

18 – HAZLET TOWNSHIP

PLANNING TEAM AND PARTICIPATION

Name	Title	Participation
Thomas Horner	Fire Chief	Municipal Workshops #1 and #2
Susan Catapano-Moore	CRS Coordinator	Municipal Workshop #1
Tim Belicose	Construction Official, Building Sub-Code Official	Municipal Workshop #1
Rob Bengivenga	Township Administrator	Municipal Workshops #1 and #2
Robert Mulligan	Police Chief	Reviewed appendix
Kenneth Kruk	DPW Superintendent	Reviewed appendix
Dennis Dayback	Engineer	Reviewed appendix

COMMUNITY PROFILE

Overview

Originally founded as Raritan Township in 1848, the Township of Hazlet encompasses a land area of 5.6 square miles in the county's Bayshore Region. The township is a suburban community in the northern part of the county and is within the Raritan Valley region. Hazlet residents have convenient rail and highway access to New York City and other North Jersey employment centers. The Route 35 and 36 corridors serve as the primary location of retail, office, and commercial enterprises. A notable feature of Hazlet is the 88.5-acre Veterans Park. It houses a community center, swim and tennis club, and the municipal building, and offers residents a wide variety of recreational and social activities.

In 2021, Hazlet initiated an effort to revitalize the 8th Street Park in the West Keansburg neighborhood by incorporating feedback from Hazlet's youth, a key project stakeholder. The project was awarded funding through NJDEP's Green Acres program as well as a grant from Monmouth County's Open Space program. Hazlet was awarded \$250,000 by the Monmouth County Open Space Grant and qualified for a \$600,000 Green Acres low-interest loan. The \$1.3 million park renovation project will include a playground designed for all children, a multi-purpose ball court, shaded picnic tables, a pavilion, an open field for sports and entertainment events, and an exercise loop for walking, jogging, or pushing a stroller. Furthermore, Hazlet was included in Monmouth County's Raritan/Sandy Hook Coastal Resilience Planning Study.

Land Use, Development, & Growth

Hazlet is a predominantly residential community and most of its land is developed. From 2015 to 2020, the community underwent minimal change in its land use composition, with urban or developed land accounting for nearly 76 percent of its total area, and wetlands making up 13 percent. Although since 2015, the Borough's forested land declined by roughly 10 acres while its developed land grew by 13 acres, its overall land use composition remained roughly the same.

Land Use Type	Total Acres (2015)	Total Acres (2020)	Percent Change
Agriculture	30.7	30.7	>0%
Barren Land	9.1	8.2	-10%
Forest	328.9	318.5	-3%
Urban	2737.4	2750.0	>0%
Water	44.8	44.1	-2%
Wetlands	478.3	477.8	>0%

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

Recent Major Development and Infrastructure from 2020 to Present

In 2021, Hazlet initiated an effort to revitalize the 8th Street Park in the West Keansburg neighborhood by incorporating feedback from Hazlet's youth, a key project stakeholder. The project was awarded funding through NJDEP's Green Acres program as well as a grant from Monmouth County's Open Space program. The site falls under FEMA's 1% annual chance floodplain (NJFloodMapper).

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

Hazlet was awarded \$250,000 by the Monmouth County Open Space Grant and qualified for a \$600,000 Green Acres low-interest loan to renovate Natco Park. The \$1.3 million park renovation project will include a playground designed for all children, a multi-purpose ball court, shaded picnic tables, a pavilion, an open field for sports and entertainment events, and an exercise loop for walking, jogging, or pushing a stroller. A good portion of the park falls within several FEMA flood zones, including 1% and 0.2% annual chance floodplain, and NJ Inland Design Flood Elevation which is FEMA's 1% annual chance floodplain + 3 feet (NJFloodMapper).

Grenada Estates Garden Homes (312 units including 12 affordable) – in progress. The project is in a flood zone and will be built to the state's and Township's higher standards.

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).

Hazlet Township, with a total estimated population of 20,249, had consistent population between the ACS survey periods of 2013-2017 and 2018-2022, with an estimated .83% change. Hazlet's current population is made up of 5.6% of residents under age 5, and 19.5% of residents over age 65 (estimated). With an aging population making up nearly twenty percent of their total community, Hazlet may focus hazard mitigation efforts on those with robust messaging and engagement for older residents, evacuation plans inclusive of populations with mobility issues, and resilient networks for resource accessibility post-disaster.

