

33 – MIDDLETOWN TOWNSHIP

PLANNING TEAM AND PARTICIPATION

Name	Title	Participation
Charles W. Rogers III	OEM Coordinator	Point of Contact, Municipal Workshop 10/28/2024
Charles Ehret	Operations Chief	Municipal Workshop 10/28/2024
Stacy Krause	Floodplain Administrator/CRS Coordinator	Reviewed appendix
Ted Maloney	Department of Public Works Director	Reviewed appendix
Victor Wymbs	Department of Public Works Assistant Director	Reviewed appendix

COMMUNITY PROFILE

Overview

The Township of Middletown is 58.7 square miles and has the largest municipal population in the County (67,106 in 2020). It is one of the original 1693 Townships of Monmouth County (along with Freehold and Shrewsbury Townships). Middletown is divided into several diverse residential neighborhoods, developing at different times over its long history.

The Township participated in two recently completed regional studies. The first is the Joint Land Use Study with Naval Weapons Station Earle that is intended to improve both the development compatibility of areas surrounding the base and storm resiliency. The second study, the New Jersey Fostering Regional Adaptation through Municipal Economics Scenarios (NJFRAMES) program, is a regional collaborative effort in coastal Monmouth County that seeks to understand and address future flood vulnerability.

In May of 2023, a first phase of improvements was implemented at Swimming River Park, including a walking path, kayak launch, boat ramp, and parking lot. The Monmouth County Park System also purchased a 17-acre estate along the Navesink River in April 2023 for \$8.4 million, which will connect to the existing Hartshorne Woods.

Land Use, Development, & Growth

In Middletown, residential, publicly owned and commercial land together constitute a large portion of its area. As a result, in 2020, urban or developed land accounted for nearly 55 percent of the town's total area, while wetlands, water, forested land, and agricultural land together made up the remaining part of the Township's area. Since, 2015, this has largely been the Township's land use composition.

Land Use Type	Total Acres (2015)	Total Acres (2020)	Percent Change
Agriculture	862.6	851.0	-1%
Barren Land	383.9	382.5	>0%
Forest	4966.5	4893.8	-1%
Urban	15159.6	15272.8	1%
Water	1780.2	1792.0	1%
Wetlands	4716.5	4677.1	-1%

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

Recent Major Development and Infrastructure from 2020 to Present

In 2016, Middletown identified certain properties as an "area in need of redevelopment." The redevelopment area encompasses approximately 450 acres in the vicinity of Port Belford and Ware Creek. In May 2017 a redevelopment plan was presented to and approved by the Township. The project was suspended during the COVID-19 pandemic but, in 2023 Middletown revived and revised its Port Belford Redevelopment plan to prioritize turning the around the ferry terminal into a "seaside village". Sections of these communities fall within FEMA's 1% and 0.2% annual chance floodplain, and NJ Inland Design Flood Elevation which is FEMA's 1% annual chance floodplain + 3 feet (NJFloodMapper).

Since 2019, numerous large-scale residential subdivisions have been constructed throughout the municipality. Toll Brothers repurposed the former Bamm Hollow golf course into a single-family residential neighborhood. Nearing completion, the community will contain 182 single family homes. In addition, Toll Brothers is constructing a new townhouse development off of Kings Highway and Highway 35 named Middletown Walk. This development will include 245 townhomes. American Properties is constructing a townhouse development at Taylor Lane and Highway 35. Heritage at Middletown, consisting of 140 residences and 36 affordable units, was recently completed at Taylor Lane and Highway 35.

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

Middletown’s Bayshore neighborhoods continue to face numerous challenges related to physical reconstruction, resiliency, long-term sustainability, and affordability. In 2024 Middletown began the process of creating a new Master Plan, with public hearings beginning in February of 2024.

All ongoing or anticipated development is south of 35, on higher ground. None of it will be in the flood zone. This includes Middletown Walk, of 406 units which include affordable housing and a retention pond. There is another similarly large development going in nearby.

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).

Middletown Township has a total population of an estimated 66,952. Of this population, an estimated 5.3% are under age 5, and 17.3% are over age 65. The population of Middletown grew moderately (an estimated 1.5%) over the period between 2013-2017 and 2018-2022 ACS surveys. With an aging population making up nearly twenty percent of their total community, Middletown 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.

There are no areas of Middletown which have been identified by CDRZ, CEJST, or OBC designation criteria.

