housing and public access infrastructure that serves all income levels, including mobile and seasonal workers.	
Impact on Future Development:	Improves the feasibility of future development by lowering risk and potentially revising FEMA flood zones.	
Impact on Critical Facilities/Lifelines:	Protects roadways, water/sewer lines, and utility services from coastal storm damage.	
Impact on Capabilities:	Strengthens coastal resilience, builds partnerships with federal and state agencies, and improves hazard mitigation coordination.	
Climate Change Considerations:	Addresses sea level rise and increased storm surge intensity due to climate change by expanding natural barriers.	
Mitigation Category	Natural Systems Protection	
CRS Category	Natural Resource Protection	
Priority	High	
Alternatives	Action	Evaluation
	No Action	Problem persists and erosion continues, increasing property damage and safety risks.
	Install seawalls or revetments	Provides some protection but is costly, may disrupt natural processes, and less sustainable long-term.
	Restrict coastal development	May limit risk but doesn't protect existing infrastructure or remove V Zone designation.



Action 2025-LowerTwp-03 Repetitive Loss Mitigation

Lead Agency:	NFIP Floodplain Administrator	
Supporting Agencies:	Homeowners	
Hazards of Concern:	Flood, Severe Weather, Severe Winter Weather	
Description of the Problem:	Lower Township has six repetitive loss and two severe repetitive loss properties. Many of these structures were built without flood design standards. These properties require mitigation to prevent future losses and prevent loss of life and property damage. Progress has been made on elevating buildings and reconstructing new buildings that are more resistant to flooding.	
Description of the Solution:	The Township will continue to conduct outreach to the RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).	
Estimated Cost:	High	
Potential Funding Sources:	FMA, HMGP, match from property owners	
Implementation Timeline:	Within 3 years	
Goals Met:	1	
Benefits:	Eliminates flood damage to homes and residences, which creating an open space for the municipality and increasing flood storage.	
Impact on Socially Vulnerable Populations:	Removing homes from the floodplain immediately removes the risk to life and property. Socially vulnerable populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Removing the risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed.	
Climate Change Considerations:	Climate change is likely to increase the frequency and severity of severe rainfall, flash flooding, riverine flooding, and coastal flooding from sea level rise and storm surge events. Removing structures from the floodplain will reduce the response and recovery costs as a result of these events and decrease the loss of human life as a result of these events. Elevating structures will reduce the recovery costs as a result of these events.	
Mitigation Category	Structure and Infrastructure Project	
CRS Category	Property Protection	
Priority	High	
Alternatives	Action	Evaluation
	No Action	Problem persists



7. Township of Lower

	Levee around floodplain	Costly, not enough room
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.



Action 2025-LowerTwp-04 CR-621 Pacific Ave/Ocean Drive

Lead Agency:	County Engineering	
Supporting Agencies:	Lower Township Administration	
Hazards of Concern:	Flood, Severe Weather	
Description of the Problem:	CR-621 is a designated County evacuation route for the Wildwoods, including Diamond Beach in Lower Township. The Route traverses a low-lying stretch of marsh that is vulnerable to tidal and nuisance flooding. Additionally, the Route is served by several bridges that are beyond their useful lives.	
Description of the Solution:	The Township will continue to support the County in the replacement of three (3) bridges and elevation of 2.7 miles of County Route 621 in Lower Township. The projects are currently in the concept development stage and have been submitted to NJDOT for preliminary engineering.	
Estimated Cost:	Medium-High	
Potential Funding Sources:	County Funds; NJDOT	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 6	
Benefits:	Risk of flooding will be reduced. Bridge replacement ensures at least a single transportation route remains accessible to the community.	
Impact on Socially Vulnerable Populations:	Elevating the road will provide a safe path of ingress and egress for residents of flood prone areas. Emergency vehicles will have the ability to assist residents during a flood event.	
Impact on Future Development:	Ensuring safe travel encourages businesses and residents to remain in or move to the area. Economic resiliency is increased by reducing the time needed for businesses to access facilities to reopen following a flood.	
Impact on Critical Facilities/Lifelines:	Roadway will be less likely to incur damage from floodwaters and be able to remain open for travel.	
Impact on Capabilities:	Economic resiliency is increased by reducing the time needed for businesses to access facilities to reopen following a flood. Bridge replacement ensures transportation routes remain open and accessible to the public for daily use and evacuation needs.	
Climate Change Considerations:	Consideration should be taken for more frequent flood events as a result of increases in rainfall frequency and severity. Ensure the bridge structure is impervious to erosion at its base due to rising water levels.	
Mitigation Category	Structure and Infrastructure Project	
CRS Category	Property Protection	
Priority	Medium	
Alternatives	Action	Evaluation
	No Action	The evacuation route remains vulnerable to tidal flooding and bridge failure, jeopardizing safe egress and emergency access.
	Only repair one bridge that has the most need	Would provide some short relief but will not address long-term structural issues and may not be cost effective.