The township has one block group identified as potentially vulnerable due to overburden (OBC), meeting criteria for vulnerable *Low-Income* populations. There are no areas of the Township meeting designation criteria for CDRZ or CEJST identification.

Demographics Summary	
Total Population (2018-2022 ACS 5-year Estimates)	20,249
Population Change since 2017	0.8%
Percent of Population Age < 5	5.6%
Percent of Population > 65	19.5%

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		
Hurricane/Tropical Storm	Extreme Temperatures	Lightning
Nor-easter	Extreme Wind	Drought
Flood	Tornado	Earthquake
Storm Surge		Wildfire
Human-made Hazards		
	Cyber Attack	Civil Unrest
	Economic Disruption	
	Terrorism	
	Power Failure	
	Pandemic	

Hazard Ranking Explanation

Power failures in 2024 have significantly impacted the township's hazard ranking, raising it from low to medium. This adjustment reflects the growing concern over the reliability of the electrical grid and the increasing frequency of outages. The township is taking steps to enhance infrastructure resilience and prevent future disruptions.

Significant Hazard Events Since Last Plan Update

The Township noted that since the last plan update, the creek frequently overflows. County, municipal, and private efforts have been made for de-snagging, but the creek needs to be dredged in conjunction with Holmdel and Union Beach. Furthermore, there have been issues with overflowing drains in the municipality. The drain along Route 35 (property address: 3206 Highway 35) overflows because of the presence of a pipeline under it. The drain by the hotel at Holly Hill also overflows because the pipeline connecting the drain is too small and is located under a highway. Similarly, the drain near the business on Moak Drive Basin overflows because the connecting pipeline is under an NJ Transit railway line, making it difficult to access. Flooding is also an issue on Union Ave. The township needs to coordinate with Union Beach to address flooding in this particular area.

Climate Change Impacts on Extent and Magnitude of Hazards

Climate change is poised to significantly impact the risks and hazards faced by Hazlet Township. As global temperatures rise, the frequency and intensity of extreme weather events such as hurricanes, tropical storms, and nor'easters are expected to increase. This will exacerbate flooding, particularly in areas already prone to such events, like the area seaward of Route 36.

The future conditions mapping provided by Rutgers that shows FEMA BFE +3 indicates the Township may experience expansion of flood-prone areas in the western area, just north of Route 35. The township has reported issues with flooding from heavy rainfall and the water not moving through the drainage system effectively, resulting in more localized flooding. This will likely be exacerbated by increased volume and intensity of rainfall during events.

RISK ASSESSMENT

National Flood Insurance Program (NFIP) statistics

Hazlet Township	
Initial FIRM	12/1/1982
Effective FIRM	9/25/2009
Number of Policies In-Force:	354
Total Losses:	119
Total Payments:	\$1,810,420.54
Number of RL Properties:	2
Number of Mitigated RL Properties:	0
RL – Total Losses:	5
RL – Total Paid:	\$1,23,653.54
Number of SRL Properties:	3
Number of Mitigated SRL Properties:	0
SRL – Total Losses:	24
SRL – Total Paid:	\$4,36,596.28

