

17 – FREEHOLD TOWNSHIP

PLANNING TEAM AND PARTICIPATION

Name	Title	Participation
George Baumann	Chief of Police/OEM Coordinator	Primary Point of Contact, Municipal Meeting #1
Matthew Bryant, PE, CME, CFM	Township Engineer	Coordination of projects and mitigation needs.
Todd Brown, PP, AICP	Township Planner and Zoning Officer	Coordination of any required Master Plan updates, etc.
Kristin Bartolomeo	Executive Assistant	Appendix coordination and review

COMMUNITY PROFILE

Overview

The current Township of Freehold encompasses 37 square miles. Until the mid-1950s, the township was a primarily rural, agricultural community surrounding the more intensely developed Borough of Freehold. With the expansion of transportation infrastructure, the character of development began to change as suburban growth began to extend from both Freehold Borough and northern urban centers. Freehold began to grow into a residential and commercial center, with the Freehold Raceway Mall opening in 1990. By the late 20th century, commercial and industrial land use patterns extended along County Route 537 (east-west) and State Route 9 (north-south).

The Township continues to preserve open space and farms, most recently approving the acquisition of a 151.7-acre tract along Ely-Harmony Road in 2022. Freehold has 14 parks that include two showcase parks (Michael J. Tighe Park and Opatut Park), pocket parks with playgrounds, open space in nearly every development, as well as an arboretum. In 2015 the Township completed its first “universally integrated” playground at Michael J. Tighe Park designed to enable children with special needs to access and enjoy a playground and play with children of all ability levels. In 2019, Freehold was awarded funding from the Monmouth County Open Space Trust Fund to construct a second integrated playground in Opatut Park, which was completed and opened in December 2021.

Since 2022, the Chesapeake & Delaware Railroad has taken over operation of the Jamesburg to Freehold rail line that connects to the Red Bank to Lakewood rail line in Farmingdale. In 2023, the Railroad began a construction and restoration project that included “25,000 track-feet of relayed rail and 12,500 new crossties, of which more than 8,000 are environmentally sustainable.”

Land Use, Development, & Growth

Although a large portion of the land in Freehold Township is developed and dedicated to residential and public, considerable land is covered by wetlands, forests and agriculture. From 2015 to 2020, the community underwent minimal change in its land use composition, with urban or developed land accounting for nearly 42 percent of its total area, and wetlands, forested land and agricultural land making up 28 percent, 20 percent, and 8 percent, respectively. Although since 2015, the Borough’s agricultural land, forested land, and wetlands, diminished marginally, while its urban or developed land experienced a slight increase, its overall land use composition remained roughly the same.

Land Use Type	Total Acres (2015)	Total Acres (2020)	Percent Change
Agriculture	2082.7	2006.3	-4%
Barren Land	170.1	169.4	>0%
Forest	5135.8	5083.5	-1%
Urban	10407.3	10553.1	1%
Water	158.0	160.7	2%
Wetlands	6932.2	6913.1	>0%

Source: NJDEP Land Use/Land Cover data, 2015-2020

Recent Major Development and Infrastructure from 2020 to Present

In 2021-2022, redevelopment plans were adopted by the Township Committee for the Freehold Mall (Burlington Coat Factory), the Lone Pine Landfill, and the former 3M property on Willowbrook Road. In an effort to maintain the Freehold Raceway Mall as a regional shopping mall and destination, the Township Committee recently worked with Mall ownership to fine-tune zoning district requirements and provide alternative permitted uses.

Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years

Recent development proposals include a new site plan for the property known as the Bellemead tract, a 77-acre parcel opposite the Trotters Way entrance to the Freehold Raceway Mall. Currently used as farmland, in 2022 Township officials approved a General Development Plan that includes an extension of Trotters Way extension from W. Main Street to U.S. Route 9. An application for development of the site, seeking subdivision and site plan approval of a mixed-use residential and commercial project is currently under review by the County and Township planning boards. The project is intended to satisfy part of the Township's affordable housing obligation.

Additionally, a development known the Estates at Brock Farms which includes the subdivision of a 128.4-acre parcel at 267 Monmouth Road located at the southeast corner of the intersection of Monmouth Road (Monmouth County Rte 537) and Siloam Road (Monmouth County Rte. 527). The subdivision consists of approximately 171 lots for the construction of 128 single family detached dwellings, 16 duplex buildings for 32 affordable units with the remainder of the lots dedicated to open space, stormwater management, roadways etc. This parcel was rezoned previously to the ML-10 (Moderate- and Low-Income Housing Zone – 10,000 square feet) Zone and will also satisfy part of the Township's affordable housing obligation.

