2 – ALLENHURST BOROUGH

PLANNING TEAM AND PARTICIPATION

Name	Title	Participation
Mike Schneider	**Police Chief**	**Primary Point of Contact, Municipal Meeting #1, Municipal Meeting #2**
Donna Campagna	Borough Administrator	Development and Review Mitigation Strategy
Matthew Mariano	Zoning and Code officer	Development and Review Mitigation Strategy

COMMUNITY PROFILE

Overview

Allenhurst is a small, quiet oceanside community with a land area of 0.3 square miles. The Borough is fully developed with the majority of its land use classified as residential. The Borough's housing is predominantly single-family with a small number of multi-family units and upper story apartments located along Main Street. Allenhurst is characterized by its wide streets alongside its 19th-century housing stock. According to the Coastal Monmouth Plan (2010), Allenhurst seeks to preserve its unique character as a historic and tranquil suburban community.

Hurricane Irene (2011) and Superstorm Sandy (2012) resulted in local power outages, flooding, and damage to the Allenhurst Beach Club. The Borough took this opportunity to refocus its resilience and sustainability efforts. In June 2015, residents and tourists alike welcomed the reopening of the Beach Club. That same year, the Borough was awarded a $200,000 grant through the Monmouth County Municipal Open Space program for improvements to Allen Avenue Park. Allenhurst was included in the U.S. Army Corp of Engineers' (USACE) Loch Arbour to Deal Beach Erosion Control Project, which was completed in late 2016.

Land Use, Development, & Growth

Allenhurst is a predominantly residential community, with urban/developed land accounting for nearly 90 percent of its total area. From 2015 to 2020, the overall land use composition of the Borough underwent negligible change; it lost 2.3 acres of water, while its barren land increased by the same acreage. Throughout this period, the share of the Borough's urban land hovered at 90 percent of the total area, covering a land area of nearly 151 –acres.

Land Use Type	Total Acres (2015)	Total Acres (2020)	Percent Change
Agriculture	-	-	-
Barren Land	5.4	7.7	43%
Forest	-	-	-
Urban	150.9	150.9	>0%
Water	10.5	8.2	-22%
Wetlands	-	-	-

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

Recent Major Development and Infrastructure from 2020 to Present

None since 2020.

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

In 2017, the Borough prepared its Municipal Public Access Plan, which presents the borough's vision and lays our goals and objectives for enhancing public access to its waterfront. It was adopted into the borough's Master Plan in 2020. There are a number of associated parcels for development that were identified in this plan and projects should be anticipated. For example, the Borough is planning on building twenty-three townhomes as part of the affordable housing effort behind the railroad tracks on Main Street and Hume Street. These townhomes will be constructed outside the existing flood zone and built in accordance with State and Local building codes. Additionally, there is going to be considerable development

near Main Street. The plans include a number of townhomes and some mixed-use construction. However, considerable parts of Main Street and all of Hume Street fall under the FEMA 1% and 0.2% annual chance floodplain, and potentially within the New Jersey Flood Hazard Area, as estimated by FEMA's 1% annual chance floodplain + 3 feet.

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).

Allenhurst Borough has an estimated population of 412 residents, of which an estimated 5% is under age 5 (21 residents) and 23% is over age 65 (an estimated 95 residents). Though a small population, these groups may require special consideration in hazard mitigation planning and response, particularly the near quarter of Allenhurst which is over age 65. Notably, the borough saw an 18.6% drop in population (from an estimated 506 residents) over the 2013-2017 and 2018-2022 ACS survey periods – impacts on the built environment may be present that impact pre-hazard communication and post-disaster response.

No areas of Allenhurst Borough meet vulnerability designation criteria for CDRZ, CEJST, or OBC identification.

Demographics Summary	
Total Population *(2018-2022 ACS 5-year Estimates)*	412
Population Change since 2017	-18.6%
Percent of Population Age < 5	5.1%
Percent of Population > 65	23.1%

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 Temperature	Lightning
Nor'easter	Extreme Wind	Drought
Flood	Tornado	Earthquake
Storm Surge	Winter Storm	Wildfire
	Coastal Erosion	

High	Medium	Low
	Natural Hazards	
	Wave Action	
	Human-made Hazards	
	Cyber Attack	Power Failure
	Economic Disruption	
	Civil Unrest	
	Pandemic	
	Terrorism	

The Borough ranked Dam Failure and Landslide as N/A.