7. Township of Lower

	Only elevate the roads	May reduce some flooding impacts, but aging bridges could still fail structurally.
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Action 2025-LowerTwp-05 CR-606/Sunset Boulevard

Lead Agency:	County Engineering	
Supporting Agencies:	Lower Township Administration	
Hazards of Concern:	Flood, Severe Storm, Severe Winter Storm	
Description of the Problem:	Sunset Boulevard (CR-606) is a county road connecting Cape May Point and Cape May Point State Park to West Cape May, Cape May, and evacuation routes to the north. The road is low-lying and has portions that can flood with water levels as little as one foot above high tide.	
Description of the Solution:	The Township will continue to support the County in the elevation of ~1.5 miles of CR-606 (Sunset Boulevard) through the South Cape May Meadows (Lower and WCM). Preliminary work has been completed for drainage and the project is in concept design.	
Estimated Cost:	High	
Potential Funding Sources:	HMGP, Township Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1,6	
Benefits:	The risk of flooding will be significantly reduced in these areas.	
Impact on Socially Vulnerable Populations:	Elevating the road will provide a safe path of ingress and egress for residents of flood prone areas. Emergency vehicles will have the ability to assist residents during a flood event.	
Impact on Future Development:	Ensuring safe travel encourages businesses and residents to remain in or move to the area. Economic resiliency is increased by reducing the time needed for businesses to access facilities to reopen following a flood.	
Impact on Critical Facilities/Lifelines:	Roadway will be less likely to incur damage from floodwaters and be able to remain open for travel.	
Impact on Capabilities:	Economic resiliency is increased by reducing the time needed for businesses to access facilities to reopen following a flood.	
Climate Change Considerations:	Consideration should be taken for more frequent flood events as a result of increases in rainfall frequency and severity.	
Mitigation Category	Structure and Infrastructure Project	
CRS Category	Property Protection	
Priority	High	
Alternatives	Action	Evaluation
	No Action	The road will remain highly vulnerable to tidal flooding, cutting off access to Cape May Point and evacuation routes during high tides or storms.
	Install flood warning signage only	This would raise awareness but does not maintain safe passage during hazard events.
	Construct a bypass route	Would be a costly option and may face environmental/regulatory constraints.



Action 2025-LowerTwp-06 Firewise Program Participation

Lead Agency:	NJ State Forest Fire Service; Cape May County Fire Chiefs Association
Supporting Agencies:	Lower Twp fire districts; Township of Lower
Hazards of Concern:	Wildfire
Description of the Problem:	Lower Township features a dense forest cover that covers a significant portion of the Township. Approximately 56% of the Township resides in the wildland-urban interface (WUI), and approximately 125 residents (or 0.5% of the population) reside in an area with high to extreme wildfire fuel hazard. Approximately 56% of the Township's buildings are in the WUI, representing \$4.7 billion in RCV. The Township has identified a need to enhance public outreach relating to wildfire risk in the Township.
Description of the Solution:	The Township will continue to seek status as a Firewise community through the facilitation of public outreach/awareness projects and fire risk reduction activities. The Township will explore funding availability and staff time to complete this task. The Township will also participate in State/County actions and trainings to enhance public outreach and knowledge of wildfire and potential mitigation measures. This will entail the participation of Township officials in trainings and seminars and the enhancement of wildfire prevention and response capabilities.
Estimated Cost:	Low
Potential Funding Sources:	Township Budget
Implementation Timeline:	3 years
Goals Met:	1, 2, 3
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	Education and Awareness Programs
CRS Category	Public Information