Demographics & Vulnerable Populations

This plan analyzed census-derived data on population trends and population age distributions to help illustrate potential vulnerability within the township. A population increase or decrease can illustrate potential hazard vulnerability through development pressures on the built environment, or through physical and social impacts of marked population loss. A community with a large share of population under age five may indicate vulnerabilities in hazard response, resource allocation, and evacuation – FEMA identifies that the pediatric population is disproportionately affected during disasters, and requires special consideration in categories of anatomy and physiology, psychological, and education vulnerabilities (FEMA, 2022, NLM, 2022). Individuals over age 65 are a growing share of the country's population and often represent the greatest share of deaths from extreme weather events and other natural disasters. A larger share of population over 65 may indicate local vulnerabilities to hazard events both before and after a disaster occurs – these populations may have mobility needs, uneven access to resources, and limited social networks that makes pre-disaster engagement challenging (FEMA, 2023).

The Township of Freehold has a total estimated population of 35,548. Of this population, an estimated 3.3% is under age 5, and 17.8% is over age 65. The Township's population remained consistent over the ACS survey periods between 2013-2017 and 2018-2022, with an estimated 0.34% change. Most impacting hazard mitigation planning for the township is an aging population, for which targeted outreach, plans inclusive of potential mobility limitations, and robust resource network will aid in hazard response and preparedness in Freehold.

There is one block group in central Freehold Township which is identified as potentially overburdened (OBC) due to criteria of *Minority* population vulnerabilities. There are no parts of the township meeting designation criteria for CDRZ or CEJST identification.

Demographics Summary	
Total Population (2018-2022 ACS 5-year Estimates)	35,548
Population Change since 2017	0.3%
Percent of Population Age < 5	3.3%
Percent of Population > 65	17.8%

Source: 2018-2022 ACS 5-Year Estimates, 2013-2017 ACS 5-Year Estimates

HAZARD IDENTIFICATION

One of the first steps in developing a risk assessment is for participating municipalities to review and prioritize the hazards that can affect them. This was done based on how often a hazard has occurred, how significant effects have been in the past, the difficulty and cost of recovering from such events. Jurisdictions ranked the list of hazards as either high, medium, low, or no concern. The following include the Township's hazard ranking. The full risk assessment for each hazard is located in Section 4.0.

Hazard Ranking

High	Medium	Low
Natural Hazards		
Flood	Extreme Temperature	Lightning
Dam Failure	Extreme Wind	Tornado
	Hurricane / Tropical Storm	
	Nor'easter	Earthquake
	Winter Storm	Wildfire
Human-made Hazards		
	Economic Disruption	Civil Unrest
	Terrorism	Power Failure
	Cyber Attack	
	Pandemic	

The Township ranked Coastal Erosion, Landslide, Storm Surge, and Wave Action as N/A.

Hazard Ranking Explanation

Floods, cyber-attacks, and pandemics all remain high hazards for the Township. Township facilities have been the victim of cyber-attacks within the past year. The police station was affected, and CentraState Healthcare also had a massive data breach which resulted in the loss of a significant amount of data. Wildfires were moved from a high-risk hazard to a low-risk hazard. There was one small two-acre fire in October 2024. Tornadoes were moved down to low from medium in the last HMP plan update. There have been no significant tornadoes or damage from tornadoes in the past five years. Coastal erosion, landslides, storm surges, and wave action are all not applicable due to the Township's general topography and geography.

Significant Hazard Events Since Last Plan Update

With just over 2.5 inches of rainfall recorded, Freehold Township was spared the worst of Hurricane Ida in September 2021. A utility pole was hit by lightning, resulting in a minor power outage, but no extensive flooding or damage was reported. Heavy rain in December 2023 caused power outages across Monmouth County, including in Freehold Township. Heavy winds and rain again left Freehold residents without power in January 2024. Additionally, there was a significant cyber-attack that affected the Township police in 2024.

Climate Change Impacts on Extent and Magnitude of Hazards

Climate change is expected to significantly impact the risks and hazards faced by Freehold Township. As global temperatures continue to rise, the frequency and intensity of extreme weather events such as hurricanes, floods, and

heatwaves are likely to increase. This will exacerbate existing vulnerabilities in the township, particularly in areas prone to flooding. The Special Flood Hazard Area (SFHA) in Freehold Township, which includes the Manasquan and Metedeconk Rivers and their tributaries, is already at risk, with approximately 5.5 percent of the township's total area lying within the 1% annual chance flood zone. With climate change, these flood zones may expand, leading to more frequent and severe flooding events that could damage infrastructure, homes, and critical facilities.