Hazard Ranking Explanation

Civil unrest was changed from low in the prior HMP update to medium concern due to the Borough's proximity to the two county cities. Additionally, power failure was also moved up to medium. The infrastructure and homes in Allenhurst require more electricity than normal homes, and today at least 60% of the homes within the Borough have emergency generators due to the frequency of power failures, with more being installed every year. Dam failure is not applicable due to the lack of dams within the Borough. The low topography of the Borough also makes the threat of landslides not applicable. Flood and storm surges remain a high risk due to the frequency of storm events, and the threat is potentially worsened by the need to refurbish the sea wall. Coastal erosion remains a medium threat; however, there have been two replenishment efforts in the past five years.

Significant Hazard Events Since Last Plan Update

Considerable flooding within the Borough causes issues with the bulkhead near the ocean. It has flooded severely twice in the past 20 years, with the last significant event occurring in September 2023 (pictured below). This event resulted in knee-deep waters that reached Elberon Avenue, causing road closures but not reaching the homes. The Borough has a sea wall, approximately 20 feet in height, that protects it from severe flooding caused by high tides.

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 Allenhurst. As a small, oceanside community, Allenhurst is particularly vulnerable to rising sea levels and increased storm intensity. The frequency and severity of flooding events are likely to increase, exacerbating existing issues with the bulkhead near the ocean and the sea wall. The borough has already experienced severe flooding twice in the past 20 years, and with climate change, such events are expected to become more frequent and intense. This will likely lead to more road closures and potential damage to infrastructure, necessitating more robust flood management and mitigation strategies.

Additionally, the increased frequency of extreme weather events, such as hurricanes and nor'easters, will likely lead to more power failures, which have already been identified as a medium concern due to the high electricity demand of the infrastructure and homes in Allenhurst. Coastal erosion, which remains a medium threat, may also worsen with rising sea levels and more frequent storm surges. The borough's efforts to enhance resilience and sustainability, such as the installation of emergency generators and the development of a Municipal Public Access Plan, will be crucial in mitigating the increased risks and hazards posed by climate change.

RISK ASSESSMENT

National Flood Insurance Program (NFIP) statistics

Allenhurst Borough	
Initial FIRM Date	3/15/1979
Effective FIRM Date	6/15/2022
Number of Policies In-Force:	44
Total Losses:	22
Total Payments:	$710,767.16
Number of RL Properties:	2
Number of Mitigated RL Properties:	0
RL – Total Losses:	7
RL – Total Paid:	$152,088.45
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