7. Township of Lower

Priority	Medium	
Alternatives	Action	Evaluation
	No Action	Problem persists
	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



Action 2025-LowerTwp-07 Disaster Debris Management Plan

Lead Agency:	Public Works	
Supporting Agencies:	OEM	
Hazards of Concern:	All hazards	
Description of the Problem:	Major disaster events can result in large amounts of debris that overwhelm normal trash collection operations. Depending on the amount generated, temporary staging areas for debris collection may be needed. The municipality does not have a disaster debris management plan in place. During a disaster that results in debris, a plan with outlined responsibilities is needed to adequately address post-disaster cleanup operations.	
Description of the Solution:	The Township will conduct disaster debris management training to selected staff in 2025 to educate on the process. The Township will work towards developing and adopting 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:	Township budget	
Implementation Timeline:	Within 5 years	
Goals Met:	3,4	
Benefits:	The action will result in increased quicker and more efficient cleanup after disaster events.	
Impact on Socially Vulnerable Populations:	N/A	
Impact on Future Development:	N/A	
Impact on Critical Facilities/Lifelines:	N/A	
Impact on Capabilities:	The action will result in increased post disaster capabilities.	
Climate Change Considerations:	Climate change may result in an increase in the frequency and severity of weather-related disaster events. This action will increase the capabilities to respond to these events.	
Mitigation Category	Local Plans and Regulations	
CRS Category	Emergency Services	
Priority	High	
Alternatives	Action	Evaluation
	No Action	Large amounts of debris will continue to overwhelm normal trash collection operations.
	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-LowerTwp-08 Higher CRS rating

Lead Agency:	CRS Coordinator	
Supporting Agencies:	OEM	
Hazards of Concern:	Flood	
Description of the Problem:	The Township is a CRS Class 7 community and would like to seek a higher CRS Class rating.	
Description of the Solution:	The Township will explore funding availability and staff time to obtain Class 6 rating in the CRS Program.	
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:	N/A	
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. As sea level rises due to climate change, the area of the flood hazard may expand. These changes are likely to increase flood risks.	
Mitigation Category	Education and Awareness Programs	
CRS Category	Public Information	
Priority	Medium	
Alternatives	Action	Evaluation
	No Action	The township will remain at CRS class 7.
	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-LowerTwp-09 NFIP and CFM training and certification

Lead Agency:	Floodplain Manager and Staff	
Supporting Agencies:	OEM	
Hazards of Concern:	Flood	
Description of the Problem:	The Township floodplain management staff lack NFIP basics and CFM certification training.	
Description of the Solution:	Where feasible, the Township will have Floodplain Manager and staff attend trainings at FEMA's EMI in Emmitsburg Maryland for NFIP Basics and the Intermediate Floodplain management course (E0273). Where not feasible, officials will attend virtual trainings and review available resources from FEMA and ASFPM at the ASFPM (https://www.floods.org/) website.	
Estimated Cost:	Low	
Potential Funding Sources:	Township Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2	
Benefits:	Providing an opportunity for Township staff and officials to become further educated on floodplain management practices and standards can aid in the development of plans and procedures in a way that is conscious of the flood hazard.	
Impact on Socially Vulnerable Populations:	Officials that are up to date on flood risk are more likely to encourage development outside areas of high flood risk, which is where socially vulnerable populations have historically resided. Safer dwellings may be developed in a less vulnerable location.	
Impact on Future Development:	Officials that understand best practices in floodplain management will have the opportunity to influence future development and prevent unsafe building in flood hazard areas.	
Impact on Critical Facilities/Lifelines:	The opportunity will exist for leaders and operators of utilities and other essential services to attend training and provide direction on ways the prepare for, plan for, and prevent interruptions in service as a result of a flood.	
Impact on Capabilities:	Officials that attend trainings will have a more confident understanding of floodplain management principles and the basics of NFIP requirements and standards.	
Climate Change Considerations:	Climate change is likely to result in stronger and more frequent rainfall events that will contribute to increased flood risk	
Mitigation Category	Education and Awareness Programs	
CRS Category	Public Information	
Priority	Medium	
Alternatives	Action	Evaluation
	No Action	Staff will continue to lack NFIP basics and CFM certification.
	Send all staff to CFM certification training	May exceed allocated budget
	Drop out of NFIP	This is not a feasible option.



