

43 – SEA BRIGHT BOROUGH

PLANNING TEAM AND PARTICIPATION

Name	Title	Participation
Ryan Murphy	OEM Coordinator	11/08/2024 municipal meeting
Rachel Giolitto	Borough Administrator	Review and input into appendix
Brian Kelly	Mayor	Review and input into appendix

COMMUNITY PROFILE

Overview

Sea Bright is a coastal community in east Monmouth County. While much of the Borough is single family residential there are several beach attractions such as the Sea Bright beach pavilion and various beach and cabana clubs. Being a barrier island community, the north end of the Borough is so narrow that development is exclusively built on the bayside of New Jersey Route 36, the main road running north-south through the Borough.

The Borough's main focus has been rebuilding and resilience since Superstorm Sandy damaged parts of the community in 2012. Recovery efforts included a community driven process named Sea Bright 2020 resulting in a Community Recovery Plan that prioritized a list of recovery projects. Sea Bright also took advantage of the "Getting to Resilience" tool developed by NJDEP and Jacques Cousteau National Estuarine Research Reserve, which examined Sea Bright's master plan, ordinances, and data to determine the Borough's preparedness for future storms and generate a resiliency recommendations report.

In 2018 the Borough amended its Flood Damage Prevention ordinance to require higher building elevations beyond what is required by the National Flood Insurance Program for new development in flood hazard areas.

Land Use, Development, & Growth

In Sea Bright, water covers a significant portion of its area, while the remaining developed land is dominated by residential and commercial uses. As a result, in 2020, water accounted for nearly 44 percent of its total area, while urban or developed land made up 30 percent. In the same year, barren land and wetlands constituted 15 percent and 11 percent respectively of the Borough's total area.

Since 2015, Sea Bright's wetlands grew by nearly 13 acres, while its water decreased by 20 acres. During this period, the Borough's barren land and urban land experienced marginal growths of roughly 6 acres and 1 acre respectively.

Land Use Type	Total Acres (2015)	Total Acres (2020)	Percent Change
Agriculture	-	-	-
Barren Land	110.6	117.0	6%
Forest	-	-	-
Urban	234.9	236.0	0%
Water	362.8	342.8	-6%
Wetlands	73.4	86.0	17%

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

Recent Major Development and Infrastructure from 2020 to Present

The Haven at Sea Bright is a mixed-use development that received approval from Monmouth County in late 2023. The development will contain 44 apartment units and bottom floor retail along Front Street. The housing units will include four single-family homes, a 15-unit condo building, and 25 townhomes. A park will be included, and the development will also redo/elevate the bulkhead.

Additional development in the Borough includes condominiums in the center of town, North Pointe at Sea Bright, the building out of the front of the BeachWalk Hotel, and the firehouse.

The Haven at Sea Bright, North Pointe at Sea Bright, BeachWalk, and the firehouse all fall under the FEMA 1% and 0.2% annual chance floodplain and NJ Inland Design Flood Elevation which is FEMA's 1% annual chance floodplain + 3 feet (NJFloodMapper). BeachWalk also falls under the 5 feet SLR (Sea Level Rise) Low-Lying area zone (NJFloodmapper).

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

The Ocean Avenue Streetscape Improvements Project, completed in 2017, addressed numerous recovery and planning issues with the result being a safer, more accessible, and attractive downtown. The project included curb bump-outs at intersections, new sidewalks and crosswalks, stationary benches and trash receptacles, ADA-compliant ramps, decorative streetlights, landscaping and street trees, and way-finding signage.

A new beach pavilion/library, repaving of Ocean Avenue, sea wall repairs, and a new municipal complex were completed in 2018/2019.

Ocean Avenue largely falls under the FEMA 1% and 0.2% annual chance floodplain, NJ Inland Design Flood Elevation which is FEMA's 1% annual chance floodplain + 3 feet, and the 5 feet SLR (Sea Level Rise) Low-Lying area zone (NJFloodmapper).

Demographics & Vulnerable Populations

This plan analyzed census-derived data on population trends and population age distributions to help illustrate potential vulnerability within the borough. 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).