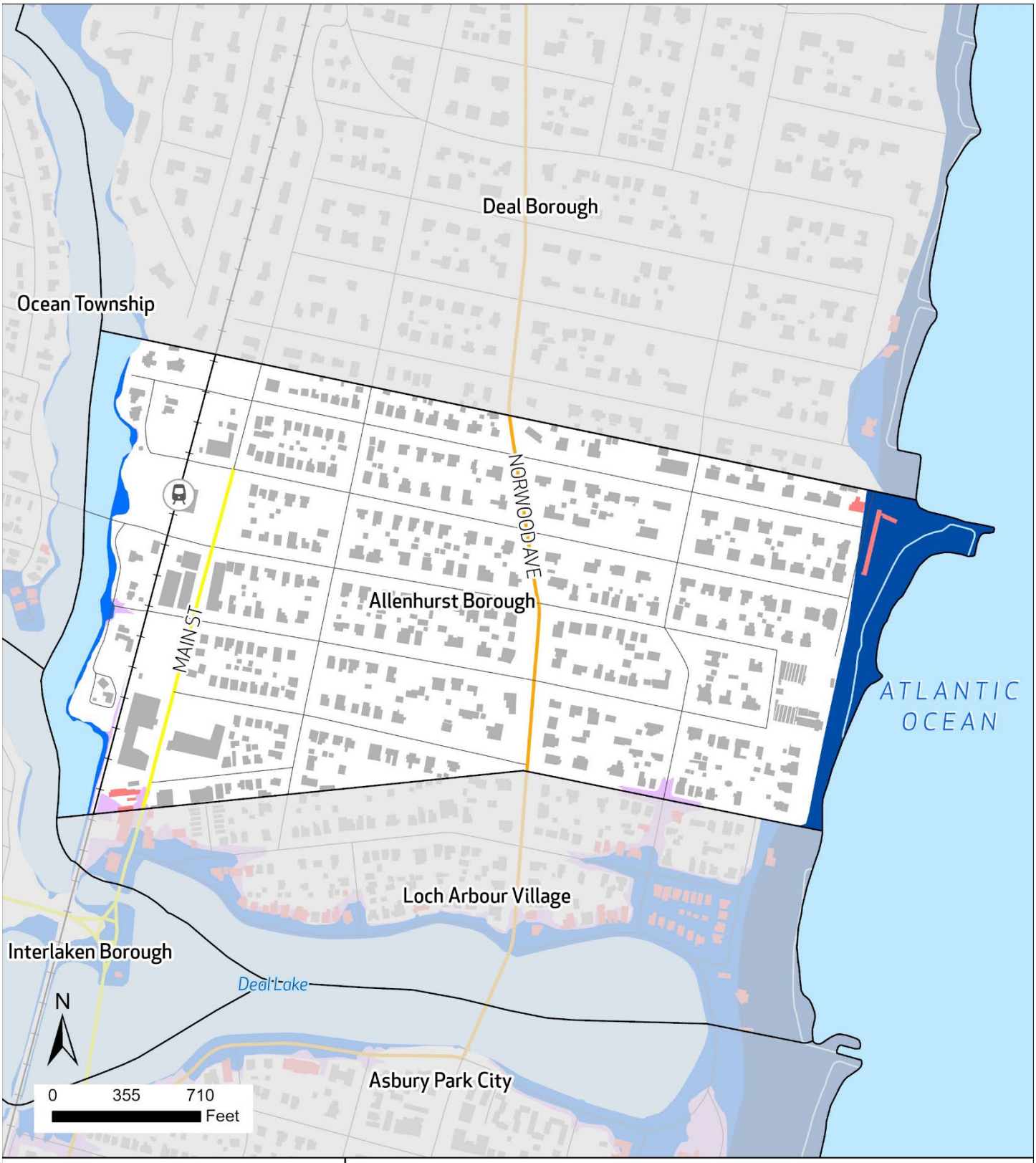
The Special Flood Hazard Area (SFHA) in Allenhurst Borough is located adjacent around the waterbodies of the borough, Deal Lake and the Atlantic Ocean. Approximately 10.2 percent of the total area of Allenhurst lies within the 1% annual chance flood zone as defined by FEMA. An additional 0.5 percent of the area of the municipality is in the 0.2% annual chance flood zone.

Roughly 88.6 percent of Allenhurst is considered developed. Of the developed parcels of the town, 1.7 percent fall within the 1% annual chance flood zone and 2.6 percent are within the 0.2% annual chance flood zone. This illustrates that development in the municipality has generally occurred in areas that are less prone to flooding.

	Percentage in the 1% Floodplain	Percentage in the 0.2% Floodplain	5 feet of Sea Level Rise
Developed Parcels	1.7%	2.6%	0.3%
Exposed Land Area	10.2%	0.5%	2.1%

During the planning process, Allenhurst identified critical facilities which function as community lifelines. These are the most fundamental services in the community that, when stabilized, enable all other aspects of society to function. Allenhurst identified five total facilities. None are located in the floodplain or in areas that are projected to be impacted by sea level rise.