Action 2025-LowerTwp-010 Substantial Damage Management Plan

Lead Agency:	Floodplain Administrator
Supporting Agencies:	Public Works, OEM
Hazards of Concern:	All Hazards
Description of the Problem:	Officials in NFIP-participating communities are responsible for regulating all development in SFHAs by issuing permits and enforcing local floodplain requirements, including Substantial Damage, for the repairs of damaged buildings. After any disaster event, they must: • Determine where the damage occurred within the community and if the damaged structures are in an SFHA. • Determine what to use for “market value” and cost to repair; uniformly applying regulations will protect against liability and promote equitable administration. • Determine if repairing plus improving the damaged structure equals or exceeds 50% of the structure’s pre-damage value. • Require permits for floodplain development. The township does not have a Substantial Damage Management Plan in place, nor do they have a formal process in place when conducting substantial damage determinations. The municipality is in need of a formal process and plan to provide a framework for conducting such inspections and determinations.
Description of the Solution:	The Township will conduct disaster debris management training to selected staff in 2025 to educate on the process. The Township will work towards developing and adopting a Disaster Debris Management Plan.
Estimated Cost:	The municipality will develop a Substantial Damage Management Plan, following the six step planning process in 2021 <i>Developing a Substantial Damage Management Plan</i> (https://crsresources.org/files/500/developing_subst_damage_mgmt_plan.pdf). This plan will outline responsibilities for Substantial Damage determinations, determining market value, and permit approval processes following a disaster event.
Potential Funding Sources:	Municipal budget
Implementation Timeline:	Within 5 years to develop the plan; ongoing to maintain and update the plan
Goals Met:	2, 3
Benefits:	This plan will provide a process in making Substantial Damage Determinations and allow the municipality to make these determinations and meet NFIP requirements more quickly.
Impact on Socially Vulnerable Populations:	Substantially damaged structures are required to be rebuilt to be compliance with current codes. Socially vulnerable populations may not have the financial means to make these improvements. This action may allow for the identification of potential resources to address substantial damages to structures owned by socially vulnerable populations.
Impact on Future Development:	A Substantial Damage Management Plan would include all existing, current, and future development in the municipality.
Impact on Critical Facilities/Lifelines:	A Substantial Damage Management Plan would include all critical facilities and lifelines in the municipality.
Impact on Capabilities:	This action improves disaster recovery capabilities.
Climate Change Considerations:	Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action provides additional planning for disaster recovery.



Mitigation Category	Local Plans and Regulations	
CRS Category	Emergency Services, Preventative Measures	
Priority	High	
Alternatives	Action	Evaluation
	No Action	The township lacks a Substantial Damage Management Plan and a formal process for damage determinations.
	Rely on state or federal resources following disaster events	Resources may not be available during major widespread events
	Establish MOUs with outside agencies to conduct Substantial Damage Determinations	A plan outlining responsibilities is still necessary to prevent missing important requirements