Sea Bright's total estimated population is 1,629. These residents are estimated to be 2.0% under age 5 and 22.9% over age 65. The Borough saw a noted 24.9% population increase (growing an estimated 325 residents) over the ACS survey periods of 2013-2017 and 2018-2022. With an aging population making up nearly twenty-three percent of their total community, Sea Bright 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. A high rate of population growth (nearly one-quarter over two five-year survey periods) highlights potential local vulnerability related to shifts in the built environment and densification.

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

Demographics Summary	
Total Population (2018-2022 ACS 5-year Estimates)	1,629
Population Change since 2017	24.9%
Percent of Population Age < 5	2.0%
Percent of Population > 65	22.9%

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 Borough'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
Coastal Erosion	Tornado	Earthquake
Flood	Winter Storm	Wildfire
Storm Surge		
Wave Action		
Human-made Hazards		
	Cyber Attack	Civil Unrest
	Economic Disruption	Power Failure
	Terrorism	
	Pandemic	

Hazard Ranking Explanation

Extreme temperatures remain a medium level of concern for Sea Bright Borough. Although the Borough has not needed to establish a warming center recently, emergency services have used the beach pavilion as a temporary location to treat individuals whose cars got stuck on the road during winter. While it is not an official warming center, it has served this purpose on at least one occasion.

Extreme winds continue to be a medium level of concern, while hurricanes and tropical storms are ranked as a high concern. For instance, during Hurricane Isaias, winds swept away a tent from Tommy's Tavern & Tap, which got stuck in trees and had to be cut down by the fire department. Additionally, Donovan's Reef's message board was affected by the winds.

Coastal erosion and wave action have increased from a medium to a high level of concern, with storm surge remaining at a high level. Sea Bright has lost significant beach area due to wave activity. Although the United States Army Corps of Engineers is expected to conduct beach replenishment, no schedule has been set. The most affected areas include the jetties, Sea Bright Beach Club, and Anchorage Beach, where erosion is caused by both wave action and storm surge.

Power failure remains a low level of concern. In the event of a wind-related power outage, the Borough has a generator to ensure that government activities are not disrupted. JCP&L has been prompt in fixing any downed power lines, and such events are infrequent.

Significant Hazard Events Since Last Plan Update

Flooding has been the primary hazard event to occur since the last plan update. In February 2021, there was flooding caused by a nor'easter. In January 2024, a winter storm brought flooding. In Summer 2024, there was flooding during full moons and high tides. The 300 block of the North Beach area, to the south in Tradewinds area around 36, and from the beach club to the housing development on the beach side felt the worst effects. Flooding comes up underneath from the sewers and is usually from the back bay.

Climate Change Impacts on Extent and Magnitude of Hazards

Climate change is expected to significantly impact the risks and hazards faced by the Borough of Sea Bright. As a coastal community, Sea Bright is particularly vulnerable to the effects of rising sea levels and increased storm intensity. The Borough has already experienced significant damage from past events such as superstorm Sandy, and future climate change is likely to exacerbate these issues. Rising sea levels will increase the frequency and severity of coastal flooding, storm surges, and erosion, posing a greater threat to both residential and commercial properties.

One of the most pressing concerns for Sea Bright is the increased risk of coastal erosion and wave action. As sea levels rise, the natural buffer provided by beaches and dunes will be diminished, leading to more severe erosion and loss of land. This will not only impact the Borough's infrastructure but also its economy, which relies heavily on beach tourism. The United States Army Corps of Engineers has plans for beach replenishment, but the timing and extent of these efforts remain uncertain.

Additionally, the increased intensity and frequency of storms due to climate change will likely result in more frequent power outages and damage to critical infrastructure. While Sea Bright has taken steps to mitigate these risks, such as installing generators and elevating buildings, the Borough will need to continue to invest in resilient infrastructure and emergency preparedness measures. The community's efforts to update its flood damage prevention ordinance and participate in programs like the "Getting to Resilience" tool are crucial steps in adapting to these changing conditions.