Source: FEMA Policy and Loss Data, August 2024

Vulnerability of the Built Environment

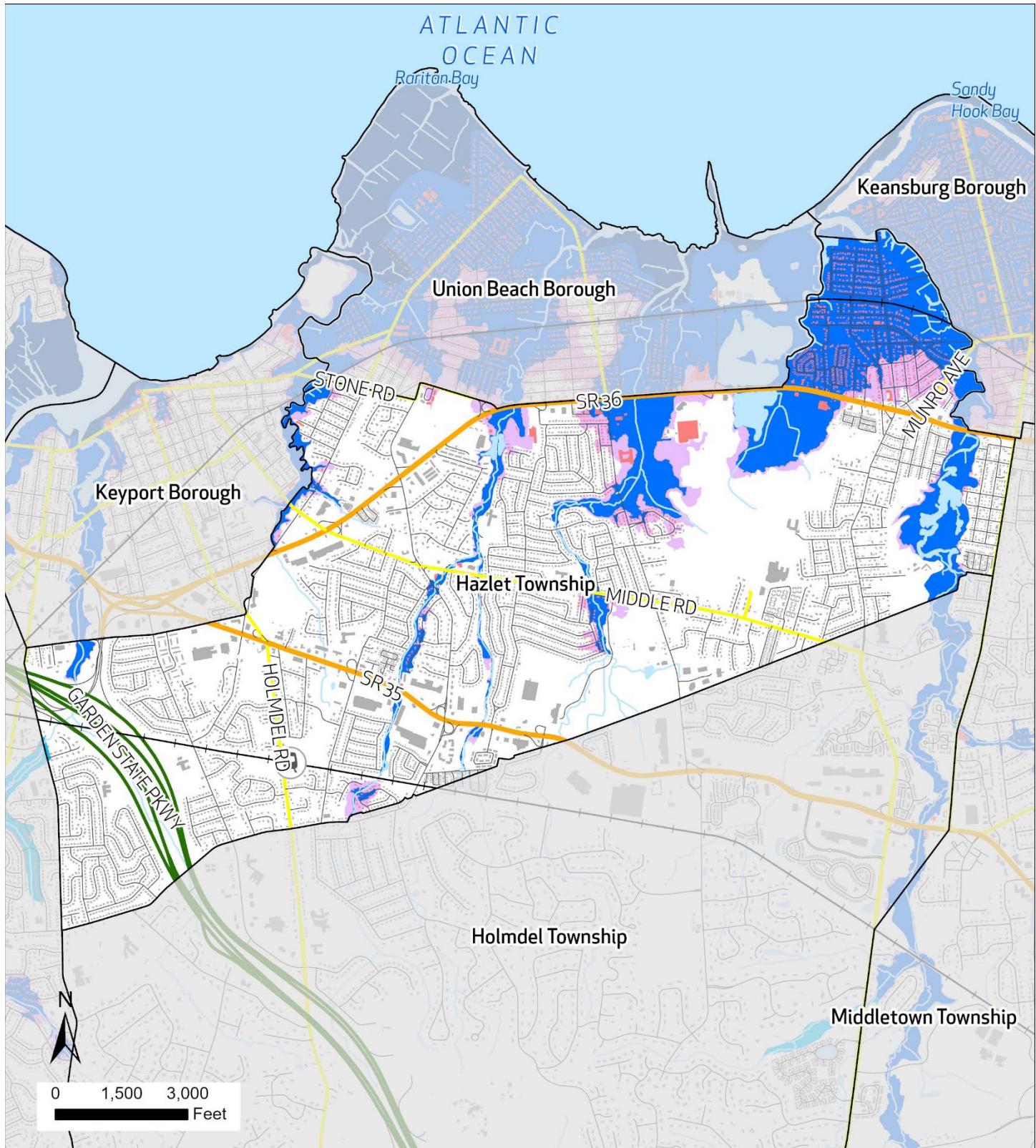
The Special Flood Hazard Area (SFHA) in the Township of Hazlet I is primarily centered adjacent to the waterbodies of the borough; East, Flat, Lappatatong, Thrones, and Waackaack Creeks. Approximately 15.3 percent of the total area of Hazlet lies within the 1% annual chance flood zone as defined by FEMA. An additional 4.6 percent of the area of the municipality is in the 0.2% annual chance flood zone.

About 77.9 percent of Hazlet is considered developed. Of the developed parcels of the town, 13.3 percent fall within the 1% annual chance flood zone and 4.5 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	13.3%	4.5%	6.2%
Exposed Land Area	15.3%	4.6%	5.1%

During the planning process, Hazlet 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 26 total facilities. Of these facilities, four are located within the floodplain. This includes facilities under the Safety and Security community lifeline as well as the Transportation lifeline.

Community Lifeline Type	Number in the 1% Floodplain	Number in the 0.2% Floodplain	Number within 5 feet of Sea Level Rise
Safety and Security	1	2	-
Transportation	1	-	-