Action 2025-LowerTwp-011 Higher Water Rescue Vehicles for Emergency Services

Lead Agency:	OEM	
Supporting Agencies:	Public Works,	
Hazards of Concern:	Flood, Severe Weather	
Description of the Problem:	Flood-prone areas lack high-water vehicles, hindering timely evacuations during severe weather. Without them, responders face delays and safety risks, especially for vulnerable populations. This gap compromises emergency response, public safety, and increases the risk of injury or loss of life.	
Description of the Solution:	The Township will be seeking funding to purchase high-water rescue vehicles to improve emergency response capabilities in flood-prone areas. These specialized vehicles are designed to operate in deep or fast-moving water, allowing first responders to safely access neighborhoods and evacuate residents during severe weather events, such as coastal storms, heavy rainfall, or tidal flooding.	
Estimated Cost:	High	
Potential Funding Sources:	EMPG, NJOEM, Municipal Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 3, 4	
Benefits:	Enhances emergency response time, reduces risk to responders and the public, and ensure safer evacuations during severe weather.	
Impact on Socially Vulnerable Populations:	Directly benefits residents in flood prone areas, particularly those with limited mobility or transportation options.	
Impact on Future Development:	Promotes equitable emergency response and preparedness in redeveloping flood-prone areas.	
Impact on Critical Facilities/Lifelines:	Ensures responders can maintain access to hospitals, shelters, and critical facilities during flood events.	
Impact on Capabilities:	Greatly expands local emergency response capacity and self-sufficiency in flood related scenarios.	
Climate Change Considerations:	As flooding and severe weather intensify due to climate change, high-water vehicles will be essential for response and rescue operations.	
Mitigation Category	N/A	
CRS Category	Emergency services	
Priority	High	
Alternatives	Action	Evaluation
	No action	Emergency responders may be unable to reach or evacuate residents during floods.
	Rely on mutual aid	Assistance from neighboring communities may be delayed or unavailable during widespread events.
	Use standard emergency vehicles	These vehicles are not equipped for deep water, posing safety hazards to responders and residents.



Action 2025-LowerTwp-012 Backup power for Community cooling/warming centers

Lead Agency:	OEM	
Supporting Agencies:	Public Works	
Hazards of Concern:	Extreme Temperature, Severe Weather, Severe Winter Weather	
Description of the Problem:	The designated community warming/cooling center lacks backup power, which limits its ability to remain operational during outages caused by extreme temperature events or severe storms.	
Description of the Solution:	The township will procure and install an appropriately sized backup generator to ensure continued operation of heating and cooling systems during emergencies. Include wiring, fuel source, and automatic transfer switch installation.	
Estimated Cost:	Medium	
Potential Funding Sources:	HMGP, Municipal budget	
Implementation Timeline:	Within 3 years	
Goals Met:	1, 3, 4	
Benefits:	Ensures uninterrupted services at the warming/cooling center for vulnerable populations during outages.	
Impact on Socially Vulnerable Populations:	Provides lifesaving refuge for those without adequate home heating/cooling, especially the elderly, low-income, and medically dependent.	
Impact on Future Development:	N/A	
Impact on Critical Facilities/Lifelines:	Keeps critical public safety infrastructure operational.	
Impact on Capabilities:	Enhances the Township's emergency sheltering capabilities.	
Climate Change Considerations:	Supports resilience to increasing frequency of extreme heat and cold due to climate change.	
Mitigation Category	Structure and Infrastructure Project	
CRS Category	Emergency Services	
Priority	High	
Alternatives	Action	Evaluation
	No action	Center may close during power outages, leaving residents without safe refuge.
	Use portable generators	Provides temporary power but less reliable and may not sustain full HVAC operations.
	Relocate center to a facility with existing generator	May require long-term planning, relocation challenges, accessibility challenges, and facility upgrades.



Action 2025-LowerTwp-013 Ohio Ave Stormwater pump station

Lead Agency:	Public Works	
Supporting Agencies:	OEM, Engineering	
Hazards of Concern:	Flood, Severe Weather, Severe Winter Weather	
Description of the Problem:	The Ohio Avenue stormwater pump station is vulnerable to failure during outages because it lacks backup power, reducing floodwater management capacity during storms.	
Description of the Solution:	Install a dedicated backup generator and electrical components to ensure continuous pump operation during storm-related outages.	
Estimated Cost:	High	
Potential Funding Sources:	HMGP, NJDEP, Township budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 3, 4	
Benefits:	Prevents system failure and localized flooding by maintaining pump station functionality during power loss.	
Impact on Socially Vulnerable Populations:	Protects neighborhoods most affected by repeat stormwater flooding and slower recovery.	
Impact on Future Development:	N/A	
Impact on Critical Facilities/Lifelines:	Keeps essential drainage infrastructure running, safeguarding public roads and utilities.	
Impact on Capabilities:	Strengthens flood response capacity and reduces post-event damages.	
Climate Change Considerations:	Enhances resilience to more intense rainfall and flood events expected with climate change.	
Mitigation Category	Structure and Infrastructure Project	
CRS Category	Property Protection	
Priority	High	
Alternatives	Action	Evaluation
	No action	Pump failure during storm events could result in severe street and property flooding.
	Manual pump operation	Labor-intensive, dangerous during storms, and dependent on responder availability.
	Upgrade pump station without generator	Doesn't address power vulnerability and still risks total system failure.