Demographics Summary	
Total Population (2018-2022 ACS 5-year Estimates)	66,952
Population Change since 2017	1.5%
Percent of Population Age < 5	5.3%
Percent of Population > 65	17.3%

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 Wind	Extreme Temperatures
Nor’easter	Tornado	Lightning
Flood	Winter Storm	Dam Failure
Storm Surge	Coastal Erosion	Drought
	Landslide	Wildfire
	Wave Action	
	Earthquake	
Human-made Hazards		
	Cyber Attack	Civil Unrest
	Economic Disruption	
	Power Failure	
	Terrorism	
	Pandemic	

Hazard Ranking Explanation

- **Extreme Temperature:** Many residents have A/C and generators.
- **Dam Failure:** Shadow Lake Dam is only dam in town.
- **Earthquake:** Some sewage pipes damaged in 2024 earthquake. Concern if it were to happen again.

Significant Hazard Events Since Last Plan Update

Several storms and winter storms that caused flooding have occurred (FEMA declaration). Residents are also experiencing more regular flooding that is not associated with storms or hurricanes, with basements and yards frequently getting flooded. Most of the flooding occurs in Bayshore, but also in areas like Lincroft. The water table is rising due to increased precipitation. The Township is trying to work with the state to dredge, but buyouts in some of these areas may be necessary.

Climate Change Impacts on Extent and Magnitude of Hazards

Climate change is projected to impact the risks and hazards faced by Middletown 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 intensify existing vulnerabilities, particularly in flood-prone areas like the Bayshore neighborhoods. Rising sea levels and increased precipitation will likely lead to more frequent and severe flooding, affecting both the built environment and critical infrastructure. The Township's floodplain, which already includes a significant portion of its developed area, will face heightened risks, requiring effective mitigation and adaptation strategies.

Additionally, climate change will increase the risks associated with extreme temperatures, droughts, and coastal erosion. The aging population in Middletown, which includes a considerable percentage of residents over the age of 65, will be especially vulnerable to these hazards. Increased heatwaves and prolonged periods of high temperatures can pose health risks, particularly for those with limited mobility and access to resources. Furthermore, the Township's efforts to manage stormwater and maintain wetlands will become more challenging as climate change affects precipitation patterns and intensifies storm events.

RISK ASSESSMENT

National Flood Insurance Program (NFIP) statistics

Middletown Township	
Initial FIRM Date	2/15/84
Effective FIRM Date	6/15/2022
Number of Policies In-Force:	1918
Total Losses:	1709
Total Payments:	\$59,622,393.53
Number of RL Properties:	114
Number of Mitigated RL Properties:	0
RL – Total Losses:	269
RL – Total Paid:	\$8,044,543.23
Number of SRL Properties:	8
Number of Mitigated SRL Properties:	0
SRL – Total Losses:	37
SRL – Total Paid:	\$1,173,553.87