The aging population in Freehold Township, with 17.8% of residents over the age of 65, is particularly vulnerable to the impacts of climate change. Older adults are more susceptible to heat-related illnesses and may face mobility challenges during evacuations in extreme weather events. Additionally, the township's infrastructure, including water systems and transportation networks, may be strained by increased demand for cooling during heatwaves and the need for repairs following severe storms.

RISK ASSESSMENT

National Flood Insurance Program (NFIP) statistics

Freehold Township	
Initial FIRM	9/25/2009
Effective FIRM	7/16/1976
Number of Policies In-Force:	69
Total Losses:	52
Total Payments:	\$333,612.62
Number of RL Properties:	5
Number of Mitigated RL Properties:	0
RL – Total Losses:	12
RL – Total Paid:	\$160,710.81
Number of SRL Properties:	0
Number of Mitigated SRL Properties:	0
SRL – Total Losses:	0
SRL – Total Paid:	\$0

Source: FEMA Policy and Loss Data, August 2024

Vulnerability of the Built Environment

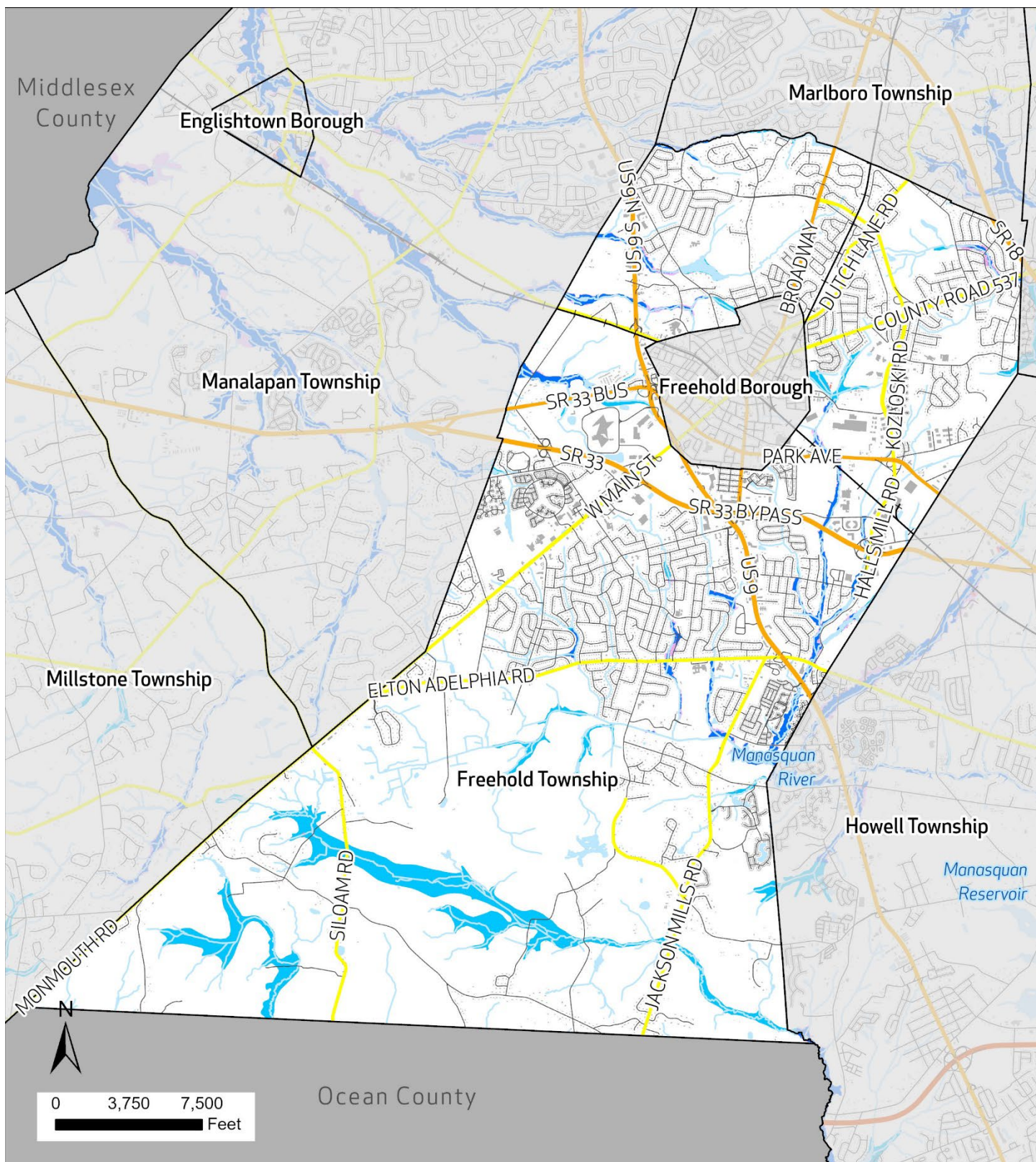
The Special Flood Hazard Area (SFHA) in the Township of Freehold is primarily located adjacent to the waterbodies of the borough: The Manasquan and Metedeconk Rivers and their tributaries, McGellairs, Wemrock, and Yellow Brooks, and Weamaconk Creek. Approximately 5.5 percent of the total area of Freehold lies within the 1% annual chance flood zone as defined by FEMA. An additional 0.3 percent of the area of the municipality is in the 0.2% annual chance flood zone.

