

# 53 – WEST LONG BRANCH BOROUGH

## PLANNING TEAM AND PARTICIPATION

Name	Title	Participation
Jason Gonter	Borough Administrator, OEM	Point of Contact, Municipal Meeting, 11/27/2024
Steven Cioffi	OEM Coordinator	Municipal Meeting, 11/27/2024
Julie Nastasi	Borough Engineer	Municipal Meeting, 11/27/2024
Anthony Valenti	DPW Director	Review HMP 2/2025

## COMMUNITY PROFILE

### Overview

The Borough of West Long Branch spans 2.83 square miles and is home to the historic Monmouth University campus. West Long Branch is a primarily residential community with commercial corridors at the intersection of Monmouth Road and Route 71 and at the north end of the Borough along Route 36.

Route 36 is the major byway through West Long Branch and Route 71 also crosses portions of the Borough. NJ Transit offers a discount pass for Monmouth University students and has bus stops for NJ Transit bus 831 on Route 71 adjacent to campus. The nearest NJ Transit railroad station to the university.

### Land Use, Development, & Growth

In West Long Branch, 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 92 percent of the town's total area, while wetlands, and barren land respectively make up 5 percent and 2 percent of its land base. From 2015 to 2020, there was a marginal increase of 61 acres in the Township's urban or developed land, which was accompanied by a decrease of 36.5 acres in forested land and 18 acres in wetlands. Between 2015 and 2020, the Borough experienced marginal land use changes; during this period, its barren land decreased by 13 acres, while its developed land grew by 14 acres.

Land Use Type	Total Acres (2015)	Total Acres (2020)	Percent Change
Agriculture	16.7	16.4	-2%
Barren Land	12.9	0.0	-100%
Forest	30.2	30.2	>0%
Urban	1681.0	1695.3	1%
Water	22.8	22.8	>0%
Wetlands	87.1	85.9	-1%

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

### Recent Major Development and Infrastructure from 2020 to Present

An age restricted 55+ community was constructed that went in at 310 Norwood Ave. The project, on a 6.4-acre lot, consists of 40+ 3 bedroom townhomes, 10 garden apartments, walkways, paved roads, and stormwater management. As of February 2025 the project is 85% complete.

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

There are approved plans for a 120 Townhouse development to be constructed adjacent to the ShopRite of West Long Branch. The project includes the townhouses across 23 buildings, roads, walkways, recreation improvements and stormwater management. The Turtle Mill Brook runs behind this property, but it does not experience a lot of flooding.

### 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).

The Borough of West Long Branch has an estimated population of 8,547, of which an estimated 7.5% is under age 5 and 16.6% is over age 65. West Long Branch saw an estimated growth in population of 7.6% over the periods between 2013-2017 and 2018-2022 ACS surveys. Along with knowledge of proposed future development, a recent population growth of close to eight percent highlights potential local vulnerabilities related to shifts in the built and social environments.

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

Demographics Summary	
<b>Total Population (2018-2022 ACS 5-year Estimates)</b>	8,547
<b>Population Change since 2017</b>	7.6%
<b>Percent of Population Age &lt; 5</b>	7.5%
<b>Percent of Population &gt; 65</b>	16.6%

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

### Hazard Ranking Explanation

- **Extreme wind:** There have been no significant incidents, apart from a few fallen trees.
- **Tornadoes:** While not frequent or consistent, tornadoes have a high severity when they do occur.
- **Power failure:** The ranking has been moved to high due to consistent outages in the Borough. According to JCP&L, the causes are often 'Unknown or Animal,' with squirrels being the main culprits.

## Significant Hazard Events Since Last Plan Update

Since 2021, the community has experienced several heavy rainfall events. Whenever it rained consistently for a few hours, resulting in more than a few inches of rain, Turtle Mill Brook overflowed, causing flooding on Eatontown Boulevard and Broadway. Similarly, Whale Pond Brook overflowed, leading to flooding on Monmouth Road and Whale Pond Road. Two properties near Cubero Ct. and Monmouth Road also experienced flooding. Parts of Monmouth University, particularly near Larchwood Ave and Palmer Ave, along with the parking lot of the Corporate Center at 2 Crescent Place, were affected by flooding as well. Despite the large wooded area near Michael Thorne Park, wildfires have not occurred there, as the area is used as a walking path and is regularly maintained by the Roads department.

