26 – LITTLE SILVER BOROUGH

PLANNING TEAM AND PARTICIPATION

Name	Title	Participation
Peter Giblin	**OEM Coordinator**	**Point of Contact, Municipal Workshop #2**
Scott Lorenson	Deputy OEM Coordinator	Point of Contact, Municipal Workshop #1

COMMUNITY PROFILE

Overview

Located on the banks of the Shrewsbury River, the Borough of Little Silver has a land area of 2.8 square miles. The small commercial district along Prospect Avenue consists of cafes, restaurants, shops, and the municipal library. The Little Silver Train Station, which is on the National Register of Historic Places, was designed by the famous 19th century American architect Henry Hobson Richardson and is served by the North Jersey Coast Rail Line. County Route 520 traverses the borough.

Since 2014 the Borough has included a Sustainability Element in its Master Plan. Little Silver has an active Sustainable Jersey Green Team and now has a Parent Teacher Organization Green Team, comprised of teachers, parents, and administrators, to increase awareness about making schools more environmentally sustainable.

Land Use, Development, & Growth

Little Silver 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 74 percent of its total area, and water and wetlands together making up 24 percent. Although since 2015, the Borough's barren and forested land declined by 2 and 3 acres respectively while its developed land grew by 6 acres, its overall land use composition remained largely the same.

Land Use Type	Total Acres (2015)	Total Acres (2020)	Percent Change
Agriculture	15.6	15.6	>0%
Barren Land	4.6	2.3	-50%
Forest	31.8	29.0	-9%
Urban	1493.6	1499.8	>0%
Water	303.6	303.5	>0%
Wetlands	186.8	185.8	-1%

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

Recent Major Development and Infrastructure from 2020 to Present

None.

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

None.

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).

Little Silver Borough's total population is estimated to be 6,104. Of this population, an estimated 6.2% is under age 5, and 17.9% is over age 65. The Borough experienced a moderate population growth of an estimated 3.16% in the periods between ACS surveys in 2013-2017 and 2018-2022. With an aging population making up nearly eighteen percent of their total community, Little Silver 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 Little Silver which have been identified by CDRZ, CEJST, or OBC designation criteria.

Demographics Summary	
Total Population *(2018-2022 ACS 5-year Estimates)*	6,104
Population Change since 2017	3.2%
Percent of Population Age < 5	6.2%
Percent of Population > 65	17.9%

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

Hazard Ranking Explanation

Coastal erosion remains a moderate concern due to the riverfront. Wave action, previously not applicable, now poses a medium level of concern due to the Shrewsbury River, which impacts two peninsulas. Additionally, the increased wave action exacerbates the potential for property damage and navigational challenges in these areas.

Significant Hazard Events Since Last Plan Update

Several areas are prone to tidal or storm flooding, with One Seven Bridges Road being the highest risk location. Water enters through catch basins and floods the roadway. The area around 557 Seven Bridges Road experiences flooding 30 to 40 times per year. While there is minimal to no property damage, the frequent flooding can create significant navigational challenges.

Climate Change Impacts on Extent and Magnitude of Hazards

Climate change is expected to significantly impact the risks and hazards faced by Little Silver Borough, particularly in terms of the extent and magnitude of these threats. As global temperatures continue to rise, the frequency and intensity of extreme weather events such as hurricanes, tropical storms, and nor'easters are likely to increase. This will exacerbate existing vulnerabilities, especially in flood-prone areas like the eastern end of the borough adjacent to the Shrewsbury River. The increased wave action and storm surges will pose greater risks to property and infrastructure, leading to more frequent and severe flooding events. Additionally, the borough's aging population, which makes up nearly eighteen percent of the community, may face heightened challenges in terms of mobility, resource access, and social support during and after such disasters.

Climate change will likely lead to more extreme temperatures, prolonged droughts, and increased coastal erosion, further stressing the borough's natural and built environments. The rising sea levels and more intense storm surges will not only threaten the structural integrity of critical facilities but also disrupt essential services and community lifelines. The borough's proactive measures, such as the proposed installation of Living Breakwaters and the elevation of flood-prone infrastructure, are crucial steps towards mitigating these risks.