About 53.3 percent of Freehold Township is considered developed. Of the developed parcels of the town, 3.7 percent fall within the 1% annual chance flood zone and 0.3 percent are within the 0.2% annual chance flood zone. This illustrates that the developed area of the municipality is generally in line with overall flood risk.

	Percentage in the 1% Floodplain	Percentage in the 0.2% Floodplain	5 feet of Sea Level Rise
Developed Parcels	3.7%	0.3%	NA
Exposed Land Area	5.5%	0.3%	NA

During the planning process, Freehold Township identified critical facilities which function as community lifelines. These facilities provide the most fundamental services in the community that, when stabilized, enable all other aspects of society to function. The municipality identified 68 total facilities. Of these facilities, three are within the floodplain. These three facilities fall within the Water Systems community lifeline type. Examples of Water Systems lifelines include dams or pump stations.

Community Lifeline Type	Number in the 1% Floodplain	Number in the 0.2% Floodplain	Number within 5 feet of Sea Level Rise
Water Systems	3	-	NA



Flood Risk

Freehold Township

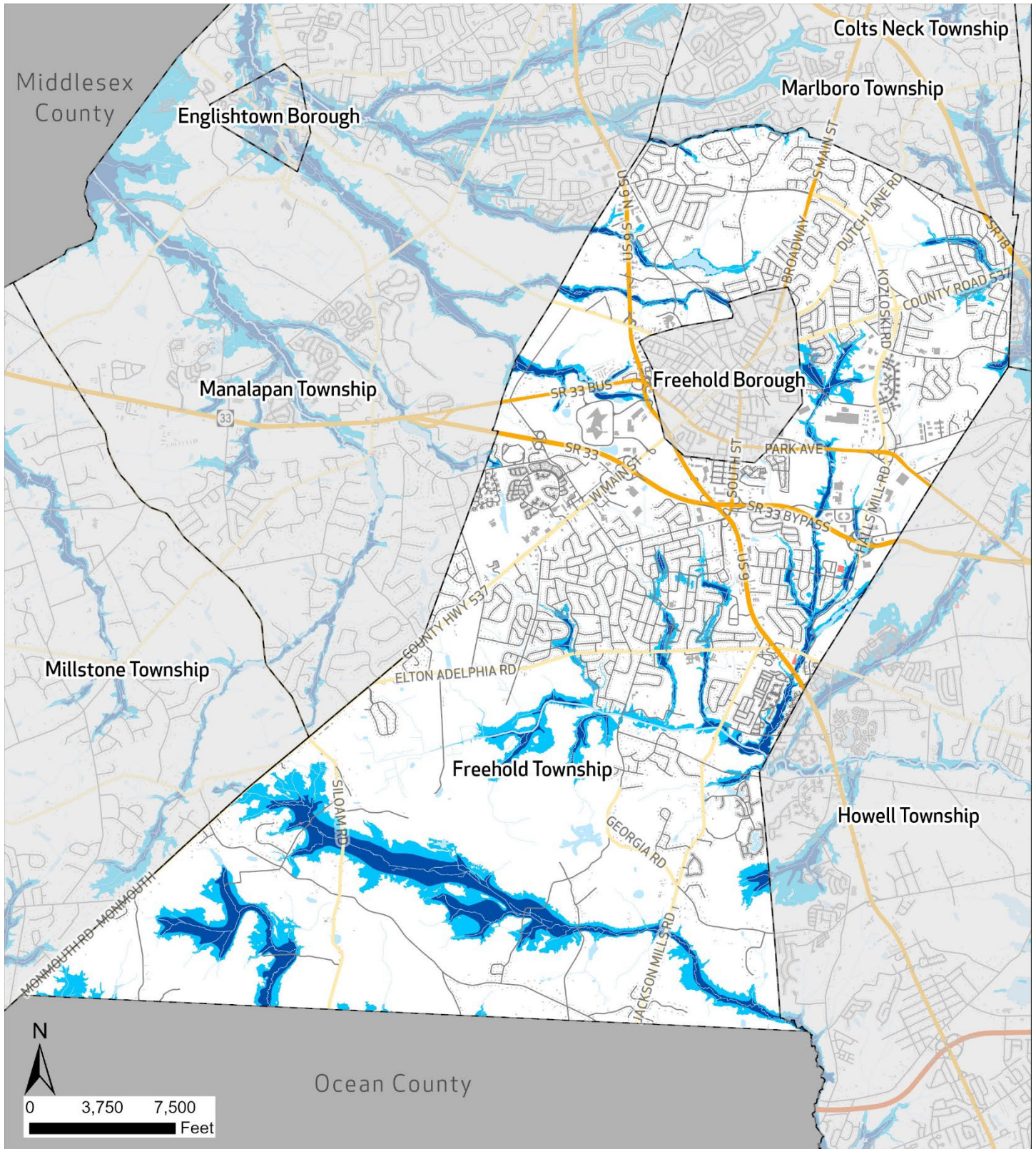
FEMA Flood Zone

- 0.2% Annual Chance
- A (1%)
- AE (1%)

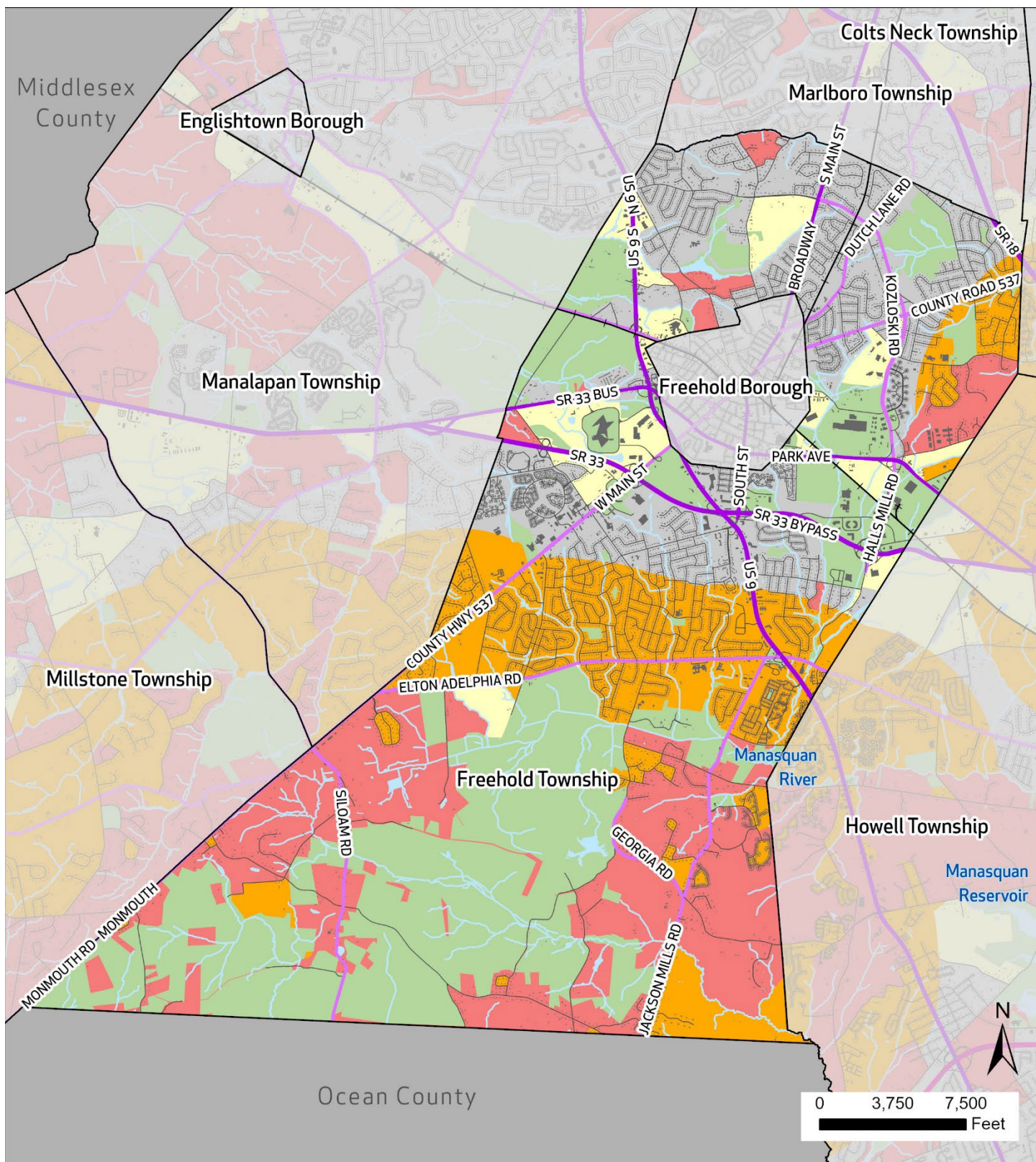
- State Hwy
- Interstate Highways
- State Routes
- County Routes
- Local Roads
- Rail Lines