Source: FEMA Policy and Loss Data, August 2024

Vulnerability of the Built Environment

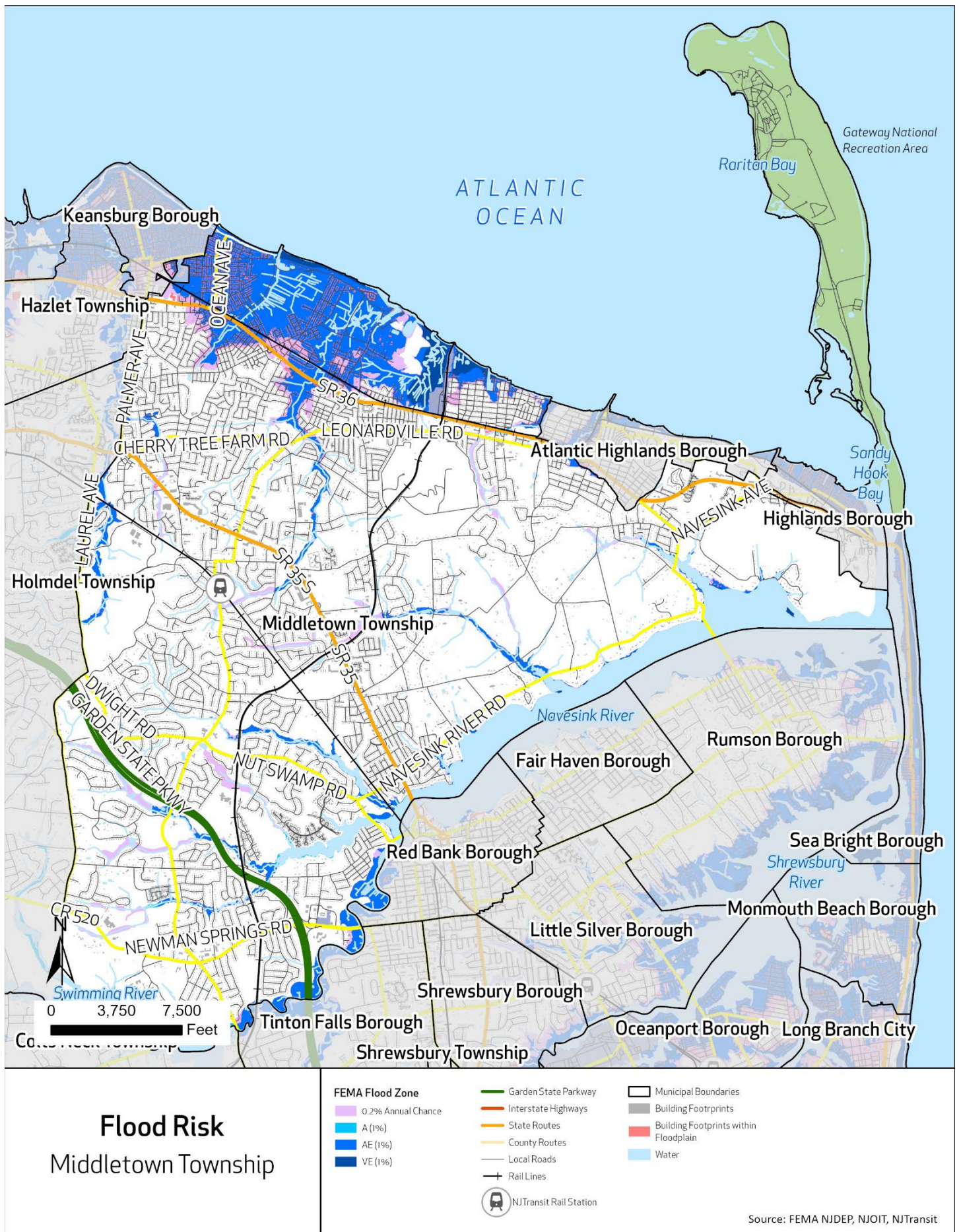
The Special Flood Hazard Area (SFHA) in the Township of Middletown is primarily located adjacent to the many creeks and brooks which pass through town flowing into the Navesink River or Raritan Bay, and the Raritan Bayshore portion of the Township generally. 14.8 percent of the total area of Middletown lies within the 1% annual chance flood zone as