RISK ASSESSMENT

National Flood Insurance Program (NFIP) statistics

Little Silver Borough	
Number of Policies In-Force:	249
Total Losses:	390
Total Payments:	$33,291,261.26
Number of RL Properties:	21
Number of Mitigated RL Properties:	0
RL – Total Losses:	55
RL – Total Paid:	$4,998,830.14
Number of SRL Properties:	2
Number of Mitigated SRL Properties:	0
SRL – Total Losses:	9
SRL – Total Paid:	$219,060.41

Source: FEMA Policy and Loss Data, August 2024

Vulnerability of the Built Environment

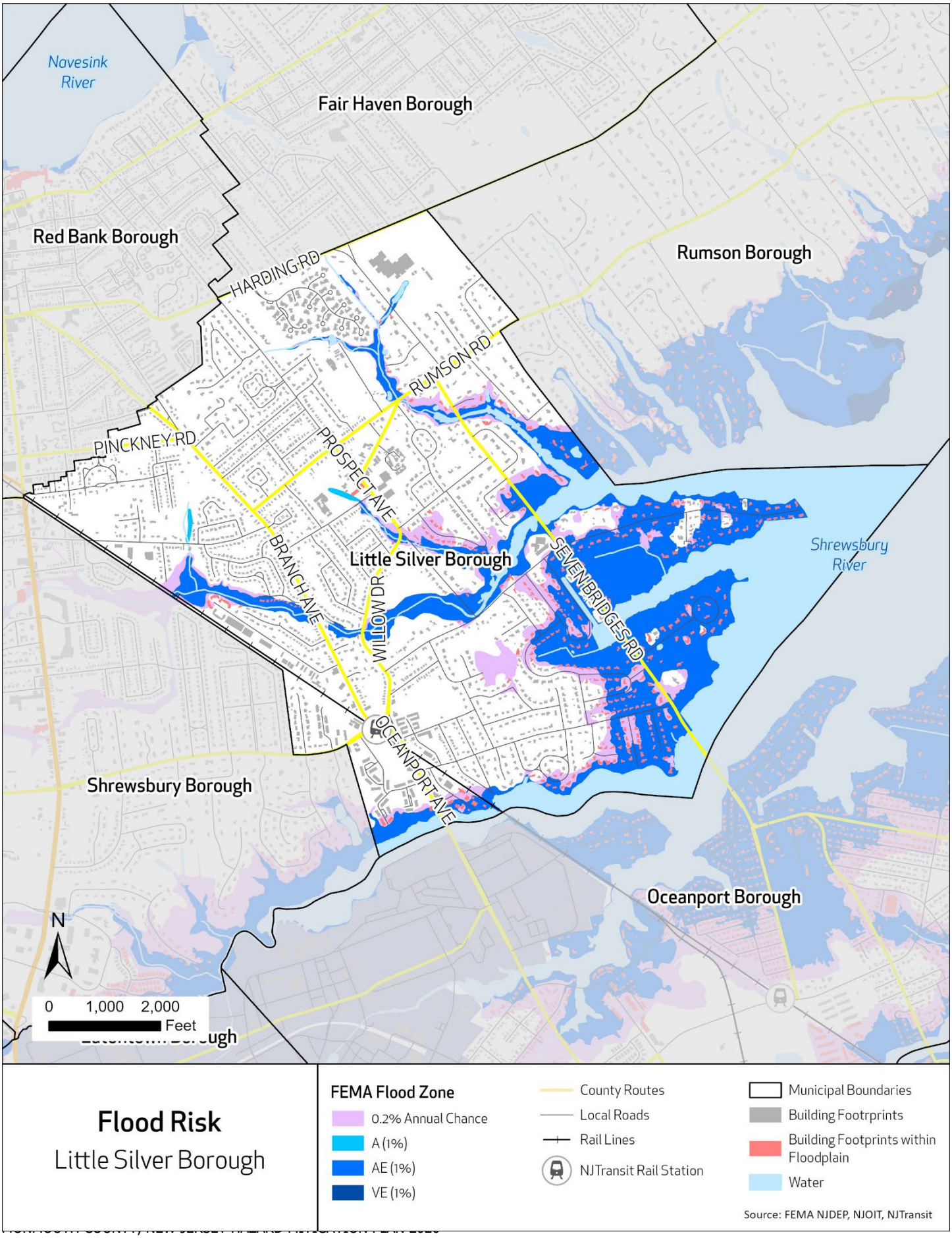
The Special Flood Hazard Area (SFHA) in the Borough of Little Silver is primarily in the eastern end of the borough adjacent to the Shrewsbury River, as well as its various smaller tributaries which pass through town. Approximately 28.2 percent of the total area of Little Silver lies within the 1% annual chance flood zone as defined by FEMA. An additional 5.3 percent of the area of the municipality is in the 0.2% annual chance flood zone.