Flood Risk

Hazlet Township

FEMA Flood Zone

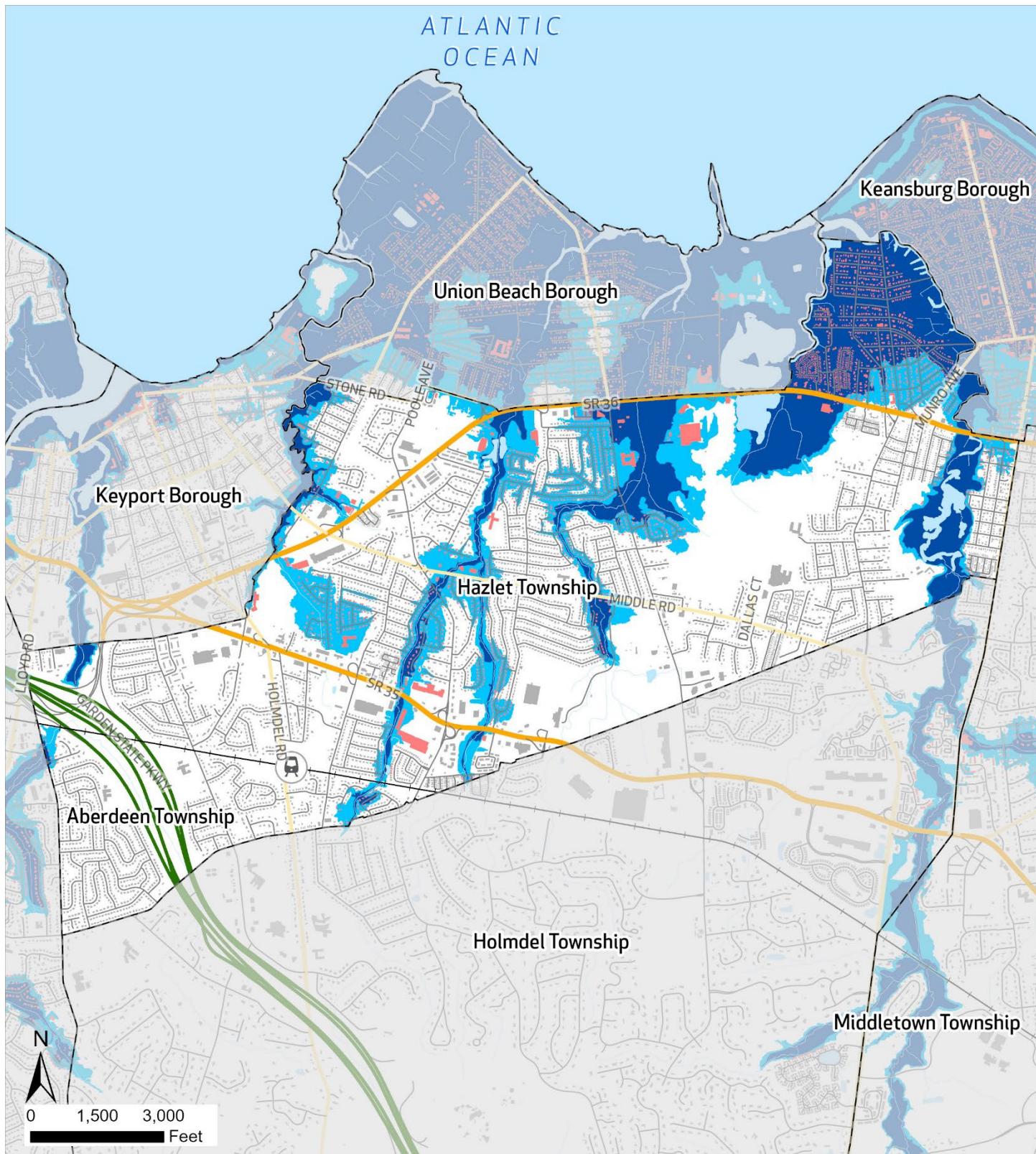
- 0.2% Annual Chance
- A (1%)
- AE (1%)

- Garden State Parkway
- Interstate Highways
- State Routes
- County Routes
- Local Roads
- Rail Lines

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



Source: FEMA NJDEP, NJOIT, NJTransit



NJ Inland Design Flood Elevation Hazlet Township

FEMA Flood Zone
 Current Base Flood Elevation (1%)