Action 2025-LowerTwp-014 North Cape May Stormwater Infrastructure

Lead Agency:	Township administration	
Supporting Agencies:	Public Works	
Hazards of Concern:	Flood, Severe Weather, Severe Winter Weather	
Description of the Problem:	Major stormwater infrastructure in the North Cape May section of Lower Township is failing, increasing flood risk and maintenance burden.	
Description of the Solution:	Replace aging and undersized infrastructure to increase level of protection with modern piping and upgraded outfalls. Ensure new components are designed to handle projected rainfall intensity and future sea level rise.	
Estimated Cost:	High	
Potential Funding Sources:	HMGP, FMA, Municipal budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 3, 4	
Benefits:	Enhances drainage capacity, reduces flood frequency, and protects roadways and properties from long-term water damage.	
Impact on Socially Vulnerable Populations:	Improves safety and livability in neighborhoods at greatest risk of repeat flood events.	
Impact on Future Development:	N/A	
Impact on Critical Facilities/Lifelines:	Supports continued operation of road networks and underground utilities.	
Impact on Capabilities:	Reduces the need for emergency response and flood recovery in frequently flooded zones.	
Climate Change Considerations:	Addresses the need for increased stormwater capacity due to more intense storms and rainfall.	
Mitigation Category	Structure and Infrastructure Project	
CRS Category	Property Protection	
Priority	High	
Alternatives	Action	Evaluation
	No action	Infrastructure failure continues, leading to road closures and property damage.
	Patch repairs only	Delay in full replacement; temporary repair may not withstand future severe weather conditions.
	Install aboveground detention only	Does not replace damaged pipes and may not effectively handle peak flow conditions in urban areas.



Action 2025-LowerTwp-015 Higher Water Rescue Vehicles for Senior Housing

Lead Agency:	OEM	
Supporting Agencies:	Public Works, Housing Authority	
Hazards of Concern:	Flood, Severe Weather, Severe Winter Weather	
Description of the Problem:	Senior housing developments often have limited evacuation capabilities, especially during flooding or storm events. Residents may lack personal transportation or mobility, increasing risk during emergencies.	
Description of the Solution:	Purchase high-water evacuation vehicles capable of accessing flood-prone areas and safely transporting residents with limited mobility from senior housing developments to designated shelters.	
Estimated Cost:	High	
Potential Funding Sources:	NJOEM, Township Budget, EMPG	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 3, 4	
Benefits:	Reduces risk of injury or death during evacuations, improves equity in emergency response planning, and enhances community resilience.	
Impact on Socially Vulnerable Populations:	Directly supports elderly, medically fragile, and mobility-limited residents.	
Impact on Future Development:	Encourages consideration of accessible evacuation in future housing developments.	
Impact on Critical Facilities/Lifelines:	Supports transportation access between housing and critical services like shelters and medical facilities.	
Impact on Capabilities:	Improves responder access and enhances emergency response readiness.	
Climate Change Considerations:	Helps address more frequent flooding and weather extremes threatening aging and vulnerable populations.	
Mitigation Category	N/A	
CRS Category	Emergency Services	
Priority	High	
Alternatives	Action	Evaluation
	No action	Seniors remain stranded during flood events, increasing mortality and healthcare risks.
	Rely on private vehicles or buses	May not be suitable for high-water access or timely evacuation needs.
	Use portable shelters at facilities	Helpful for sheltering in place but doesn't solve evacuation challenges in rising water