defined by FEMA. An additional 2.8 percent of the area of the municipality is in the 0.2% annual chance flood zone.

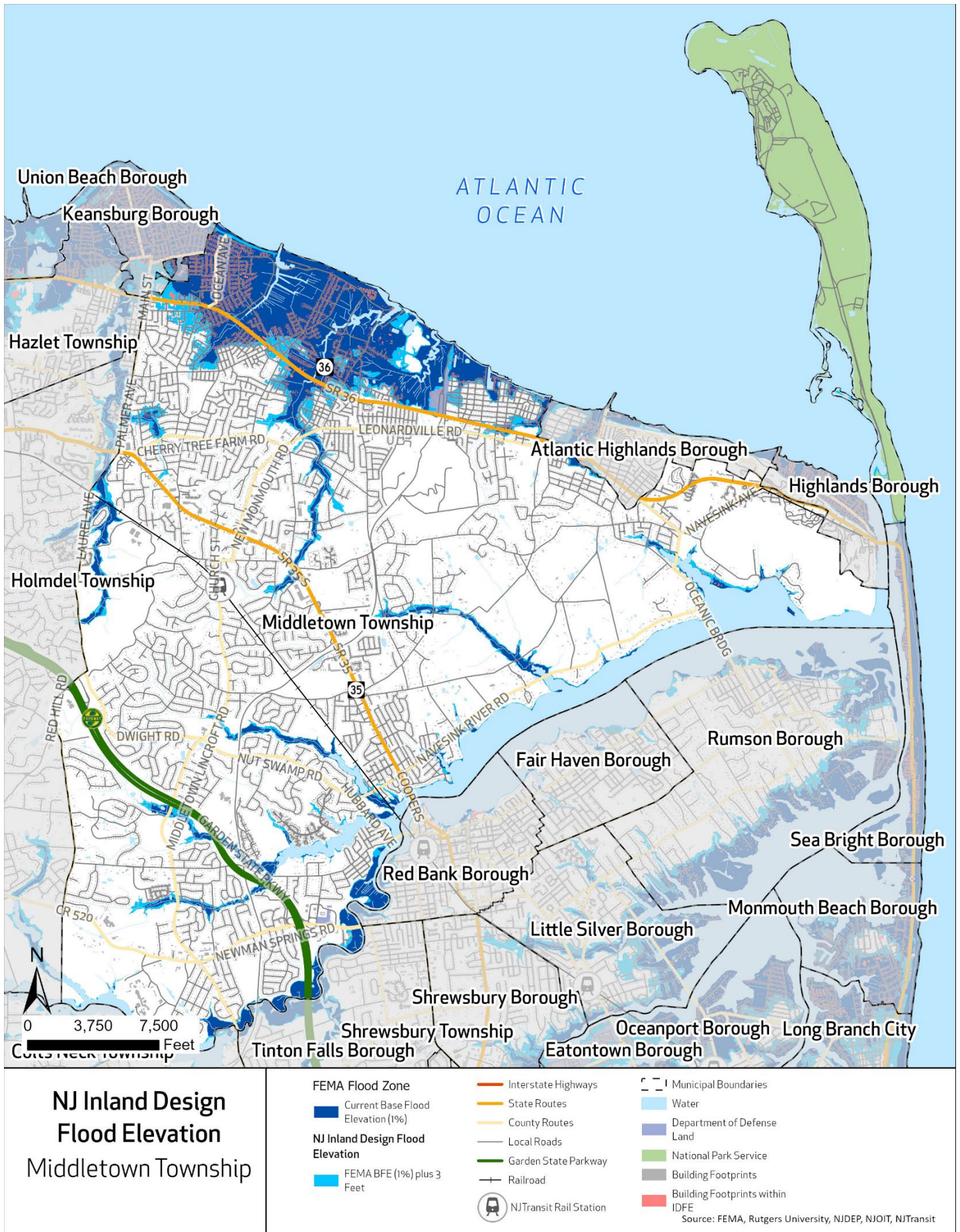
About 75.3 percent of Middletown is considered developed. Of the developed parcels of the town, 16.5 percent fall within the 1% annual chance flood zone and 3.3 percent are within the 0.2% annual chance flood zone. This illustrates that the developed area of the municipality is generally in line with overall flood risk.