NJ Inland Design Flood Elevation
 FEMA BFE (1%) plus 3 Feet

Interstate Highways

 State Routes

 County Routes

 Local Roads

 Garden State Parkway

 Railroad

 NJTransit Rail Station

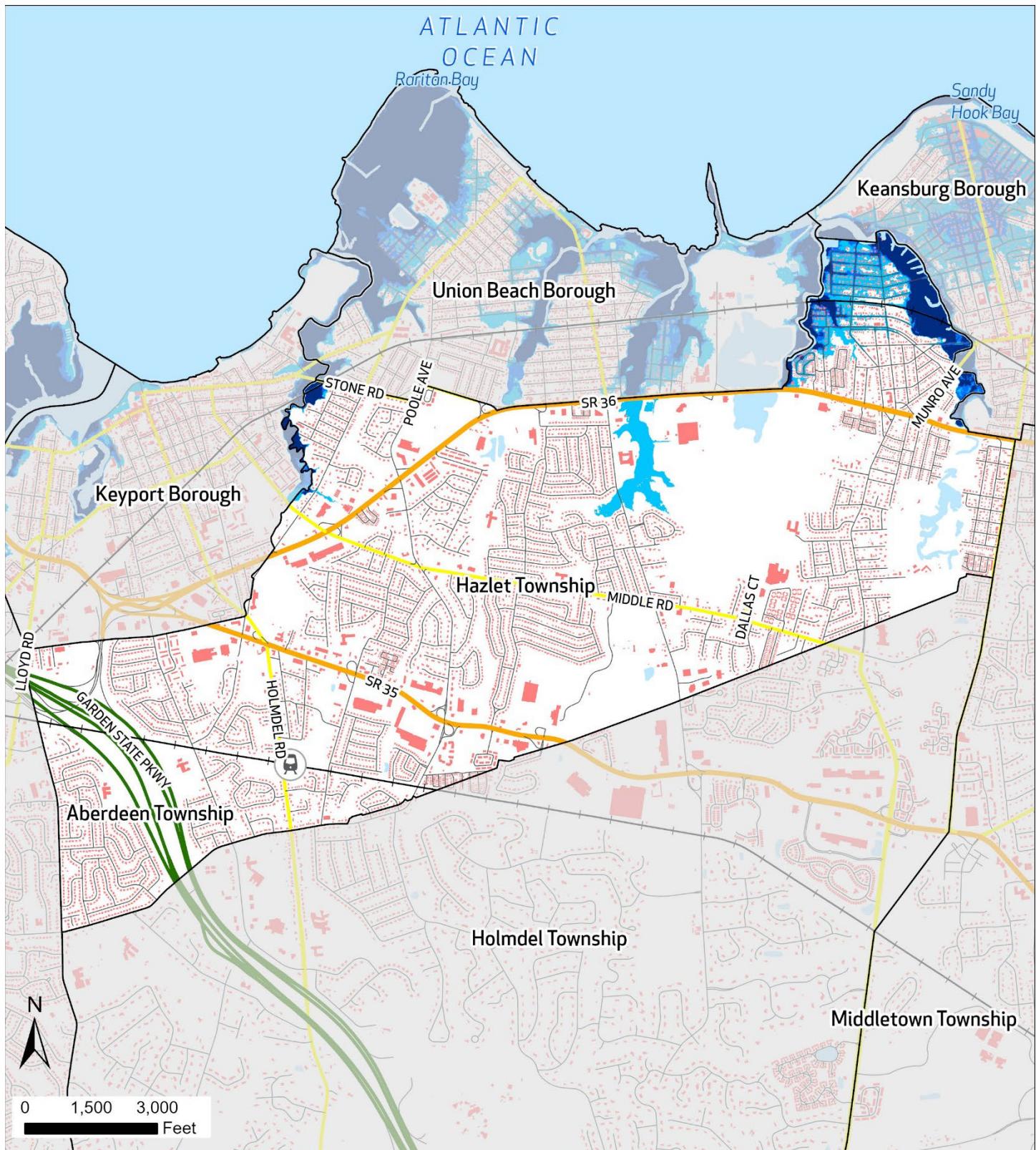
Municipal Boundaries

 Water

 Building Footprints

 Building Footprints within IDFE

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



Permanent Inundation Under Sea Level Rise (SLR) Scenarios

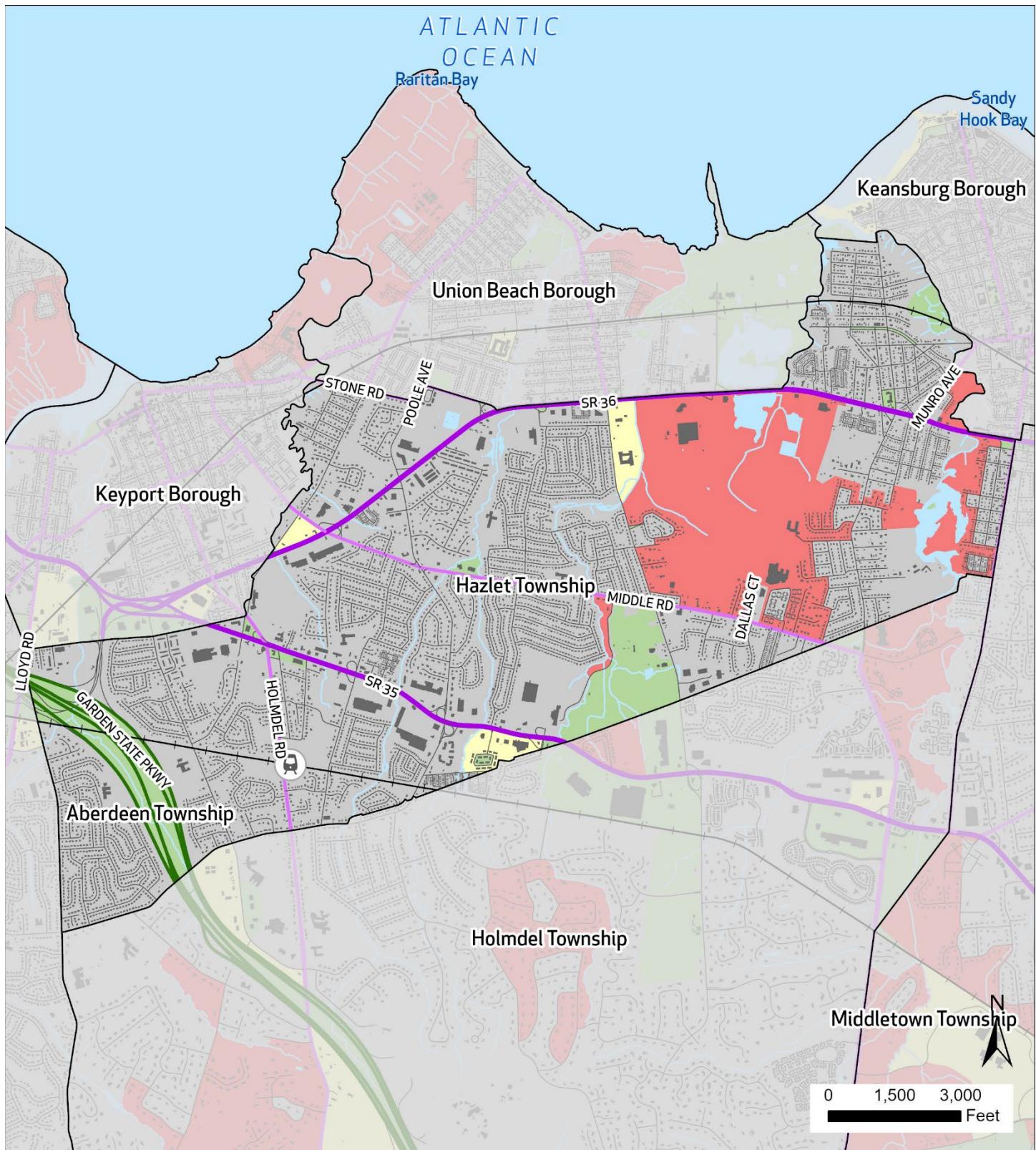
Hazlet Township

- Area Inundated Under 2 Feet SLR
- Area Inundated Under 3 Feet SLR
- Area Inundated Under 5 Feet SLR
- Garden State Parkway
- Interstate Highways
- State Routes
- County Routes
- Local Roads
- Rail Lines

NJTransit Rail Station

- Municipal Boundaries
- Building Footprint
- Water

Source: NOAA, NJDEP, NJOIT, NJTransit



Wildland Urban Interface (WUI) Classification

Hazlet Township

- Intertidal
- High or Medium Density Housing
- Low or Very Low Density Housing
- No Housing
- Garden State Parkway
- Interstate Highways
- State Routes
- County Routes
- Local Roads
- Rail Lines