Action 2025-LowerTwp-016 Dam Inundation Modeling in High Risk areas

Lead Agency:	OEM	
Supporting Agencies:	Township Engineering	
Hazards of Concern:	Dam Failure, Flooding	
Description of the Problem:	There is an insufficient amount of data surrounding dam inundation and the resulting flooding within the township.	
Description of the Solution:	The township will conduct dam inundation modeling in high-risk areas, prioritizing those dams and their downstream areas that are classified as a high or significant hazard.	
Estimated Cost:	Medium	
Potential Funding Sources:	HMGP, HHPD, Township Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 4, 7	
Benefits:	Identification of dams that are at higher risk of failure and an understanding of their inundation zones provides the opportunity to work with the downstream community to prepare for any potential flooding events and address any ways to mitigate the overall risk of failure.	
Impact on Socially Vulnerable Populations:	The most vulnerable populations may live directly downstream of the dam. Identifying which areas are most likely to experience significant impacts will allow for planning and staging of resources to protect lives and property.	
Impact on Future Development:	New structures are less likely to be built in areas where the risk of inundation is high. This can guide capital improvement projects within the municipality and only allow development in areas where it is safe to build, and guide future building codes, zoning, land use and permitting.	
Impact on Critical Facilities/Lifelines:	Allows for the identification of infrastructure that currently exists which may be vulnerable to impacts so that sufficient planning and preparation to increase resiliency and decrease likelihood of interruption.	
Impact on Capabilities:	Identification of inundation areas provides a framework to plan for the needs of communities that lie within the areas of highest risk.	
Climate Change Considerations:	Increase in extreme rainfall events may alter the floodplain, which impacts the dam inundation zones as water moves downstream.	
Mitigation Category	Structure and Infrastructure Project	
CRS Category	Preventative Measures	
Priority	High	
Alternatives	Action	Evaluation
	No action	The township will remain unaware of dam failure risks and potential flood extents, increasing vulnerability and - Unpreparedness.
	Rely on outdated or generic data	May result in incomplete or inaccurate flood risk assessments, especially downstream of high-hazard dams.
	Focus only on state-regulated dams	Ignores risks from smaller, locally-owned or unregulated dams that may still pose serious hazards.



Action 2025-LowerTwp-017 Emergency Messaging System

Lead Agency:	OEM	
Supporting Agencies:	Township Administration	
Hazards of Concern:	All Hazards	
Description of the Problem:	Some residents are not reached by current emergency messaging systems, due to lack of internet, phone access, or language barriers, leaving them uninformed during critical hazard events.	
Description of the Solution:	The Township plans to secure funding to expand outreach using direct mail, printed materials, language-accessible alerts, and enhanced digital notification tools (e.g., text/email, reverse 911). Promote enrollment in systems through events and partnerships.	
Estimated Cost:	Low	
Potential Funding Sources:	Township budget	
Implementation Timeline:	Within 2 years	
Goals Met:	1, 2, 4	
Benefits:	Broadens access to life-saving information, ensures timely alerts, and helps build trust in emergency management.	
Impact on Socially Vulnerable Populations:	Reaches households without internet, ESL residents, seniors, and individuals with cognitive disabilities.	
Impact on Future Development:	Sets the foundation for a more connected and resilient community.	
Impact on Critical Facilities/Lifelines:	Indirectly supports lifeline operation by reducing public confusion and congestion during emergencies.	
Impact on Capabilities:	Enhances communication effectiveness and increases enrollment in local alert systems.	
Climate Change Considerations:	Ensures timely communication during increasingly frequent and intense hazard events.	
Mitigation Category	Education and Awareness Programs	
CRS Category	Public Information, Emergency Services	
Priority	Medium	
Alternatives	Action	Evaluation
	No action	Many residents will remain uninformed or unprepared during emergencies.
	Rely only on digital systems	May exclude elderly, rural, and lower-income populations without digital access.
	Use public signs/billboards only	Good for visibility, but lacks personal and timely delivery of information.