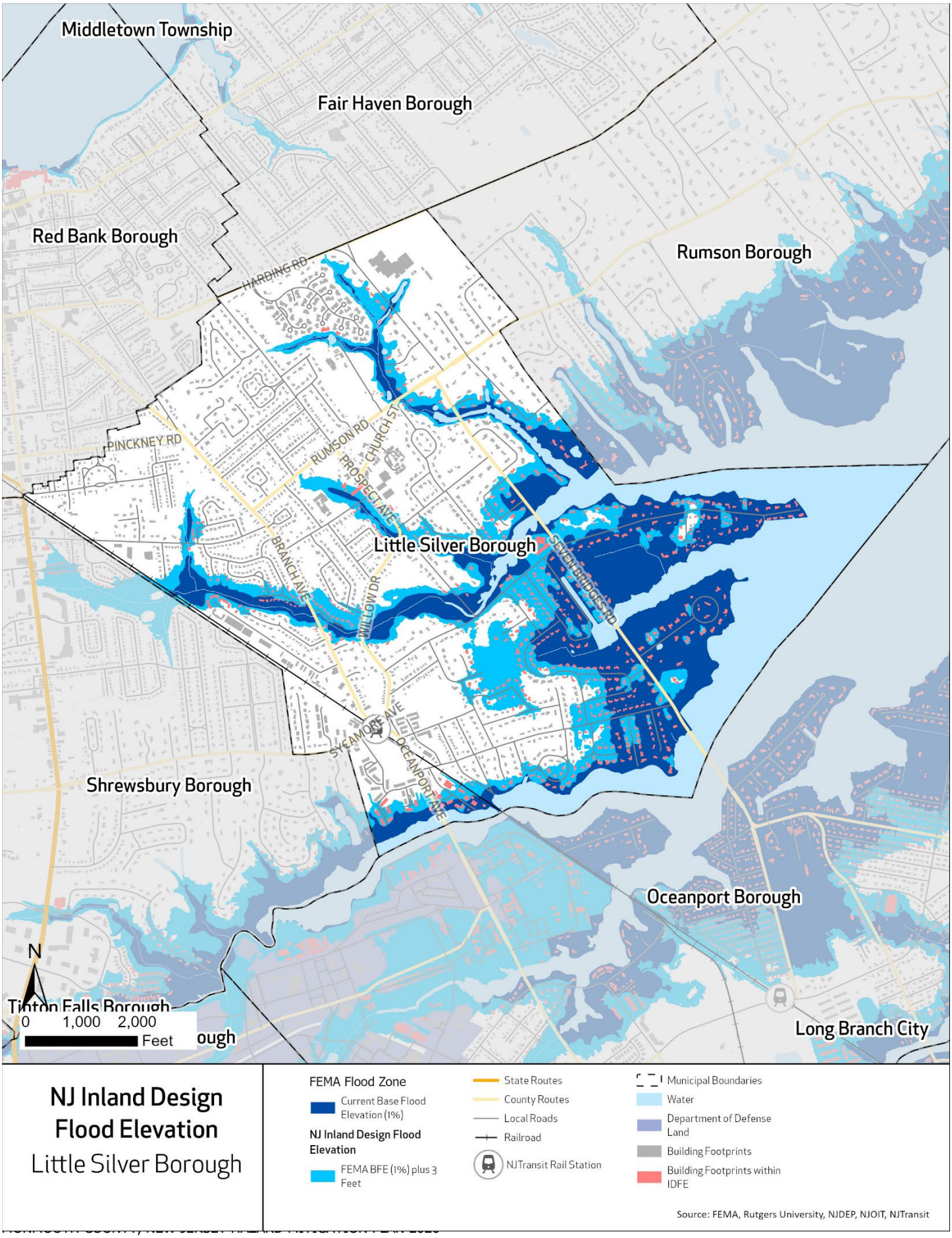
About 83.6 percent of Little Silver is considered developed. Of the developed parcels of the town, 17.4 percent fall within the 1% annual chance flood zone and 4.5 percent are within the 0.2% annual chance flood zone. This illustrates that development in the municipality has generally occurred in areas that are less prone to flooding.