- Municipal Boundaries
- Building Footprints
- Building Footprints within Floodplain
- Water

Source: FEMA NJDEP, NJOIT, NJTransit



Source: FEMA, Rutgers University, NJDEP, NJOIT, NJTransit



**Wildland Urban
Interface (WUI)
Classification**
Freehold Township

- | | | |
|--|--|---|
| Interface | State Hwy | Municipal Boundaries |
| Intermix | Interstate Highways | Building Footprint |
| High or Medium Density Housing | State Routes | Water |
| Low or Very Low Density Housing | County Routes | |
| No Housing | Local Roads | |
| | <div style="position: absolute; left: 2px; top: 5px;">+</div><div style="position: absolute; left: 10px; top: 5px;">+</div><div style="position: absolute; left: 18px; top: 5px;">+</div> Rail Lines | |

Source: USFS, NJDEP, NJOIT, NJTransit

CAPABILITY ASSESSMENT

Planning & Regulatory Capabilities

Freehold Township has the following additional Planning & Regulatory capabilities:

Plan and Regulation	Yes	No	Date of last update	How does this capability support hazard mitigation?
Master Plan	X		8/4/2024	Through identification of current and new hazards while planning for new patterns of development.
Capital Improvement Plan		X		
Local Emergency Operations Plan/Continuity of Operations Plan		X		
Floodplain Development Ordinance	X		6/28/22	Outlines flood plain management regulations and requirements for development and building.
Floodplain Management Plan		X		
Stormwater Management Ordinance	X		2/9/21	Outlines the latest NJDEP regulations for stormwater management. Requires all development to reduce runoff, meet water quality standards, etc. in attempt to reduce flooding.
Stormwater Management Plan	X		8/2006 (currently in progress of update)	The stormwater management plan is currently being updated by a consultant (T&M Associates) of the Township of Freehold. The plan aims to provide requirements of development and overall stormwater management in the Township. The updated plan is expected to be complete in 2025.
Watershed Management Plan		X		
Sheltering Plan		X		
Evacuation Plan		X		
Substantial Damage/Improved Structures Response		X		
Repetitive Loss Plan		X		
Disaster Debris Management Plan		X		
Tracking elevation certificates and/or Letter of Map Change	X		On-going	The Freehold Township Engineering Department keeps records of any elevation certificates and/or letters of map change provided to the Township.
Post-Disaster Recovery Plan		X		
Current/recent redevelopment plans or studies		X		
Community Wildfire Protection Plan		X		
Climate Adaptation Plan		X		
Other Plans that discusses hazard mitigation		X		
Other ordinance and regulation that mitigate the impacts of natural hazards		X		

Administrative and Technical Capabilities

Freehold Township has the following Administrative and Technical capabilities:

Position	Yes	No	Explanation
Floodplain Administrator	X		The floodplain administrator is the Township Engineer, Matthew J. Bryant who is also a certified floodplain manager (CFM).
Grant Writer	X		In addition to in-house staff working on grant applications, The township utilizes a grant writing consultant (Millennium Strategies) to assist in grant writing.
Staff trained to support mitigation	X		The Township Engineer is trained in mitigation and has prior career experience in that field.
Existing mutual aid or technical assistance agreements to support hazard mitigation projects		X	
Non-governmental organizations/other partners		X	

Position	Yes	No	Explanation
that work with the municipality on mitigation projects			
Organizations that work with socially vulnerable or underserved populations		X	

Education and Outreach Capabilities

Freehold Township has the following Education and Outreach capabilities:

Education & Outreach Capability	Yes	No	Explanation
Communicate natural and human-based hazards to the public		X	
StormReady		X	
Firewise USA		X	
Severe Weather Awareness Week		X	
Community Rating System (CRS)		x	The Township has minimal flood loss or NFIP claims and does not participate in the CRS.