By addressing the increased risks of flooding, erosion, and storm damage, the Borough can better protect its residents, infrastructure, and economy from the adverse effects of climate change.

RISK ASSESSMENT

National Flood Insurance Program (NFIP) statistics

Sea Bright Borough	
Initial FIRM Date	10/14/71
Effective FIRM Date	6/15/2022
Number of Policies In-Force:	887
Total Losses:	1950
Total Payments:	\$86,623,739.84
Number of RL Properties:	79
Number of Mitigated RL Properties:	2
RL – Total Losses:	234
RL – Total Paid:	\$11,940,581.26
Number of SRL Properties:	18
Number of Mitigated SRL Properties:	0
SRL – Total Losses:	99
SRL – Total Paid:	\$8,186,929.53

Source: FEMA Policy and Loss Data, August 2024

Vulnerability of the Built Environment

The Borough of Sea Bright is located on a narrow strip of land surrounded by water on both sides, the Shrewsbury to the east and the Atlantic Ocean to the West. The Special Flood Hazard Area (SFHA) consists of almost the entire Borough.

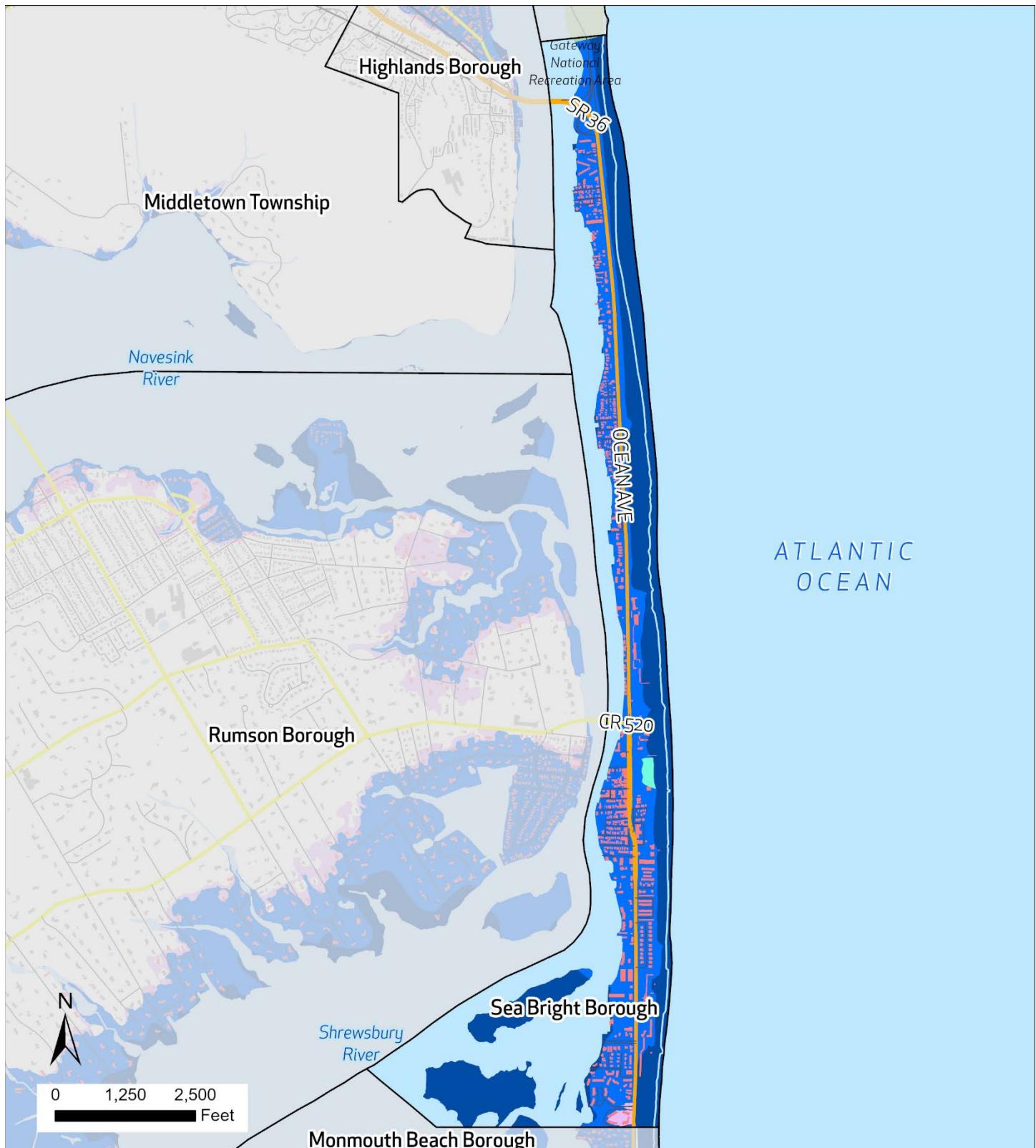
Approximately 99.5 percent of the total area of Sea Bright lies within the 1% annual chance flood zone as defined by FEMA. An additional 0.4 percent of the area of the municipality is in the 0.2% annual chance flood zone.