## 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 West Long Branch. As global temperatures rise, the frequency and intensity of extreme weather events such as heavy rainfall, hurricanes, and heatwaves are likely to increase. This will exacerbate flooding issues, particularly in areas adjacent to Turtle Mill Brook and Whale Pond Brook, which have already experienced significant flooding events. The increased rainfall and storm surges will put additional strain on the Borough's infrastructure, leading to more frequent and severe flooding of roads, properties, and critical facilities. The Borough's high percentage of developed land, combined with its proximity to water bodies, makes it particularly vulnerable to these climate-induced hazards.

Moreover, the rising temperatures and changing precipitation patterns will also affect the Borough's ecosystem and increase the risk of droughts and wildfires. Although wildfires have not been a significant issue in the past, the changing climate could alter this trend, especially in wooded areas like Michael Thorne Park. Additionally, the increased frequency of power failures, often caused by extreme weather and animal interference, will further complicate the Borough's ability to respond to and recover from these events. Overall, climate change will amplify the extent and magnitude of existing hazards, necessitating proactive measures and robust mitigation strategies to protect the community and its infrastructure.

## RISK ASSESSMENT

### National Flood Insurance Program (NFIP) statistics

West Long Branch Borough	
Initial FIRM Date	1/16/81
Effective FIRM Date	9/25/2009
Number of Policies In-Force:	20
Total Losses:	16
Total Payments:	\$48,041.45
Number of RL Properties:	1
Number of Mitigated RL Properties:	0
RL – Total Losses:	2
RL – Total Paid:	\$7,772.84
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

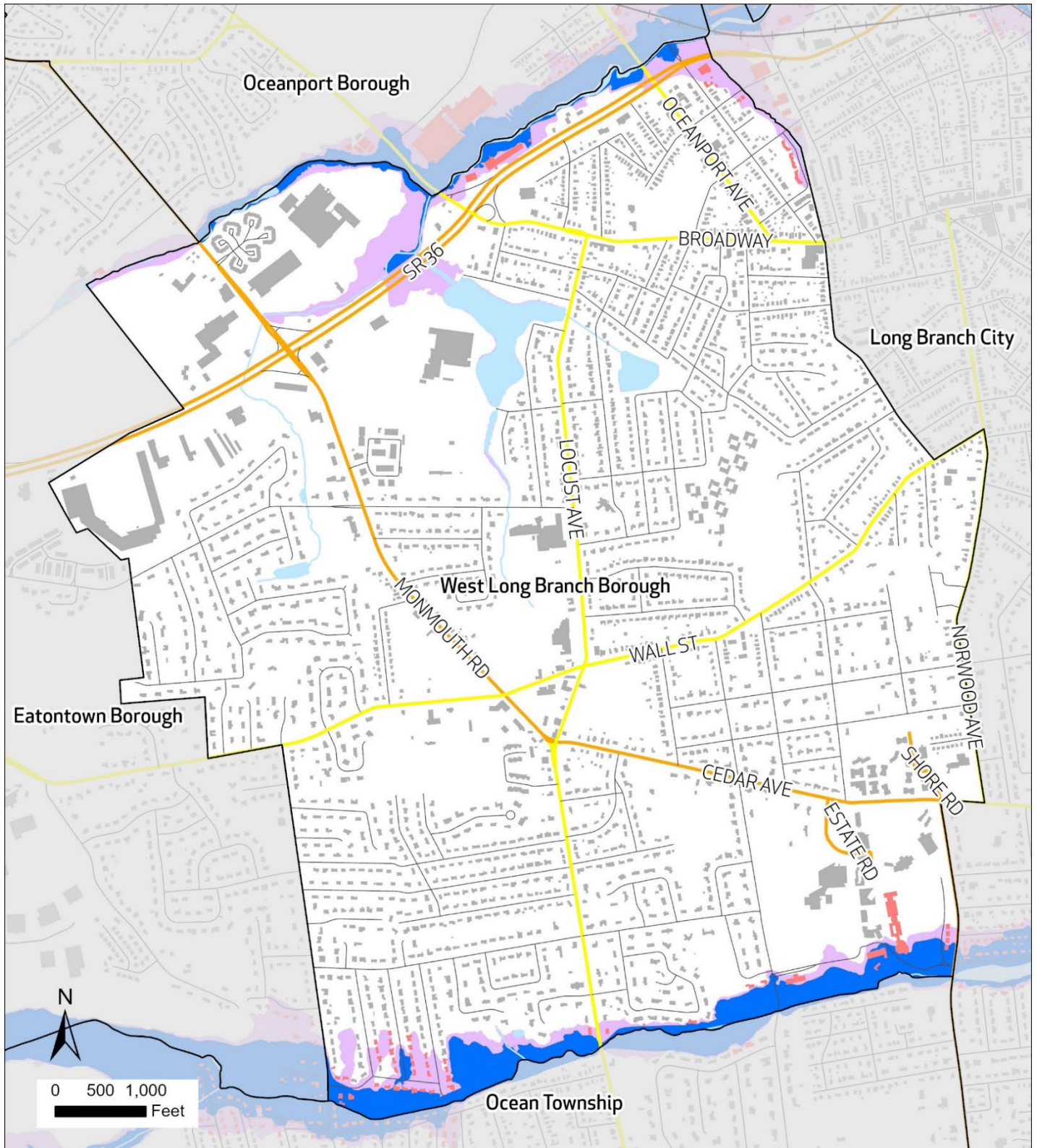
The Special Flood Hazard Area (SFHA) in the Borough of West Long Branch is primarily located adjacent to Turtle Mill and Whale Pond Brooks. Approximately 2.9 percent of the total area of West Long Branch lies within the 1% annual chance flood zone as defined by FEMA. An additional 4.3 percent of the area of the municipality is in the 0.2% annual chance flood zone.