	Percentage in the 1% Floodplain	Percentage in the 0.2% Floodplain	5 feet of Sea Level Rise
Developed Parcels	16.5%	3.3%	10.0%
Exposed Land Area	14.8%	2.8%	13.6%

During the planning process, Middletown 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 100 total facilities. Of these facilities, 16 are within the floodplain. Of these 16, two are also within areas projected to be inundated under sea level rise.

Community Lifeline Type	Number in the 1% Floodplain	Number in the 0.2% Floodplain	Number within 5 feet of Sea Level Rise
Health and Medical	1	1	-
Safety and Security	9	1	1
Transportation	-	1	-
Water Systems	2	1	1







Permanent Inundation Under Sea Level Rise (SLR) Scenarios

Middletown Township

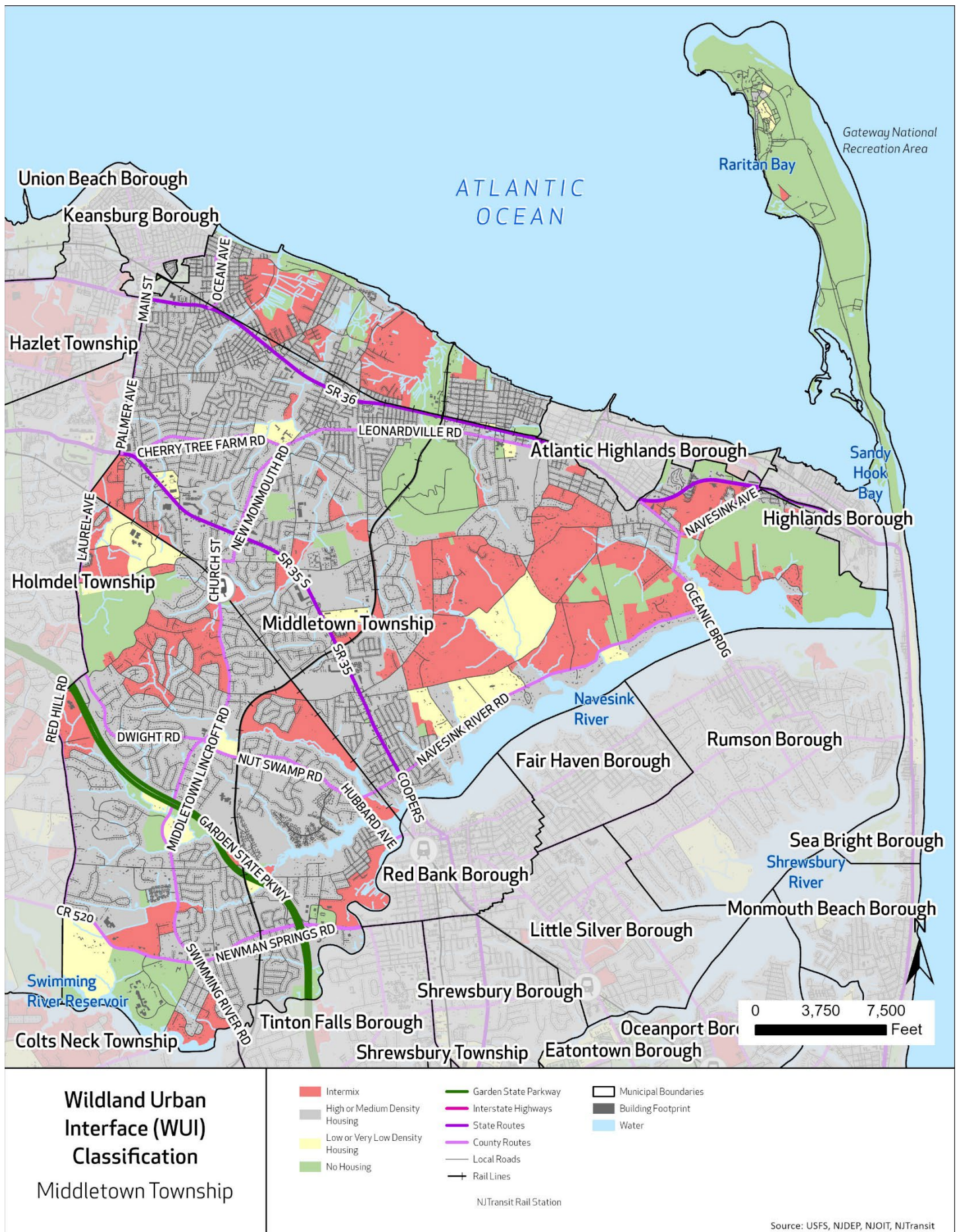
- Area Inundated Under 2 Feet SLR
- Area Inundated Under 3 Feet SLR
- Area Inundated Under 5 Feet SLR

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

- Municipal Boundaries
- Building Footprint
- Water
- Department of Defense Land
- National Park Service

NJ Transit Rail Station

Source: NOAA, NJDEP, NJOIT, NJTransit



CAPABILITY ASSESSMENT

Planning & Regulatory Capabilities

Middletown 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		2023 Re-Examination Report	The master plan was completed in 2004 with subsequent master plan reexamination reports 2009, 2011, 2014, & 2023.
Capital Improvement Plan	X			The Township does a Capital Plan implementation every year. Departments are required to have a 5 year projection of their Capital needs.
Local Emergency Operations Plan/Continuity of Operations Plan	X		2023	
Floodplain Development Ordinance	X		2022	The Township does a Capital Plan implementation every year. Departments are required to have a 5 year projection of their Capital needs.
Floodplain Management Plan	X			
Stormwater Management Ordinance	X			Updates to the Stormwater Management Ordinance will be completed in end of 2024. Per Ordinance#2024-3340 Middletown Township updated it's Stormwater Management regulations consistent with the NJDEP Inland Flood Protection Rule to ensure that stormwater infrastructure is designed to manage both current and future levels of rainfall, runoff and flooding.
Stormwater Management Plan		X		An updated "Stormwater Management Plan" is currently being prepared as part of the Amended Master Plan currently underway by the Township. The last Stormwater Management Plan was revised May 22, 2007.
Watershed Management Plan		X		An inventory of existing stormwater infrastructure iis currently in process of being complied as required per our NJDEP Tier A MS4 Municipal Stormwater Requirements. This is a multi-year process to locate, compile, map, upload and update watershed information. Middletown does have a Stormwater Outfall Map that was prepared in 2009.
Sheltering Plan		X		
Evacuation Plan	X			The Township has an Evacuation Plan in place which is Annex G of the EOP. Police, Fire, and all emergency personnel have an important part in the Evacuation Plan.
Substantial Damage/Improved Structures Response	X			We use the 50 rule and measure this cumulatively over a 10-year period. Once structures get to the 50%, they must be brought to code/elevate for permits and CO.
Repetitive Loss Plan		X		Township in Process of drafting a plan. Will utilize to direct HM projects.
Disaster Debris Management Plan	X			Middletown Township has seven TDMA (Temporary Debris Management Area) sites registered and certified with the NJDEP for emergency/storm response use. The locations of the TDMA's are at designated areas within Belford Park, Butler Park, Greeley Park, Kunkel Park, West Front Street Park, the Middletown Fire Academy, and the Middletown Train Station. Debris types for these sites include temporary storage of Vegetative Debris, Construction and Demolition Debris and Bulky Solid Waste.
Tracking elevation certificates and/or Letter of Map Change	X			EC's are due to CO issuance and are part of the building permit jacket as well as scanned into our system for upload to the Forerunner Program. LOMCs once approved by FEMA would be kept in our internal system by address/block/lot.
Post-Disaster Recovery Plan	X			
Current/recent redevelopment plans or studies	X			The Township participated in two recently completed regional studies. The first is the Joint Land Use Study with Naval Weapons Station Earle that is intended to improve both the development compatibility of areas surrounding the base and storm resiliency. The second study, the New Jersey Fostering Regional Adaptation through Municipal Economics Scenarios (NJFRAMES) program, is a regional and collaborative effort in coastal Monmouth County that seeks to understand and address future flood vulnerability.
Community Wildfire Protection Plan		X		
Climate Adaptation Plan		X		
Other Plans that discusses hazard mitigation	X			Next Steps to Compatibility Planning Study, Monmouth County, New Jersey (2022) encourages compatible development within the NWS Earle's Military