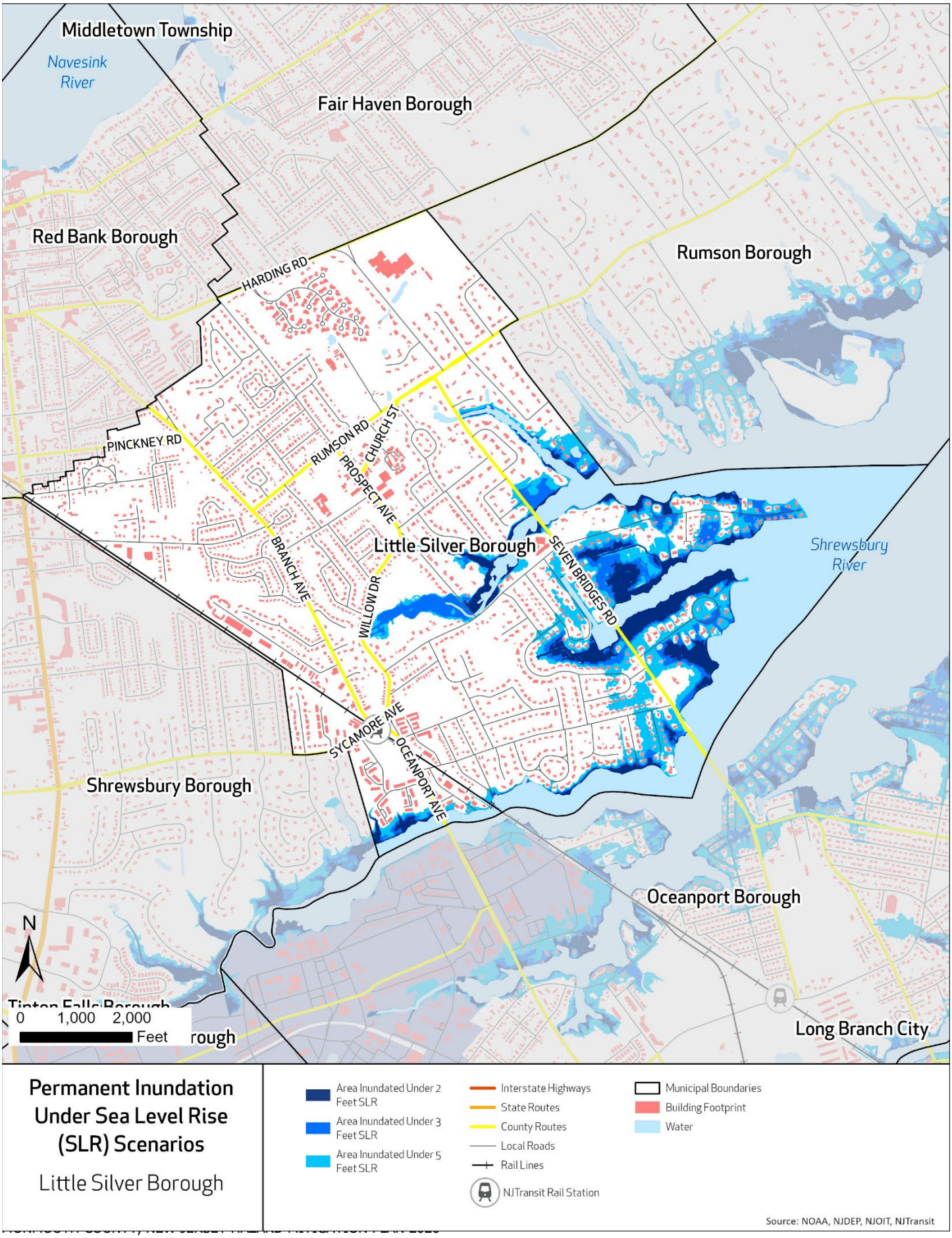
	Percentage in the 1% Floodplain	Percentage in the 0.2% Floodplain	5 feet of Sea Level Rise
Developed Parcels	17.4%	4.5%	14.4%%
Exposed Land Area	28.2%	5.2%	12.2%