About 91.7 percent of West Long Branch is considered developed. Of the developed parcels of the town, 1.9 percent fall within the 1% annual chance flood zone and 2.5 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
<b>Developed Parcels</b>	1.9%	2.5%	4.0%
<b>Exposed Land Area</b>	2.9%	4.3%	0.2%

During the planning process, West Long Branch 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 18 total facilities. Of these facilities, two are located within the floodplain. These facilities are categorized as Water Systems lifelines. Examples of Water Systems lifelines includes dams and pump stations.

Community Lifeline Type	Number in the 1% Floodplain	Number in the 0.2% Floodplain	Number within 5 feet of Sea Level Rise
<b>Water Systems</b>	1	1	-



## Flood Risk

### West Long Branch Borough

#### FEMA Flood Zone

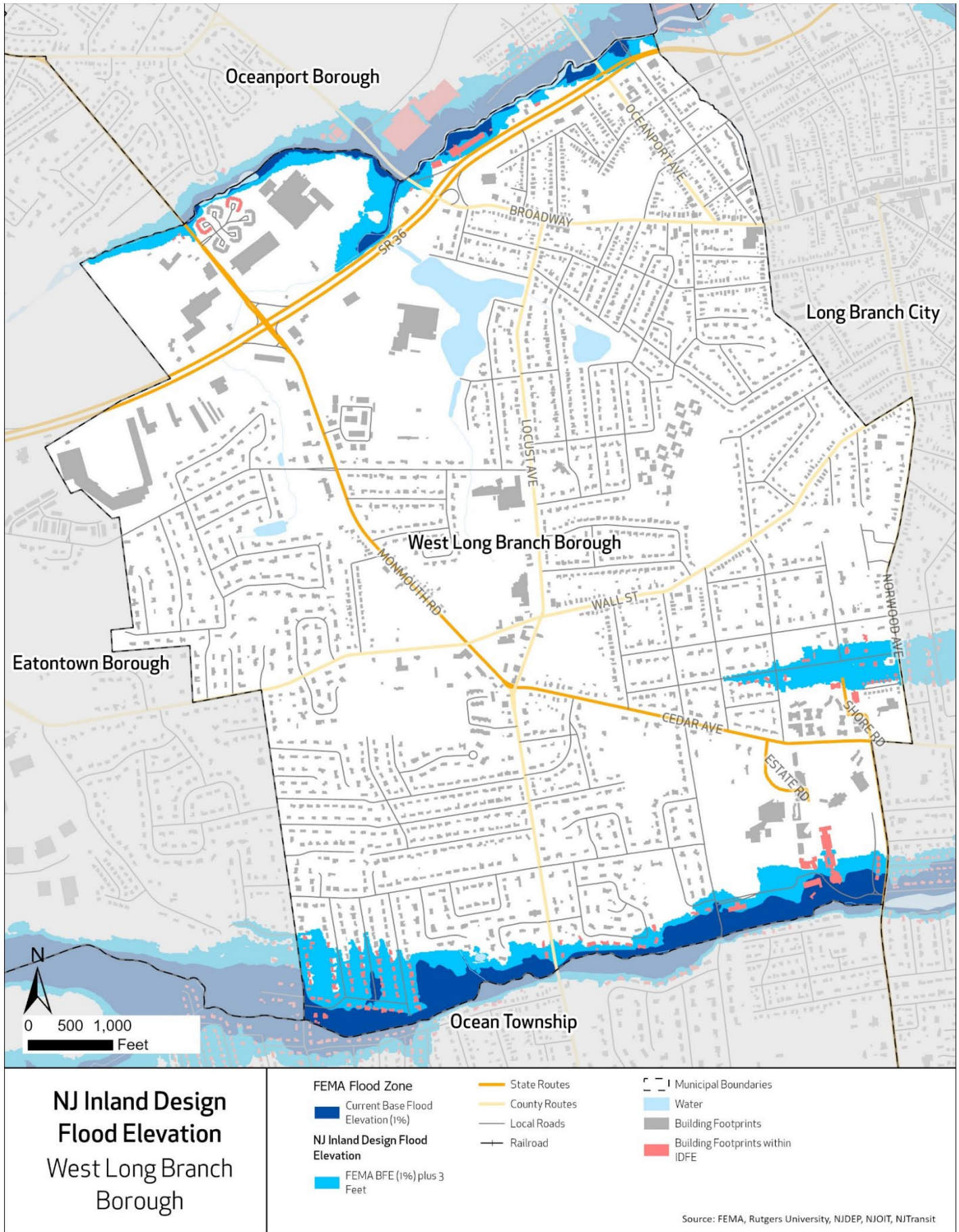
- 0.2% Annual Chance
- AE (1%)