About 87.4 percent of Sea Bright is considered developed. Of the developed parcels of the town, 88.2 percent fall within the 1% annual chance flood zone and 0.9 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	99.0%	1.0%	79.6%
Exposed Land Area	99.5%	0.4%	75.7%

During the planning process, Neptune City 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 three total facilities. Of these facilities, all are within the floodplain and two of three are in an area which is 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
Safety and Security	2	-	1
Health and Medical	1	-	1



Flood Risk

Sea Bright Borough

FEMA Flood Zone

- 0.2% Annual Chance
- AE (1%)
- AO (1%)
- VE (1%)

State Routes

County Routes

Local Roads

Municipal Boundaries

Building Footprints

Building Footprints within

Floodplain

Water

Source: FEMA NJDEP, NJOIT, NJTransit



NJ Inland Design Flood Elevation Sea Bright Borough

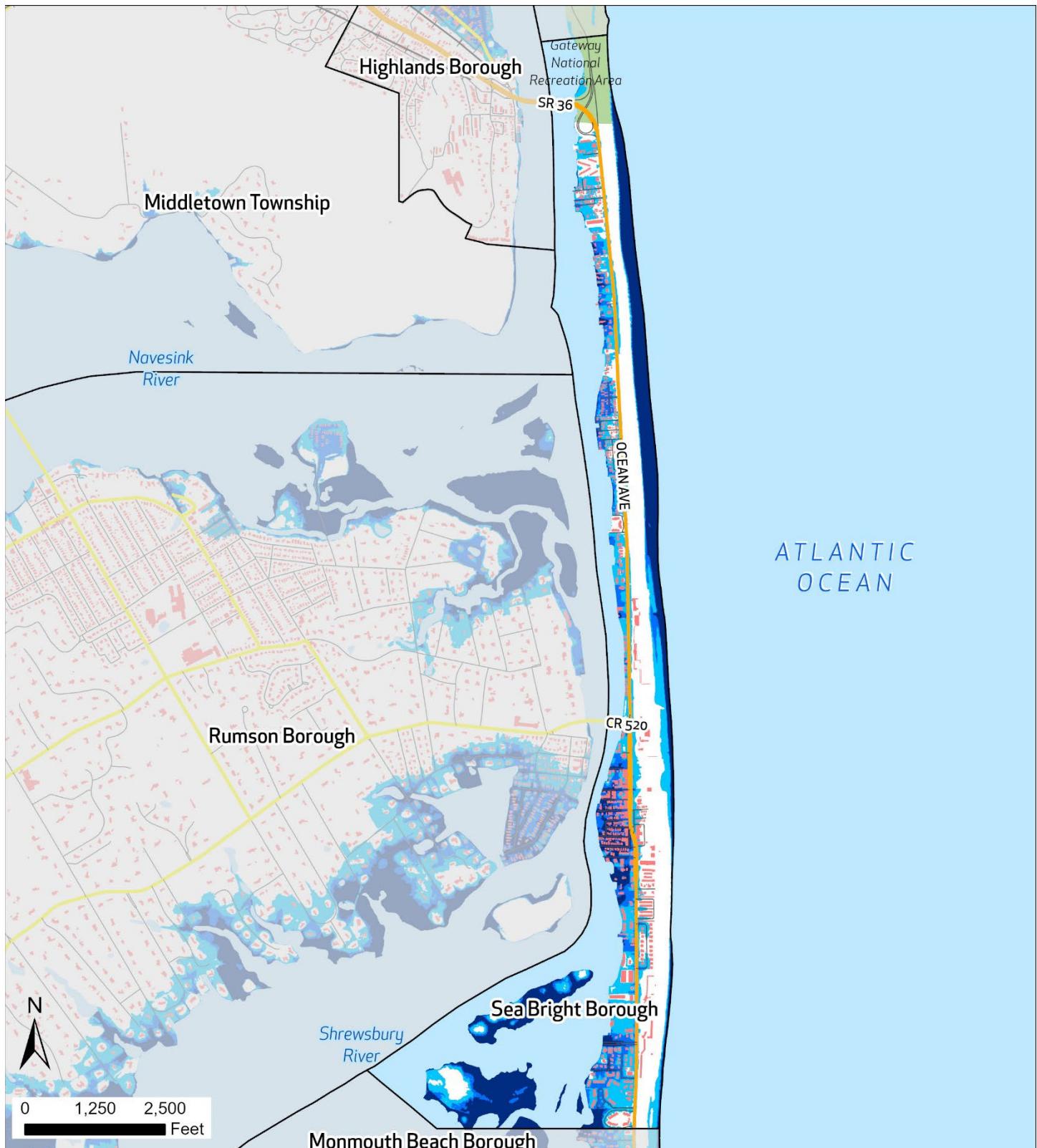
FEMA Flood Zone
Current Base Flood Elevation (1%)