Plan and Regulation	Yes	No	Date of last update	How does this capability support hazard mitigation?
				Influence Area. Among the environmental constraints are natural hazards including wildfire, flooding, and storm surge.
Other ordinance and regulation that mitigate the impacts of natural hazards		X		We have a couple design standards in our Land Use Ordinance to protect steep slopes. We also have storm water ordinances.

Administrative and Technical Capabilities

Middletown Township has the following Administrative and Technical capabilities:

Position	Yes	No	Explanation
Floodplain Administrator	X		Stacy Krause PP/AICP/CFM. Full-time municipal employee. Is also Senior Health Planner. Is a CFM, only CFM working for Middletown Township.
Grant Writer	X		Contractor
Staff trained to support mitigation	X		
Existing mutual aid or technical assistance agreements to support hazard mitigation projects	X		With Monmouth County
Non-governmental organizations/other partners that work with the municipality on mitigation projects	X		We are part of the NJ Coastal Coalition (501C3) and Monmouth County Inter-Governmental Community Rating System Users Group. Both can assist in identifying mitigation projects and aid opportunities.
Organizations that work with socially vulnerable or underserved populations	X		Middletown Helps Its Own is instrumental in post-disaster food distribution. We always call on Monmouth County Health Department and OEM to assist WV and/or underserved populations if needed for sheltering and resource distribution, including food and medical needs.

Education and Outreach Capabilities

Middletown Township has the following Education and Outreach capabilities:

Education & Outreach Capability	Yes	No	Explanation
Communicate natural and human-based hazards to the public	X		The town uses social media (Facebook and Instagram), newsletters, the Township website, Nixle, both electronic and non-electronic signs placed around town, and the Township TV station. Our OEM and floodplain management website have this info located throughout the website, specifically here: https://middletownnj.org/867/Protecting-People-from-Hazards-Storm-Pre and https://middletownnj.org/868/Protecting-Your-Property-from-a-hazard .
StormReady	X		Middletown participates in StormReady as part of Monmouth County's certification.
Firewise USA		X	
Severe Weather Awareness Week	X		
Community Rating System (CRS)	X		Middletown is currently rated a 7.

Financial Capabilities

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

Financial Capability	Yes	No	Explanation
FEMA BRIC		X	
FEMA FMA	X		Middletown has submitted to FEMA for one FMA elevation grant in the last 2 years and it has not been finalized.
FEMA Public Assistance		X	
FEMA HMGP		X	
Non-FEMA Federal Funding Programs		X	
Other FEMA resources		X	
NJ Infrastructure Bank		X	
Other state municipal assistance or grant programs	X		NJEM Grants Program

Financial Capability	Yes	No	Explanation
Evaluation process on the prioritization of risk reduction projects against other local activities	X		Capital Planning priorities including risk reduction are discussed every year by a Township Staff committee that ultimately works with the Governing Body to determine, and then implement priorities.
Other ongoing efforts to build additional financial capabilities	X		Most mitigation projects will involve State and /or Federal agencies and there is usually a shared funding of such projects. The Township only uses a small percentage of its capital financing authority, so when a mitigation project comes about, the Township can fund it's portion without great difficulty.