During the planning process, Little Silver 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 10 total facilities. Of these facilities, one is within the floodplain.

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


Navesink River
Fair Haven Borough
Red Bank Borough
Rumson Borough
HARDING RD
RUMSON RD
PINCKNEY RD
PROSPECT AVE
BRANCH AVE
WILLOW DR
Little Silver Borough
SEVENBRIDGES RD
Shrewsbury River
OCEANPORT AVE
Shrewsbury Borough
Oceanport Borough
N
0 1,000 2,000
Feet
Flood Risk
Little Silver Borough
FEMA Flood Zone
0.2% Annual Chance
A (1%)
AE (1%)
VE (1%)
County Routes
Local Roads
Rail Lines
NJTransit Rail Station
Municipal Boundaries
Building Footprints
Building Footprints within Floodplain
Water
Source: FEMA NJDEP, NJOIT, NJTransit


Middletown Township
Fair Haven Borough
Red Bank Borough
Rumson Borough
Little Silver Borough
Shrewsbury Borough
Oceanport Borough
Long Branch City
HARDING RD
PINCKNEY RD
RUMSON RD
CHURCH ST
PROSPECT AVE
BRANCH AVE
WILLOW DR
SEVENBRIDGES RD
SYCAMORE AVE
OCEANPORT AVE
N
0 1,000 2,000
Feet
NJ Inland Design Flood Elevation