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

State Routes
County Routes
Local Roads
Railroad

Municipal Boundaries
Water
National Park Service
Building Footprints
Building Footprints within IDFE

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



**Permanent Inundation
Under Sea Level Rise
(SLR) Scenarios**

Sea Bright Borough

Source: NOAA, NJDEP, NJOIT, NJTransit



Wildland Urban Interface (WUI) Classification

Sea Bright Borough

- Intermix
- High or Medium Density Housing
- Low or Very Low Density Housing
- No Housing
- State Routes
- County Routes
- Local Roads
- Rail Lines

- Municipal Boundaries
- Building Footprint
- Water

Source: USFS, NJDEP, NJOIT, NJTransit

CAPABILITY ASSESSMENT

Planning & Regulatory Capabilities

Sea Bright Borough 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	
Capital Improvement Plan	x		2023	5-year capital improvement plan that is continuously updated
Local Emergency Operations Plan/Continuity of Operations Plan	x		2/25	List applicable hazards to borough and mitigation techniques in place in the even of said hazards
Floodplain Development Ordinance	x		5/24	Promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific flood hazard areas through the establishment of comprehensive regulations for management of flood hazard areas
Floodplain Management Plan	x		5/24	Promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific flood hazard areas through the establishment of comprehensive regulations for management of flood hazard areas
Stormwater Management Ordinance	x		7/24	Flood control, groundwater recharge, and pollutant reduction shall be achieved through the use of stormwater management measures, including green infrastructure best management practices (GI BMPs) and nonstructural stormwater management strategies
Stormwater Management Plan	x		7/24	Flood control, groundwater recharge, and pollutant reduction shall be achieved through the use of stormwater management measures, including green infrastructure best management practices (GI BMPs) and nonstructural stormwater management strategies
Watershed Management Plan		x		
Sheltering Plan	x		2/25	
Evacuation Plan	x		2/25	
Substantial Damage/Improved Structures Response		x		
Repetitive Loss Plan	x		10/24	
Disaster Debris Management Plan		x		
Tracking elevation certificates and/or Letter of Map Change	x		Continuously Updated	
Post-Disaster Recovery Plan		x		
Current/recent redevelopment plans or studies	x		4/23 and 5/24	
Community Wildfire Protection Plan		x		
Climate Adaptation Plan		x		
Other Plans that discusses hazard mitigation	X			2020 Community Recovery Plan
Other ordinance and regulation that mitigate the impacts of natural hazards	X			2018 Flood Damage Prevention Ordinance