Additional Capability Assessment Information:

- Middletown 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: 7**
- **Sustainable Jersey Participation Status: Silver**

MITIGATION STRATEGY

Overview and Progress Since Last Plan Update

The Township has prioritized and will continue to prioritize the enforcement of our Flood Hazard Ordinance, particularly the substantial improvement process and elevation requirements. We also plan to continue the multi-agency work with NJDEP and the Army Corp to progress the Port Monmouth Flood Control projects, bulkhead repair in Belford, and marsh and dune restoration in Leonardo. Our Municipal Master plan update will be adopted soon, and we continue to include climate resilience and mitigation moving forward into the future.

Completed or Removed Actions

Action	Name	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
33-1	Provide for Continuity of Operations by Elevating Generators and Switches at Fire Stations	Elevate generators and switches at all fire stations located in the flood hazard area.	Flood, Wave Action, Nor'easter, Hurricane and Tropical Storm, Storm Surge	N/A	Each Fire Company, Township	FEMA, HMA	\$300,000	N/A	Completed	Complete per Fire Marshal
33-2	Build Upland Dune Restoration Install Wave-attenuating Oyster Reefs to Protect the Leonardo Neighborhood from Flooding	This action proposes marsh restoration bordered to the west by a maritime forest berm to provide a buffer to Normandy Road and neighboring properties. Upland dune restoration landward of the replenished beach, along with the expansion of the wave-attenuating oyster reefs within the NWS Earle Security Zone could serve as nature-based solutions to mitigate flooding and storm.	Nor'easter, Hurricane and Tropical Storm, Storm Surge	High	NJ Sea Grant	NJ Sea Grant, New Jersey Corporate Wetlands Restoration Partnership, National Fish and Wildlife	\$3M	3 years	Completed	NJDEP and Naval Station built an oyster reef at the Leonardo Pier.
33-3	Create a Plan to Define Steep Slope/High-risk Areas to Manage Development in Landslide Areas	Create a plan to implement reinforcement measures in Landslide Township Municipal budget 3 years new high-risk areas.	Landslide	Low	Township	Municipal budget	Staff time	3 years	Completed	Twp Ordinance passed.
33-4	Develop a Microgrid Feasibility Study (2017)	In August 2020, Middletown Township was awarded a \$150,000 grant from the New Jersey	All Hazards	Low	Township	Municipal budget	\$150,000	2 years	Completed	

Action	Name	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
		Board of Public Utilities to hire experts to conduct an initial study to determine a cost-effective configuration that will allow the Township to use local resources to power critical facilities, especially during times of emergency.								
33-5	Increase the Number of Drones and Provide Drone Training	More drones and drone training for police officers. Two officers have completed the training already.	All Hazards	Medium	Township Police	Homeland Security grants, Municipal budget	\$34,000	1 year	Completed	Police dept maintains drones and conduct ongoing training.

New and Ongoing Actions

Action	Name	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
33-6	Acquire, elevate, or relocate buildings and infrastructure in flood prone areas, with a focus on Substantially Damaged, Repetitive Loss (RL), and Severe Repetitive Loss (SRL) properties.	Elevate 248 structures determined to be substantially damaged and mitigate (elevate or acquire for open space) RL and SRL properties.	Flood, Wave Action, Nor'easter, Hurricane and Tropical Storm, Storm Surge	High	State of New Jersey, Monmouth County, Township of Middletown	FEMA HMA	\$13.5M	5+ years	Ongoing	New and substantially improved homes in the RLA are built above the BFE. Township acquired one property (block 202 lot 10), in July 2024. The town also received one property via donation (block 532 lot 45) on March 15, 2024. The town continues to evaluate opportunities to purchase other non-conforming homes in the SFHA.
33-7	De-slug and Desilt Streams and Provide Wetlands Maintenance	Management of riparian buffers along rivers and streams, channel desnagging to preserve the function of natural drainage channels and floodplains, wetlands maintenance and removal of invasive plant species, desilting	Flood, Nor'easter, Hurricane and Tropical Storm, Wildfire	High	Middletown Township (in conjunction with Monmouth County and Army)	Municipal budget, EPA, NFWF, NOAA, New Jersey Corporate	\$3.3M	5+ years	Ongoing	This is done as needed with storm response and public complaints.