- Municipal Boundaries
- Building Footprint
- Water

NJ Transit Rail Station

Source: USFS, NJDEP, NJOIT, NJTransit

CAPABILITY ASSESSMENT

Planning & Regulatory Capabilities

Hazlet 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		2017 updating in 2025	We look at the zoning of each area as to build in accordance with FEMA and state regulations. Currently Hazlet Township's master plan does not contain a vulnerability assessment but the Land Use Element that the board will be adopting in July includes it.
Capital Improvement Plan	X		2024	Sanitary and storm water upgrades reduce run off and flooding
Local Emergency Operations Plan/Continuity of Operations Plan	X		9/2023 and will be updated in 2025	
Floodplain Development Ordinance	X		2/2024	To help comply with state regulations and minimize flood damage
Floodplain Management Plan	X		2/2024	Same as above
Stormwater Management Ordinance	X		6/2024	Same as above
Stormwater Management Plan	X		6/2024	Same as above
Watershed Management Plan		X		
Sheltering Plan	X		9/2023	OEM operations to help residents in need.
Evacuation Plan	X		9/2023	OEM operations to help residents in need.
Substantial Damage/Improved Structures Response	X		2/2024	OEM operations to help residents in need.
Repetitive Loss Plan		X		
Disaster Debris Management Plan	X		4/2023	OEM operations to help residents in need.
Tracking elevation certificates and/or Letter of Map Change	X		Year round through forerunner	Assist in resident building to the fema regulations so that they minimize any damage during events.
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			Hazlet was included in the county's Naval Weapons Station Earle Joint Land Use Study, completed in 2019. Hazlet received an environmental assessment report for Natco Lake Park that provides pertinent information to help guide conservation management and enhancement of the park, as well as potential solutions for the heavy tick population along park trails. The report released in February 2022 will help guide the renovation of Natco Park's trails this year.
Other ordinance and regulation that mitigate the impacts of natural hazards		X		

Administrative and Technical Capabilities

Hazlet Township has the following Administrative and Technical capabilities:

Position	Yes	No	Explanation
Floodplain Administrator	X		
Grant Writer		X	
Staff trained to support mitigation		X	
Existing mutual aid or technical assistance agreements to	X		County oem

Position	Yes	No	Explanation
support hazard mitigation projects			
Non-governmental organizations/other partners that work with the municipality on mitigation projects	x		
Organizations that work with socially vulnerable or underserved populations	x		

Education and Outreach Capabilities

Hazlet 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		

Financial Capabilities

Within the last five years, Hazlet 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	
FEMA HMGP		X	
Non-FEMA Federal Funding Programs	x		Arpa money used for generator
Other FEMA resources		X	
NJ Infrastructure Bank		X	
Other state municipal assistance or grant programs		X	
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:

- Hazlet Township is a Forerunner community. Forerunner has dynamic tools to better manage flood risk and increase resilience by enforcing floodplain compliance and increasing disaster response by documenting damages in the field and providing timely information to residents. Forerunner's public features give residents access to relevant property-level flood risk details that help inform key decisions and minimize the number of assistance requests. Forerunner is also designed to make CRS participation easier for the Township.
- **Community Rating System (CRS) Classification:** 6
- **Sustainable Jersey Participation Status:** Registered

MITIGATION STRATEGY

Overview and Progress Since Last Plan Update

As we improve roadways in the floodplain, we plan to install drainage to help mitigate localized flooding.

Completed or Removed Actions

Action	Name	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Timeline	Action Status	Notes
Action 18-1	Acquire Flood-prone Property for Open Space	Purchase of McNamy Property in Partnership with Port Authority to preserve floodways and mitigate flood losses.	Flood, Nor'easter, Hurricane and Tropical Storm	N/A	N/A	N/A	\$450,000	N/A	Withdrawn	No longer interested
Action 18-2	Purchase and Install Generators for Critical Facilities	Purchase, install and maintain generators for First Aid, two generator upgrades and one new generator for fire houses, and a generator upgrade for the police station.	All Hazards	N/A	N/A	N/A	\$500,000	N/A	Completed	Two generators installed for fire houses. All installations and upgrades cost \$350,000 in total.
Action 18-3	Purchase Police Protective Gear	Purchase additional police protective gear, such as helmets, outer vest carriers, ballistic vest to mitigate against the rise in terrorism.	Terrorism	N/A	N/A	N/A	\$100,000	N/A	Completed	Funded by: local county and state funds
Action 18-4	Upgrade Communication System between Fire and Police	Upgrade communications police and fire department by increasing the number of portable and mobile phones and having a base station.	All Hazards	N/A	N/A	N/A		N/A	Withdrawn	Switched to County – used to be separate system.
Action 18-5	Join FEMA's CRS Program	Join CRS program to complete pro-active floodplain management and assist residents with flood insurance costs.	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	N/A	N/A	N/A		N/A	Completed	Class 6