Little Silver 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
Department of Defense Land
Building Footprints
Building Footprints within IDFE
Source: FEMA, Rutgers University, NJDEP, NJOIT, NJTransit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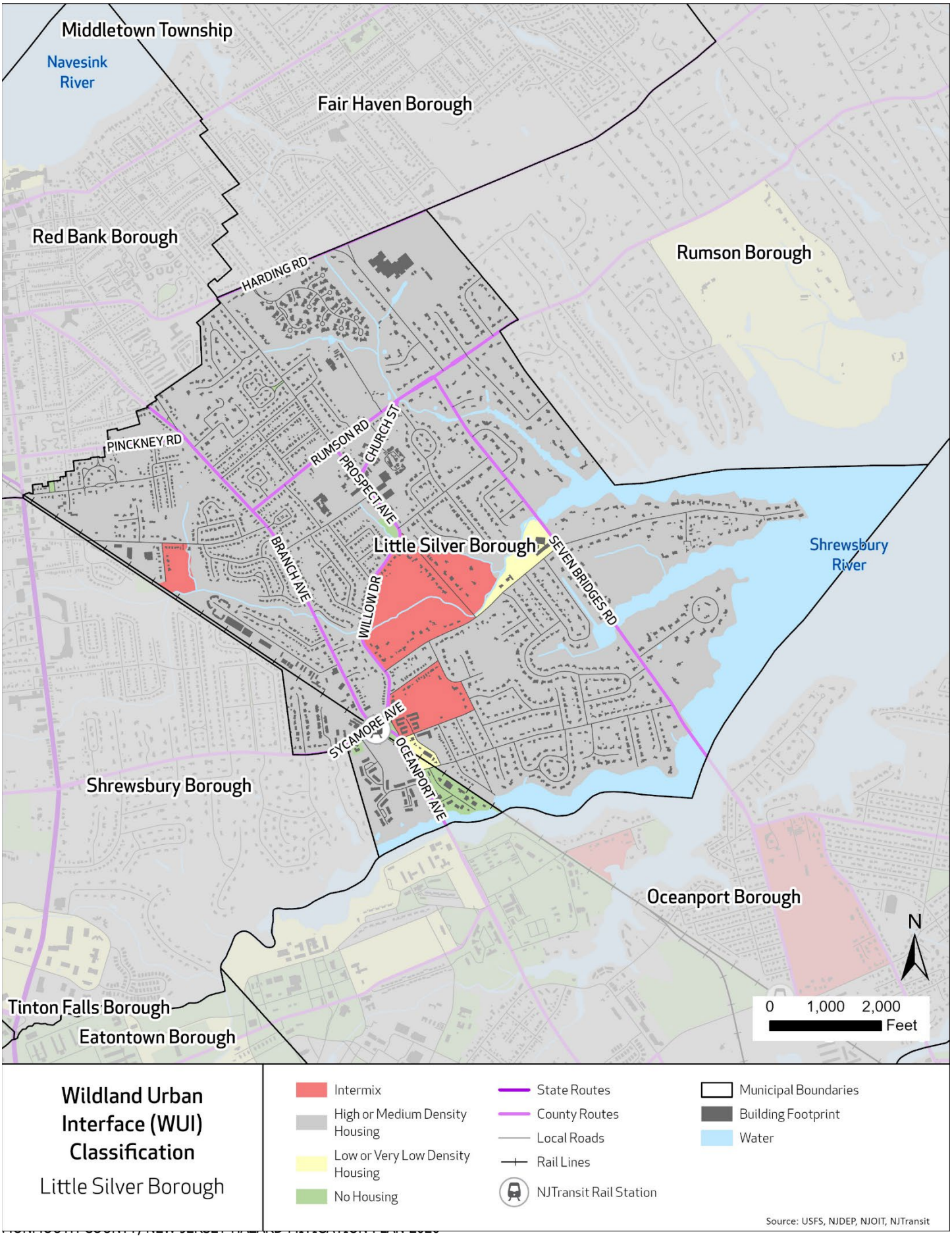
Shrewsbury River
SYCAMORE AVE
OCEANPORT AVE
Shrewsbury Borough
Oceanport Borough
Long Branch City
N
0 1,000 2,000
Feet
Permanent Inundation Under Sea Level Rise (SLR) Scenarios
Little Silver Borough
Area Inundated Under 2 Feet SLR
Area Inundated Under 3 Feet SLR
Area Inundated Under 5 Feet SLR
Interstate Highways
State Routes
County Routes
Local Roads
Rail Lines
NJTransit Rail Station
Municipal Boundaries
Building Footprint
Water
Source: NOAA, NJDEP, NJOIT, NJTransit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Shrewsbury River
SYCAMORE AVE
OCEANPORT AVE
Shrewsbury Borough
Oceanport Borough
Tinton Falls Borough
Eatontown Borough
N
0 1,000 2,000
Feet
Wildland Urban Interface (WUI) Classification
Little Silver Borough
Intermix
High or Medium Density Housing
Low or Very Low 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