Administrative and Technical Capabilities

Sea Bright Borough has the following Administrative and Technical capabilities:

Position	Yes	No	Explanation
Floodplain Administrator	x		Mary Tangolics
Grant Writer	x		Rachel Giolitto
Staff trained to support mitigation	x		
Existing mutual aid or technical assistance agreements to support hazard mitigation projects	x		

Position	Yes	No	Explanation
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

Sea Bright Borough has the following Education and Outreach capabilities:

Education & Outreach Capability	Yes	No	Explanation
Communicate natural and human-based hazards to the public	x		Use of mailers & Nixel electronic communications
StormReady	x		StormReady certified through Monmouth County's certification
Firewise USA		x	
Severe Weather Awareness Week		x	
Community Rating System (CRS)	x		Use of mailers to raise awareness throughout boro; CRS certified, last updated 2022

Financial Capabilities

Within the last five years, Sea Bright Borough 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	
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:

- Sea Bright 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 Borough.

Community Rating System (CRS) Classification: 6

Sustainable Jersey Participation Status: Bronze

MITIGATION STRATEGY

Overview and Progress Since Last Plan Update

While improvements are ongoing, we have made completed updates to the seawall along the beachfront to mitigate ocean flooding. We continue to see improved bulkheads along the riverfront side with new projects and residences going up, but the effects have yet to bear fruit until the projects are completed.

Completed or Removed Actions

Action	Name	Description	Hazards Addressed	Pri-ority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
Action 35-1	Purchase and Install New Siren for Municipal Complex	Purchase and install a siren on the municipal complex.	All Hazards	N/A	N/A	N/A	N/A	N/A	Withdrawn	The Borough Hall and emergency services are in their new location. A new siren is no longer needed. Old Borough Hall is now a cultural center. Parks and rec runs it and has events like bridge and yoga. This location could also be used as shelter (100 military-issued cots).

New and Ongoing Actions

Action	Name	Description	Hazards Addressed	Pri-ority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
Action 35-2	Acquire, elevate, or relocate buildings and infrastructure in flood prone areas, with a focus on Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties	Elevation of approximately 700 homes; 114 homes are on the Repetitive Loss List. The Borough has identified these homes as severely damaged after Superstorm Sandy. A majority of the homes on the repetitive loss list are located west of NJSH Route 36, on the river side, between Osborne Place and Peninsula Avenue. The Borough is seeking funding to provide financial assistance to Borough residents seeking to elevate their homes.	Flood, Wave Action, Nor'easter, Hurricane and Tropical Storm, Storm Surge	High	OEM Coordinator	FEMA HMA; Municipal budget	\$105M	2 years	Ongoing	Some houses still need to be raised. The majority of raising projects occur when people buy houses, knock them down, and build new ones that are raised.
Action 35-3	Elevate Bulkhead with Pump Stations, Tide Valves to Outfalls, and	The scope of this project is completing the bulkhead by raising it 2,600 feet from the south side of the Rumson Rd. Bridge to Osborne P., along both private and public property, to create a continuous elevated	Flood, Wave Action, Extreme Wind, Nor'easter, Hurricane and Tropical	High	OEM Coordinator	FEMA HMA	\$10.2M	2 years	Ongoing	Bulkheading has gone up at the end of most streets. Rumson Bridge to Osborn Place (the downtown business district) has been the focus. Imbrie does not have a bulkhead, but most roads outside of that have elevated