	Number in the 1% Floodplain	Number in the 0.2% Floodplain	Number Affected by 5 feet of Sea Level Rise
Community Lifelines and Critical Facilities	-	-	-



Flood Risk

Allenhurst Borough

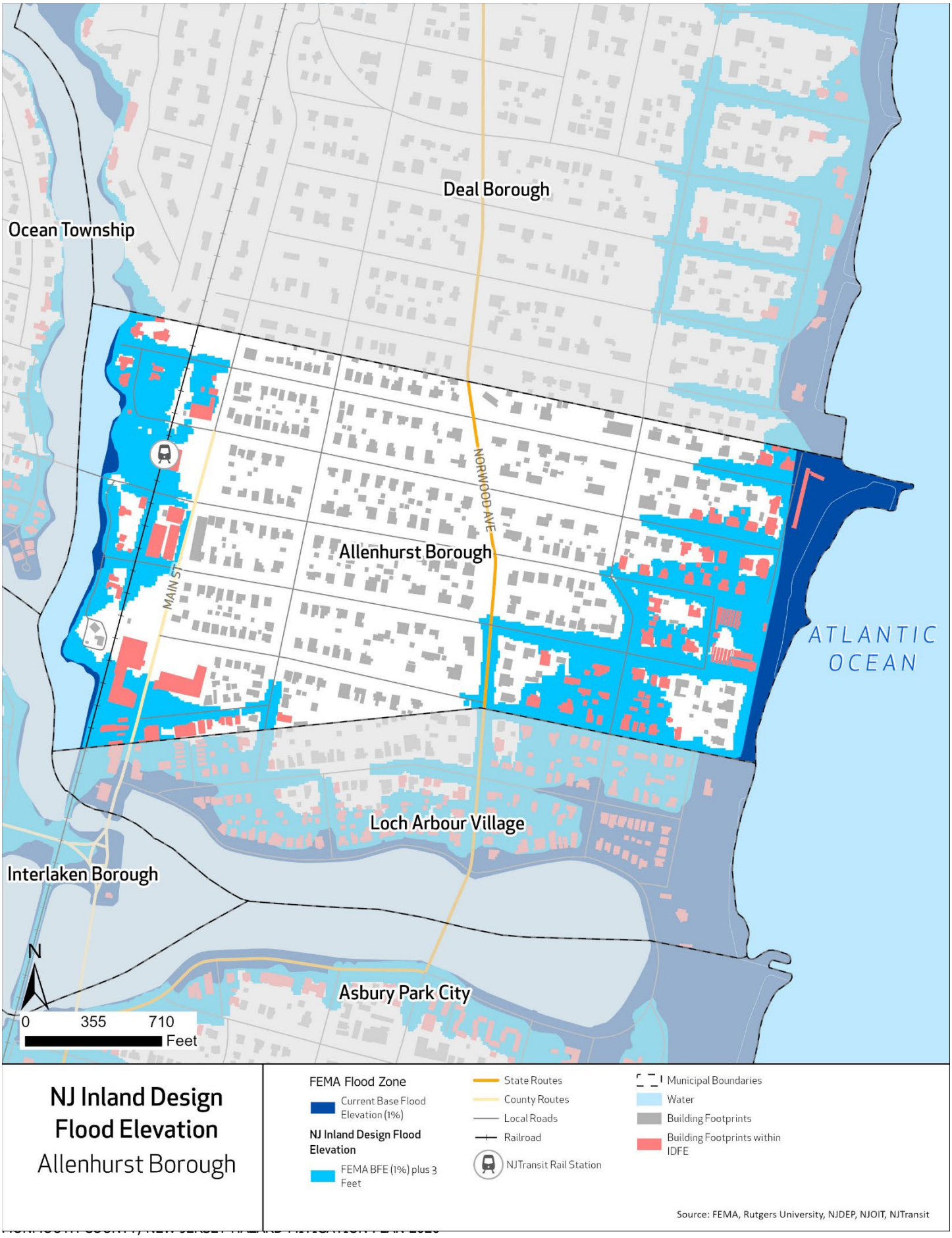
FEMA Flood Zone

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

- State Routes
- County Routes
- Local Roads
- Rail Lines
- NJTransit Rail Station

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

Source: FEMA NJDEP, NJOIT, NJTransit


Deal Borough
Ocean Township
NORWOOD AVE
Allenhurst Borough
MAIN ST
ATLANTIC OCEAN
Loch Arbour Village
Interlaken Borough
Asbury Park City
N
0 355 710
Feet
NJ Inland Design Flood Elevation
Allenhurst 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
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