Little Silver 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	
Capital Improvement Plan	X			Capital money has been allocated to purchase new generators / radio equipment / security equipment for our Borough buildings.
Local Emergency Operations Plan/Continuity of Operations Plan	X		2023	strategizes deployment of resources, communications, and ICS
Floodplain Development Ordinance	X			designing and building structures within a floodplain in a way that actively reduces the risk of flood damage
Floodplain Management Plan		X		
Stormwater Management Ordinance		X		
Stormwater Management Plan		X		actively reduce flooding, particularly by managing stormwater runoff effectively, thus minimizing potential damage to communities and infrastructure.
Watershed Management Plan	X			Managing water flow, land use, and vegetation to minimize the impacts of flooding
Sheltering Plan	X		2023	We have this outlined in our Municipal EOP
Evacuation Plan	X		2023	We have this outlined in our Municipal EOP
Substantial Damage/Improved Structures Response		X		
Repetitive Loss Plan		X		
Disaster Debris Management Plan	X		2023	Effectively manage debris generated after a natural disaster
Tracking elevation certificates and/or Letter of Map Change		X		
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		2023	We have this outlined in our EOP as our sheltering plan, evacuation plan, and local EOP encompasses hazard mitigation Little Silver PPE Stockpiling Mitigation Plan for Pandemics
Other ordinance and regulation that mitigate the impacts of natural hazards	X			In 2024, the borough adopted a Complete Streets Policy, aiming to provide “safe, convenient, equitable, healthy, and environmentally and economically beneficial transportation for all users."

Administrative and Technical Capabilities

Little Silver Borough has the following Administrative and Technical capabilities:

Position	Yes	No	Explanation
Floodplain Administrator	X		OEM
Grant Writer		X	
Staff trained to support mitigation	X		OEM
Existing mutual aid or technical assistance agreements to support hazard mitigation projects	X		
Non-governmental organizations/other partners that work with the municipality on mitigation projects	X		

Position	Yes	No	Explanation
Organizations that work with socially vulnerable or underserved populations		X	

Education and Outreach Capabilities

Little Silver Borough has the following Education and Outreach capabilities:

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

Financial Capabilities

Within the last five years, Little Silver 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 the Last Plan Update

The Borough of Little Silver is a sustainable community that actively works to fuse scientific evidence with proactive policy and aims to improve Little Silver's resilience to damage from natural disasters and adapt to future climate concerns. The Borough is in discussions with Installing a series of Living Breakwaters that would be positioned in the Shrewsbury River, east of the Gooseneck Bridge on both the Oceanport and Little Silver side to assist with flood mitigation. Moving forward, Little Silver will remain forward thinking and prioritize home, roadway and critical infrastructure elevation, 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	Pri-ority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
26-1	Improve Communications between Police Officers	New internet provider (ISP) for police/borough communications to enable responders to communicate with each other and community members.	All Hazards	N/A	N/A	Municipal budget	N/A	N/A	Completed	The infrastructure for Police, Fire, and EMS was upgraded, and they are on the state system. The cost was $1,300,000 and came from the municipal budget.
26-2	Purchase Tree Trimming Equipment	Purchase new tree-trimming equipment, such as a tree shredder.	Flood, Extreme Wind, Nor'easter, Hurricane and Tropical Storm, Wildfire	N/A	N/A	Municipal budget	N/A	N/A	Withdrawn	This action has been withdrawn; it is being completed by a private entity.
26-3	Create a Plan to Manage Development in Landslide Hazard Areas	Create a plan to implement reinforcement measures in high-risk areas.	Landslide	N/A	N/A	Municipal budget	N/A	N/A	Withdrawn	This action has been withdrawn; the Borough has not been experiencing landslides.

New and Ongoing Actions

Action	Name	Description	Hazards Addressed	Pri-ority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
26-4	Improve Stormwater Runoff and Drainage by Upgrading Infrastructure and Clean Streams	The Borough improves their stormwater system every year with their yearly roadway program, updating drainage inlets to eco-grates. Develop mitigation steps to reduce damage and losses due to flooding	Flood, Nor'easter, Hurricane and Tropical Storm	High	Borough Engineer	Municipal budget	$50k	1 year	Ongoing	Control of stormwater runoff and efficient drainage has been needed on county roads. The County cleans these through ongoing maintenance.