- State Routes
- County Routes
- Local Roads

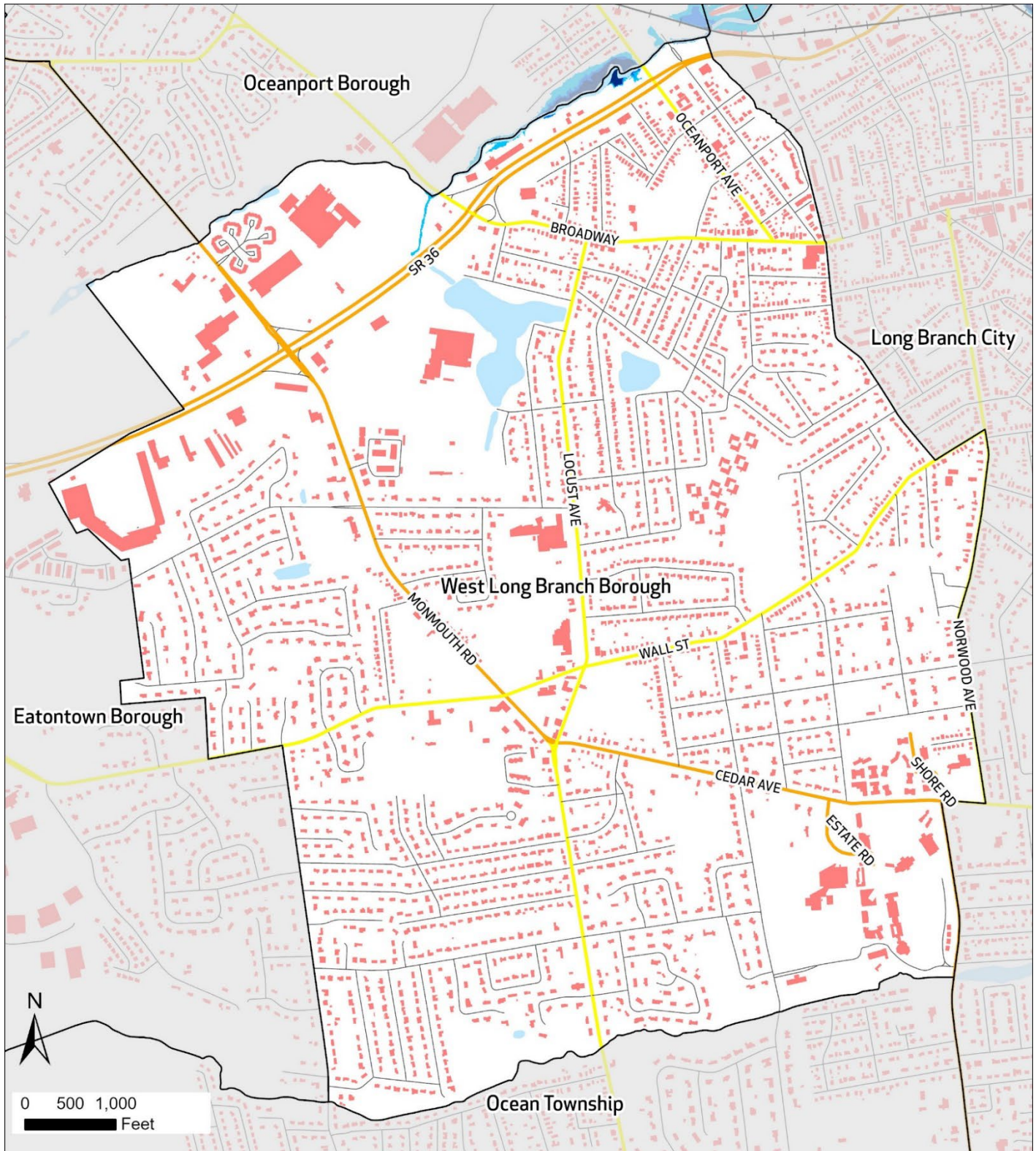
- Municipal Boundaries
- Building Footprints
- Building Footprints within Floodplain