Allenhurst Borough

- Area Inundated Under 2 Feet SLR
- Area Inundated Under 3 Feet SLR
- Area Inundated Under 5 Feet SLR
- Interstate Highways
- State Routes
- County Routes
- Local Roads
- Rail Lines
- NJTransit Rail Station
- Municipal Boundaries
- Building Footprint
- Water

Source: NOAA, NJDEP, NJOIT, NJTransit


Deal Borough
Ocean Township
NORWOOD AVE
Allenhurst Borough
MAIN ST
ATLANTIC OCEAN
Loch Arbour Village
Interlaken Borough
Deal Lake
Asbury Park City
N
0 355 710
Feet
Wildland Urban Interface (WUI) Classification
Allenhurst Borough
High or Medium Density Housing
No Housing
State Routes
County Routes
Local Roads
Rail Lines
NJTransit Rail Station
Municipal Boundaries
Building Footprint
Water
Source: USFS, NJDEP, NJOIT, NJTransit

CAPABILITY ASSESSMENT

Planning & Regulatory Capabilities

Allenhurst 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		2023	FY 2023 – Housing Plan Element and Fairshare Plan FY 2018 – Master Plan Reexamination Report
Capital Improvement Plan	X		2021	FY 2021 – Multijurisdictional Natural Hazard Mitigation Plan (FEMA Approved 02/12/2021)
Local Emergency Operations Plan/Continuity of Operations Plan	X		2024	
Floodplain Development Ordinance	X		2022	FY 2022 – Ordinance 2022-09 – enforce state standard for freeboard
Floodplain Management Plan	X			
Stormwater Management Ordinance	X		2024	FY 2024 – Ordinance 2024-08 – Adopted state requirement, no higher standard
Stormwater Management Plan	X			
Watershed Management Plan	X			Deal Lake
Sheltering Plan		X		
Evacuation Plan	X			
Substantial Damage/Improved Structures Response	X		2022	Ordinance 2022-09 Flood Damage Prevention Ordinance
Repetitive Loss Plan		X		
Disaster Debris Management Plan		X		
Tracking elevation certificates and/or Letter of Map Change	X			Zoning/engineering office
Post-Disaster Recovery Plan		X		
Current/recent redevelopment plans or studies	X			Main Street Affordable Housing: This area is outside the 100- and 500-year flood plains per the FEMA flood map 06/15/2022.
Community Wildfire Protection Plan		X		
Climate Adaptation Plan		X		
Other Plans that discuss hazard mitigation	X			Allenhurst Design Guidelines for Historic preservation
Other ordinance and regulation that mitigate the impacts of natural hazards		X		

Administrative and Technical Capabilities

Allenhurst Borough has the following Administrative and Technical capabilities:

Position	Yes	No	Explanation
Floodplain Administrator	X		Zoning/engineer office
Grant Writer	X		Zoning officer
Staff trained to support mitigation	X		
Existing mutual aid or technical assistance agreements to support hazard mitigation projects	X		Commissioners/ Mayor / Borough Administrator
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

Allenhurst Borough has the following Education and Outreach capabilities:

Education & Outreach Capability	Yes	No	Explanation
Communicate natural and human-based hazards to the public	X		Blast emails, Code Red
StormReady		X	
Firewise USA		X	
Severe Weather Awareness Week		X	
Community Rating System (CRS)		X	

Financial Capabilities

Within the last five years, Allenhurst 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:

MITIGATION STRATEGY

Overview and Progress Since Last Update

The Borough of Allenhurst actively works to fuse scientific evidence with proactive policy and aims to improve Allenhurst's resilience to damage from natural disasters and adapt to future climate concerns. Since 2020, the Borough has completed an emergency generator, and emergency operations plan which promotes a flourishing community and further support the municipality's resiliency goals. Moving forward, Allenhurst will prioritize home, roadway and critical infrastructure improvements, continued upgrades to water, sewer and stormwater conveyance systems and coordinate with state and local agencies on the best ways to achieve resiliency within this vulnerable coastal community.