Financial Capabilities

Within the last five years, Freehold Township has used the following financial capabilities to implement hazard mitigation activities:

Financial Capability	Yes	No	Explanation
FEMA BRIC		X	
FEMA FMA		X	
FEMA Public Assistance	X		Public Assistance was received for Tropical Storm Isaias in 2020. Additionally public assistance was received in 2020.
FEMA HMGP	X		The Township obtained a grant through HMGP 4597 for a generator project at the Township's Water Treatment Plant.
Non-FEMA Federal Funding Programs		X	
Other FEMA resources		X	
NJ Infrastructure Bank		X	
Other state municipal assistance or grant programs	X		The township applies for and obtains grants the the NJDOT Municipal Aid grant programs for roadway infrastructure improvements.
Evaluation process on the prioritization of risk reduction projects against other local activities		X	
Other ongoing efforts to build additional financial capabilities		X	

Additional Capability Assessment Information:

MITIGATION STRATEGY

Overview and Progress Since Last Update

The Township of Freehold has provided the below mitigation actions to prioritize mitigation measures to protect the health safety and welfare of the public. This includes but is not limited to improvements to the streams throughout the Township to minimize impacts of downstream erosion, upstream flooding, etc.; providing backup power to critical facilities and ensuring that Township infrastructure (both utilities and roadway infrastructure) can function and mitigate further damage during a disaster. As seen by the below table, several actions have been completed or are at the precipice of being completed in the near future and we intend to continuous our strategies in a similar fashion in the future.

Completed or Removed Actions

Action	Name	Description	Hazards Addressed	Pri- ority	Responsible Party	Potential Funding	Cost Estimate	Time- line	Action Status	Notes
17-1	Excavate and Remove Existing Storm Pipe, Stabilize Stream Banks, Replace Storm Pipe, and Install New Drainage Structure along Rose Court	Stabilization and drainage improvement of Rose Court, at the end of the cul-de-sac. Remediation of this hazard will include excavation and removal of the existing storm drainage pipe and flared end section, and stabilization of stream banks.	Extreme Wind, Nor'easter, Hurricane and Tropical Storm, Winter Storm	N/A	Township Engineer	FEMA HMA	\$2M	N/A	Completed	This action is complete
17-2	Reconstruct Culvert on Plymouth Drive	Rehabilitation of the structure number 1316X68 will include repairing the existing voids behind the side walls of the culvert with a concrete type material, lining the culvert with a high-density polyethylene elliptical pipe, and grouting the annular space.	Flood, Nor'easter, Hurricane and Tropical Storm	N/A	Township Engineer	FEMA HMA	\$330000	N/A	Completed	This action is complete
17-3	Purchase and Install a Generator for CentraState Hospital	Backup generator for CentraState Hospital.	All Hazards	N/A	Township, CentraState	FEMA HMA	\$200,000	N/A	Withdrawn	Action to be removed as hospital has undertaken installation of emergency generators on the property.
17-4	Create a Plan to Manage Development in Landslide Hazard Areas	Create a plan to implement reinforcement measures in high-risk areas.	Landslide	Low	Township	Municipal budget		3 years	Withdrawn	Remove action. No known landslide hazard areas

New and Ongoing Actions

Action	Name	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
17-5	Reconstruct Culvert on Hampton Drive	Rehabilitation of the structure number 1316X57 will include repairing the existing voids behind the side walls of the culvert with a concrete type of material, lining the culvert with high-density polyethylene elliptical pipe, and grouting the annular space.	Flood, Nor'easter, Hurricane and Tropical Storm	High	Township Engineer	FEMA HMA	\$675,000	1 year	Ongoing	<p>This project has been awarded to a contractor and is anticipated to be complete in 2025.</p> <p>This project aims to reduce both upstream flooding impacts and down stream erosion impacts.</p>
17-6	Reconstruct Culvert on Medford Boulevard	Rehabilitation of the structure number 1316X64 will include repairing the existing voids behind the side walls of the culvert with a concrete type of material, lining the culvert with a high-density polyethylene elliptical pipe and grouting the annular space.	Flood, Nor'easter, Hurricane and Tropical Storm	High	Township Engineer	FEMA HMA	\$500,000	3 year	Ongoing	This project aims to reduce both upstream flooding impacts and down stream erosion impacts.
17-7	Clean and De-snag Streams Throughout the Township	Clean vegetative and manmade debris, logs, and other items that are contributing to erosion and localized flooding.	Flood, Coastal Erosion, Nor'easter, Hurricane and Tropical Storm	Low	Township Engineer, Superintendent of Public Works	USDA	\$500,000	1 year	Ongoing	This project aims to reduce both upstream flooding impacts and down stream erosion impacts.
17-8	Provide Hazard Mitigation Information/ Training to Residents	Provide information and links to websites where residents can obtain more information about preparedness, education on water quality, and receive emergency alerts.	All Hazards	Medium	Multiple Township Departments	Municipal budget	\$10,000.00	5 + years	Ongoing	This project would aim to train residents to the impacts or improvements to properties to reduce risk.