New and Ongoing Actions

Action	Name	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Timeline	Action Status	Notes
Action 18-6	Continue to Clear Debris and Sediment from Stream Corridors to Mitigate Flooding	The Mosquito Commission is clearing debris and sediment from many creeks and waterways at the Township's request to improve carrying capacity of flood flows and reduce overbank flooding.	Flood, Nor'easter, Hurricane and Tropical Storm	Medium	Township Administrator	Municipal budget, County budget	\$450,000	2 years	Ongoing	Most recently completed removing debris from flat creek.
Action 18-7	Clean, Televise, and Replace Stormwater Inlets and Catch Basins	Improve inspection and maintenance of stormwater drainage by cleaning all lines, televising, and replacing inlets and catch basins throughout the entire system township wide.	Flood, Nor'easter, Hurricane and Tropical Storm	Medium	Public Works Department	Municipal budget	100,000	1 year	Ongoing	Ongoing throughout the year with our road program
Action 18-8	Acquire, elevate, or relocate buildings and infrastructure in flood prone areas, with a focus on Repetitive Loss (RL) and Severe Repetitive Loss (SLR) properties	Support resident applications and prove assistance to the fullest extent possible in regard to the elevation of existing properties within the flood zone and under the known elevations.	Flood, Nor'easter, Hurricane and Tropical Storm	High	Township Administrator	FEMA HMA	TBD	1 year	Ongoing	Substantial Damages improvements or new home have been elevated. No other residents have shown interest in home elevations or home acquisitions.
Action 18-9	Develop a Natco Park Wildlife Protection Plan	Coordinate with NJ Division of Fire Safety to develop and implement a community-wide protection plan for Natco Park. Examine paths to clear, emergency paths, and equipment needed to mitigate wildfire.	Extreme Wind, Wildfire	Medium	Township Fire and Planning Departments	FEMA HMA	\$100,000	2 years	Ongoing	Working State Fire Forest. Feedback from Environmental Commission.

Action	Name	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Timeline	Action Status	Notes
Action 18-10	Upgrade Surveillance System Software for the Township	Upgrade the surveillance system software to be able see a live feed of all municipality-owned critical facilities and commercial corridors.	Terrorism	High	Township Police	Homeland Security Grants	\$20,000	1 year	Ongoing	Want to install in all parks - \$300,000 is the cost estimate.
Action 18-11	Construct Flood Control Measures (e.g., floodwalls and small berms) along Thomas Creek and Waackaack Creek to Mitigate Flooding in the West Keansburg Neighborhood	Use minor structural projects that are smaller and more localized (e.g., flood walls or small berms) in areas that cannot be mitigated through non-structural activities or where structural activities are not feasible due to low densities.	Flood, Wave Action, Nor-easter, Hurricane and Tropical Storm, Storm Surge	High	Township of Hazlet	FEMA HMA	\$250,000	3 years	New	Mosquito Commission de-snags the creek.
Action 18-12	Increase size of Drainage Pipe Under Route 35 to reduce risk of flooding on emergency evacuation route	Pipe that drains the flood plain behind 3206 Route 35 in connection with the Chingarora Creek needs to be increased in size to enable it to drain into the larger pipe under route 35.	Flood, Nor-easter, Hurricane and Tropical Storm	High	Township of Hazlet	FEMA/State	\$150,000	2	New	Pipe is often clogged
Action 18-13	Elevate the Union Ave. culvert/bridge that goes over the east creek by Appleton need to be raised to prevent flooding and blocking off an evacuation route and school access	Union Ave. culvert/bridge that goes over the east creek by Appleton need to be raised to prevent flooding and blocking off an evacuation route and school access	Flood, Nor-easter, Hurricane and Tropical Storm,	high	Township of Hazlet	FEMA/state/local	\$500,000	3	New	Trying to obtain state grants for pedestrian safety