Action	Name	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
		<p>and dredging of streams and ditches of the following:</p> <ul style="list-style-type: none"> • Waackaack Creek/L.F. 12,500 • Pew's Creek/L.F. 10,500 • Compton's Creek/L.F. 39,300 • Ware Creek/L.F. 10,800 • Wagner's Creek/L.F. 12,000 • Claypit Creek/L.F. 14,400 • McClees Creek L.F 19,200. <p>The total stream cleaning is 118,700 LF and assumed silt removal rate 0.75 cu.</p>								
33-8	Purchase Temporary/ Portable Pumps to Remove Stormwater	Installing temporary/ portable pumps in certain areas will allow stormwater from major nuisance flooding events in Leonardo and Belford sections. The goal is to pump stormwater from the system, discharging into Pew's Creek. Once the water level in the system reaches a certain elevation below existing street elevation, pumps would be activated, and system water would be discharged into the creek. Slide gates would be closed during the pumping to prevent stormwater from reentering the drainage systems.	Flood, Nor'easter, Hurricane and Tropical Storm	High	Middletown Township	Municipal Budget	\$110,000	5+ years	Ongoing	The Township owns multiple 750 GPM trailer mounted pumps for dewatering OEM has trained and used them in conjunction with the garage mechanics for the listed purpose. Located at the DPW yard and the fire academy. The ones at the fire academy are not in great shape and need to be moved to the DPW yard and all should be stored inside after servicing. We need to acquire suction hoses for some of these pumps.
33-9	Enhance Security at Township Facilities	Increase surveillance systems in Township critical facilities.	Terrorism	Low	Middletown Township	Homeland Security grants, Municipal budget	\$493,000	2 years	Ongoing	New municipal building and Police Station officially opened summer 2023 with enhanced security measures, key card access, cameras, etc. Drills and training will continue on a rolling basis.
33-10	Conduct Compton Creek Marsh Restoration and build a Maritime Forest; Repair Bulkhead at Belford Harbor	The proposed project is primarily north of Broadway where Compton Creek enters a 2,000-foot-wide Salt Hay Grass-dominated floodplain characterized by historic drainage and mosquito ditches. Current mitigation strategies include an	Nor'easter, Hurricane and Tropical Storm, Storm Surge	High	Middletown Township and Monmouth County	New Jersey Corporate Wetlands Restoration Partnership	\$13M	2 years	Ongoing	The bulkhead repair at Belford Harbor is under construction and is projected to be complete early summer 2025.

Action	Name	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
		existing bulkhead, a rock groin breakwater, and possible future maintenance dredging by the USACE. However, this area needs marsh restoration, an upland berm maritime forest along Church Road, and repairs to the existing bulkhead along Belford Harbor.				(NJCWRP), FEMA HMA, National Fish and Wildlife				
33-11	Conduct Ware Creek Marsh Restoration and Build an Upland Berm Maritime Forest	The action includes marsh restoration and an upland maritime forest berm along Ware Creek.	Nor'easter, Hurricane and Tropical Storm, Storm Surge	High	Middletown Township and Monmouth County	NJCWRP, FEMA HMA, National Fish and Wildlife	\$13M	5 years	Ongoing	Army Corps fifth contract – 2028.
33-12	Coordinate with NWS Earle on Protecting the Navy Base and the Belford Neighborhood through Resiliency and Risk Reduction Projects	The project proposes restoring marshlands to enhance their ability to act as natural buffers to reduce impacts of storm-induced surge and waves, as well as upland restoration to provide a buffer to Normandy Road.	Nor'easter, Hurricane and Tropical Storm	High	Middletown Township and Monmouth County	New Jersey Corporate Wetlands Restoration Partnership, National Fish and Wildlife	TBD	5 years	Ongoing	Ongoing as part of the Microgrid Planning. Town working on necessary approvals and funding.
33-13	Upgrade, Remove, or Rehabilitate the Swimming River Reservoir Dam	Upgrade, remove, or rehabilitate Swimming River Reservoir Dam, a High-Hazard Potential Dam.	Dam Failure	High	New Jersey – American Water Company	NJDEP Bureau of Dam Safety and Flood Control, FEMA HMA	TBD	5 years	New	Although the dam is owned by New Jersey American Water Company, this action is getting added if case funding becomes available. There were rehabilitation projects over the years, the last one in 2012-2014. There are no pending projects at this time.
33-14	Elevate Broadway in Port Monmouth & Belford	Local road to be elevated. Sunny day rain and storm flooding. Is important for evacuation in neighborhood. Marsh on both sides.	Nor'easter, Hurricane and Tropical Storm, Storm Surge	Low	Army Corp	Army Corp/ Town	\$46M	3 years	New	Public alerts are going out to prepare for road closures in conjunction with this project. At this time there is no plan of action to elevate Broadway in Port Monmouth and Belford. Army Corp is installing a floodgate at Broadway under

Action	Name	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
										Contract 5 of the Army Corp of Engineers Flood Protection Plan. Contract 5 is currently due for completion October 31, 2025.