Action	Name	Description	Hazards Addressed	Pri-ority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
	Backflow Preventors	bulkhead equipped with four stormwater pump stations, tide flex valves at all outfalls within the project area, and backflow preventers. The Borough is seeking to raise the bulkhead elevation to 7.0ft NAVO 88, to protect these properties from the 25-year-storm event.	Storm, Storm Surge							bulkheads. R. Murphy believes they have tide valves.
Action 35-4	Floodproof the Downtown District	Floodproof a minimum of 35 buildings in the Downtown District. These businesses have been identified by the Borough as severely damaged after Superstorm Sandy. Many of the buildings (18) are also listed on the 2011 Repetitive Loss List. The Downtown District is located along Ocean Avenue/Route 36 between Peninsula Avenue and Osborne Place. The Borough is seeking funding to provide financial assistance to businesses in order to provide floodproofing to their buildings.	Flood, Wave Action, Nor'easter, Hurricane and Tropical Storm, Storm Surge	Medium	OEM Coordinator	FEMA HMA	\$5.2M	1 year	Ongoing	New large project along the riverfront will require a new, higher bulkhead in the center of town
Action 35-5	Construct Berms Along Beachfront to Absorb Storm Surge	Constructing berms to protect vulnerable areas and absorb wave action storm surge, and to act as a natural barrier to the destructive forces of wind.	Flood, Wave Action, Nor'easter, Hurricane and Tropical Storm, Storm Surge, Coastal Erosion	High	OEM Coordinator	FEMA HMA	\$3M	1 year	Ongoing	Anchorage Beach needs it most. No berms have been constructed in the past couple years, but some are being done now. They are also dredging rivers and using Monmouth Beach as dump point (underground pipe by cultural center).
Action 35-6	Move the Electrical Infrastructure Underground	Move above-ground electric wires and infrastructure below-ground.	All Hazards	Medium	OEM Coordinator	CDBG, Federal and State grant	\$200,000 .00	1 year	Ongoing	

Action	Name	Description	Hazards Addressed	Pri-ority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
Action 35-7	Target Harden Pump Stations with Camera System and Fencing	Upgrade security on all pump stations (3 sewer pumps + 2 stormwater pumps), including camera system and fencing.	Terrorism	High	Borough DPW, Police Department	Homeland Security grants	Unk	2 years	Ongoing	Discussion with Police Dept Homeland Security officer to elevate this priority to HIGH
Action 35-8	Develop a Hydrology Study to Improve Stormwater Management Borough-wide	Hydrology Study to improve stormwater management and flooding issues.	Flood, Wave Action, Nor'easter, Hurricane and Tropical Storm, Storm Surge	Medium	Borough Engineering	Municipal funding	Unk	2 years	Ongoing	No progress.
Action 35-9	Maintain and Retrofit Existing Outfalls	Maintain and retrofit all existing 63 outfalls in the Borough.	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	Medium	Borough DPW, Engineering	FEMA HMA	Unk	1 year	Ongoing	continuously ongoing with new construction projects
Action 35-10	Improve Public Awareness of Severe Wind Through Outreach Activities	Improve public awareness of severe wind through outreach activities such as informing residents of shelter locations and evacuation routes; requiring or encouraging wind engineering measures and construction techniques that may include structural bracing, straps and clips, anchor bolts, laminated or impact-resistant glass, reinforced pedestrian and garage doors, window shutters; reviewing building codes and structural policies to ensure they are adequate to protect older structures from wind damage; encouraging wind-resistant roof shapes; educating design professionals to include	Extreme Wind, Nor'easter, Hurricane and Tropical Storm	Low	Planning Board, OEM	Municipal budget	Staff time	5 years	Ongoing	Outreach occurs via CRS certification.

Action	Name	Description	Hazards Addressed	Pri-ority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
		wind mitigation during building design.								
Action 35-11	Improve Public Awareness of Storm Preparedness at the Marina	Educate boat and marina owners on how to properly prepare for a storm in order to reduce losses. Marinas can develop a boat preparation pamphlet for boat owners. The purpose of the pamphlet would be to educate owners on how to secure boats in preparation for a hurricane, storage facility options, and actions to take after a storm.	Flood, Wave Action, Extreme Wind, Nor'easter, Hurricane and Tropical Storm, Winter Storm	Low	Planning Board, OEM	Municipal budget	Staff time	5 years	Ongoing	Outreach occurs via CRS certification.