- Water

Source: FEMA NJDEP, NJOIT, NJTransit









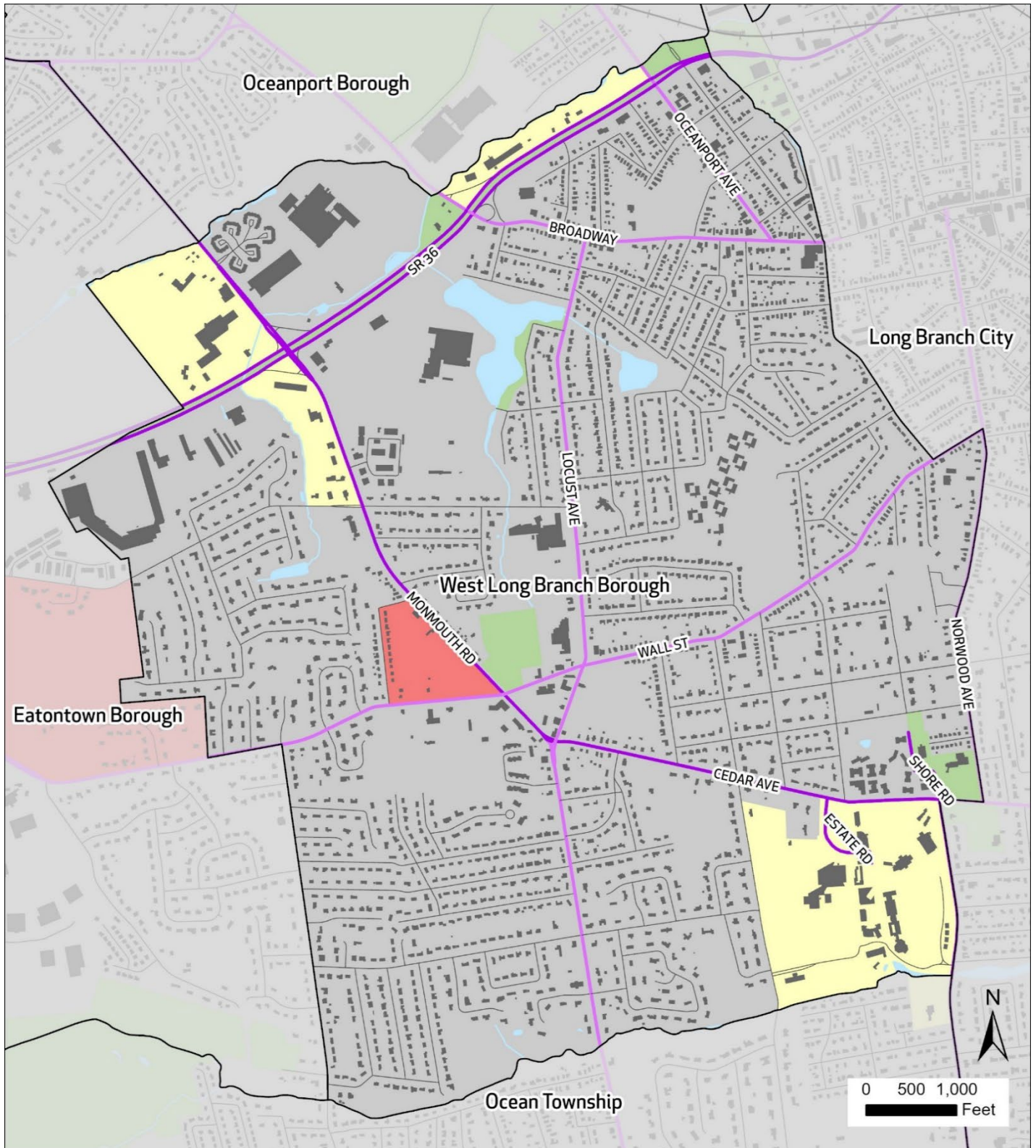
**Permanent Inundation Under Sea Level Rise (SLR) Scenarios**