Action	Name	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
17-9	Create a Wildfire Mitigation Plan and Provide Public Outreach on the Hazard	Evaluate areas at risk of wildfire and provide create a plan to mitigate those areas while educating residents on wildfire risks and mitigation strategies.	Wildfire	Medium	Fire Department	Municipal budget	\$300,000	2 years	Ongoing	
17-10	Acquire, elevate, or relocate buildings and infrastructure in flood prone areas, with a focus on Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties	Assist homeowners with Repetitive Loss or Severe Repetitive Loss properties to elevate, acquire, and/or demolish their home.	Flood, Nor'easter, Hurricane and Tropical Storm	Low	Emergency Management	FEMA HMA		2 years	Ongoing	There are minimal NFIP claims and no apparent required elevation requirements.
17-11	Purchase and Install a Generator for Traffic Lights along the Route 9 and Route 537 Corridors	Purchase and install a hookup for generators along all major intersections along Route 9 and 537.	All Hazards	High	Township	FEMA HMA, DOT, Municipal budget, County budget	\$100,000	2 years	Ongoing	
17-12	Conduct a Microgrid Feasibility Study	Conduct a study on the feasibility of a microgrid for backup power at the hospital, police, municipal buildings, and fire house.	All Hazards	Medium	Township Public Works, Administration	Municipal budget, Sustainable energy grants	\$150,000	2 years	Ongoing	
17-13	Target Harden Police Headquarters by Installing Surveillance Cameras and Fencing	Increase security at Police Headquarters through a fence for the yard and surveillance equipment, such as cameras.	Terrorism	Medium	Township Police Department	Homeland Security grants, Municipal budget		1 year	Ongoing	
17-14	Repair, Remove, or Rehabilitate the Lake Topanemus Dam	Repair, remove, or rehabilitate Lake Topanemus Dam, a High-Hazard Potential Dam, located along Doctors Creek.	Dam Failure	High	Monmouth County, Freehold Township,	Municipal budget, NJDEP Bureau of Dam	\$0.00	3 years	Ongoing	The township is actively working with the County of Monmouth whom provides inspections of the dam to keep the dam in operation and

Action	Name	Description	Hazards Addressed	Pri- ority	Responsible Party	Potential Funding	Cost Estimate	Time- line	Action Status	Notes
					Freehold Borough	Safety and Flood Control, FEMA HMA				functioning in the event of a disaster or excessive flooding.
17-15	Purchase and Install a Larger Generator for the Water Treatment Plant	Purchase and install a new larger generator for the Freehold Township Water Treatment Plant. In addition to the new generator, it is also proposed to retrofit the electric within the existing building so that the new generator supplies power.	All Hazards	High	The Freehold Township Superintend ent of Facilities with assistance from the Freehold Township Engineering Department.	FEMA HMA	\$1.7M	1 year	Ongoing	This project is ongoing and is expected to be completed in 2025. This project aims to provide resilience and backup power to critical water lifeline utility throughout the Township and surrounding community.
17-16	Stream Erosion Study	Asses the rate and extent of erosion along streams throughout Freehold Township and Develop Recommendations for any warranted repairs	Flood	High	The Township of Freehold Engineering Department utilizing Engineering Consultants	FEMA HMGP or HMA	250000	1 year	New	This project would aim to identify areas of scouring and erosion along stream banks through Freehold Township to preserve the flood hazard areas and limit property loss in large rain events.
17-17	Stream Erosion Remediation	Remediate and areas of significant erosion identified in the stream erosion study	Flood	High	The Township of Freehold Engineering Department utilizing Engineering Consultants	FEMA HMGP or HMA	500000	1-3 years	New	This project would aim to remediate areas of scouring and erosion along stream banks through Freehold Township to preserve the flood hazard areas and limit property loss in large rain events.