Completed or Removed Actions

Action	Name	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Timeline	Action Status	Notes
2-1	Purchase and Install Natural Gas Emergency Generators	The Borough seeks to provide temporary power via gas generators for Borough Hall and the Fire Station.	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	N/A	N/A	N/A	N/A	N/A	Completed	Natural gas generator is 95% installed at Police Headquarters /Borough Hall and at the Firehouse. Cost: $65,000.
2-2	Structurally Retrofit Critical Facilities	Structural Retrofitting of the Police Headquarters, Municipal Building, Radio Tower, and the Water Tower to make them less vulnerable to human and natural-based hazards.	All Hazards	High	Borough Administration, Council	FEMA HMA		3 years	Withdrawn	The radio and water tower will come down. There are plans to rebuild Borough Hall/Police HQ.
2-3	Structurally Retrofit Existing Communication Tower on Municipal Building to Support Emergency Response	To maintain police, fire, and medical EMS services throughout the municipality, the Borough seeks to retrofit the tower at the municipal building.	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	N/A	N/A	N/A	N/A	N/A	Withdrawn	Action no longer needed. Switched over to County EMS system; the County has a digital signal, and the tower is no longer needed.
2-4	Create a Temporary Shelter and Warning Center	Create a Temporary Shelter and Warming Center.	All Hazards	Medium	Borough Administration and Council	Municipal budget		2 years	Completed	The Firehouse serves as a warming center and shelter.

New and Ongoing Actions

Action	Name	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Timeline	Action Status	Notes
2-5	Remove Beach Structures and Convert to Open Space	The OEM Basic Plan was amended to include a "major storm annex" detailing the removal of structures from the beach. Permanent beach structures were replaced with modular systems.	Hurricane and Tropical Storm, Storm Surge	High	Borough Administrator	Municipal budget, DEP Blue Acres	$3.5M	5 years	Ongoing	As of 2024, there are 25 permanent structures remaining and 30 portable structures that are moved off the beach after summer. Long term goal is to remove all permanent structures from the beach.
2-6	Purchase Jet/ Vacuum Debris Truck and/or coordinate with County DPW to use their Equipment	To maintain storm drainage and sanitary service throughout the municipality, the Borough seeks to provide proper maintenance of infrastructure to ensure a state of readiness during a storm event.	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	Medium	OEM Director	Municipal budget	$350k	3 years	Ongoing	The Borough currently coordinates with Ocean Township and City of Asbury Park to use their jet truck. Long term goal is to purchase their own truck.
2-7	Build a New Building Structure to protect OEM Equipment	The Borough seeks to provide a centralize building for critical OEM equipment. Currently this equipment is stored outside and subject to the daily elements which damages the effectiveness equipment in emergency events.	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	Medium / High	Borough Engineer and OEM Director	Municipal budget	$1.5M	2 years	Ongoing	No update – still a long-term goal
2-8	Acquire, elevate, or relocate buildings and infrastructure in flood prone areas, with a focus on Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties	There are currently no RL or SRL properties in the Borough; however, the Borough realizes the floodplain changes over time and the risk is always present. If in the next five years properties become RL/SRL, the Borough will coordinate with residents to mitigate properties through structure elevation, demolition to open space, or another type of mitigation.	Flood, Wave Action, Nor'easter, Hurricane and Tropical Storm, Storm Surge, Winter Storm	High	Mayor and Council	FEMA HMA	TBD	5 + years	Ongoing	

Action	Name	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Timeline	Action Status	Notes
2-9	Build a Staging Area for Civil Unrest Incidents	Monmouth County uses the Allenhurst Firemen's Club as a staging area for civil unrest incidents in Asbury Park. The Borough could use additional equipment to help respond the civil unrest events.	Civil Unrest	Medium	Allenhurst PD	DHS	$150,000	2 year	New	
2-10	Lake Drive Improvements Project	Allenhurst was awarded a $400,000 grant from the 2024 Monmouth County Municipal Open Space Grant for improvement along Lake Drive (between Allen Ave. and Corlies Ave.). The Borough would like to expand these improvements to the south towards the old water tower to prevent future development from flooding in this area.	Flood, Wave Action, Nor'easter, Hurricane and Tropical Storm, Storm Surge	High		HMA, Monmouth County Municipal Open Space Grant	$400,000	2 years	New	The Borough will create a natural living shoreline to address storm hazard