Action	Name	Description	Hazards Addressed	Pri-ority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
		through control of stormwater runoff and more efficient drainage and discharge to three major streams. Stream cleaning reduces sediment/debris within watershed providing better overall volume flaw throughout the Borough.								
26-5	Acquire, elevate, or relocate buildings and infrastructure in flood prone areas, with a focus on Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties	The Borough is proposing mitigation through house elevation and acquisition for homes within the 100-year flood zone, specifically RL/SRL properties.	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	High	Borough Engineer	FEMA HMA	$24.9M	5 + years	Ongoing	No elevations were completed since the last plan update, and one property was acquired.
26-6	Repair Outfall Drainage Pipe and Install Tide Flex Valve	The Borough is proposing mitigation of each drainage outfall pipe located within the Borough. The installation of a tide flex valve is proposed to migrate storm surge within the Borough existing storm drain system to help protect during a flooding event.	Storm Surge	High	Borough - Engineer	FEMA HMA	$200k	1 year	Ongoing	This remains a high priority, however we have no progress on this yet.
26-7	Install a Regional Dyke Structure along the Sandy Hook Inlet	The Army Corp of Engineers is proposing a regional dyke structure along the Sandy Hook Inlet into the Navesink and Shrewsbury River. The installation of a dyke structure is proposed to mitigate storm surge within the Borough existing storm drain system to	Storm Surge	High	Army Corp of Engineers	FEMA HMA, Army Corp of Engineers	$30M	1 year	Ongoing	USACE has dredged Shrewsbury River (Branchport Creek).

Action	Name	Description	Hazards Addressed	Pri-ority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
26-8	Purchase and Install Generators for Critical Facilities	Purchase and install a generator at Red Bank Regional High School, DPW Annex, Municipal Building, Point Rd. School, Fire/EMS, and the pump house at Fairview Ave.	All Hazards	Low	Borough OEM	FEMA HMA, Municipal budget	$200k	2 years	Ongoing	The Municipal Building and Fire/EMA obtained a new generator. The cost for both was $60,000 and came from the municipal budget.
26-9	Target Harden Critical Facilities by Installing Surveillance Cameras, Panic Buttons, and/or Bulletproof Glass	Fortify the Woman's Club; enhance camera system at DPW/Verizon tower, train station platform, sewer pumps; and harden the municipal building through bulletproof glass in entry, portable metal detectors (est. $7,000), a camera system, panic buttons, and ha	Terrorism	Medium	Borough Administration	Homeland Security grants	$250k	2 years	Ongoing	The camera systems and security in the building at Borough Hall has been updated via the municipal budget. We are in the process of updating security cameras at our Train Station.
26-10	Elevate Seven Bridges Rd. Above the Flood Zone	Coordinate with the County to elevate Seven Bridges Rd. above the Flood Zone	Flood, Wave Action, Nor'easter, Hurricane and Tropical Storm, Storm Surge	High	Monmouth County and Borough Engineering	FEMA HMA, County funding, municipal funding	$10M	2 years	Ongoing	The priority level remains high, but there has not been progress.
26-11	Install Living Breakwaters	Install a series of Living Breakwaters that would be positioned in the Shrewsbury River, east of the Gooseneck Bridge on both the Oceanport and Little Silver side.	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge, Wave Action	High	Oceanport, Rumson, Monmouth Beach, Long Branch	FEMA HMA	See Notes	2 years	New	Rip-Rap and Armor Stone: $35.9M Oyster Rings: $5.4M ExoForms: $3M Oyster Castles: $1.5M
26-12	Implement Actions from the Little Silver PPE Stockpiling Mitigation Plan	The Little Silver PPE Stockpiling Mitigation Plan details actions to reduce the risk of pandemic.	Pandemic	High	Little Silver	Monmouth County Health Department,	TBD	3 years	New	