West Long Branch Borough

<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #000080; margin-right: 5px;"></span> Area Inundated Under 2 Feet SLR</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #0000FF; margin-right: 5px;"></span> Area Inundated Under 3 Feet SLR</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #00FFFF; margin-right: 5px;"></span> Area Inundated Under 5 Feet SLR</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; border-bottom: 2px solid #8B4513; margin-right: 5px;"></span> Interstate Highways</li> <li><span style="display: inline-block; width: 15px; border-bottom: 2px solid #FFA500; margin-right: 5px;"></span> State Routes</li> <li><span style="display: inline-block; width: 15px; border-bottom: 2px solid #FFFF00; margin-right: 5px;"></span> County Routes</li> <li><span style="display: inline-block; width: 15px; border-bottom: 1px solid #000000; margin-right: 5px;"></span> Local Roads</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px solid #000000; margin-right: 5px;"></span> Municipal Boundaries</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #FF0000; margin-right: 5px;"></span> Building Footprint</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #ADD8E6; margin-right: 5px;"></span> Water</li> </ul>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Source: NOAA, NJDEP, NJOIT, NJTransit





# **Wildland Urban Interface (WUI) Classification**

West Long Branch 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, NJOT, NJTransit



## CAPABILITY ASSESSMENT

### Planning & Regulatory Capabilities

West Long Branch 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		2024	
Capital Improvement Plan	X			Updates in individual departments
Local Emergency Operations Plan/Continuity of Operations Plan	X		2021	Increases the ability to take proactive actions to reduce the potential damage caused by natural disasters, including the resources, expertise, and planning processes necessary to implement mitigation strategies.
Floodplain Development Ordinance	X		2024	Increases the ability to protect residents and property from natural disaster
Floodplain Management Plan	X		2022	Increases the ability to protect residents and property from natural disaster
Stormwater Management Ordinance	X			Increases the ability to protect residents and property from natural disaster
Stormwater Management Plan	X		2024	Increases the ability to protect residents and property from natural disaster
Watershed Management Plan		X		
Sheltering Plan		X		Increases the ability to protect residents during disaster events
Evacuation Plan	X			*Via County Plan
Substantial Damage/Improved Structures Response		X		
Repetitive Loss Plan		X		
Disaster Debris Management Plan	X			Increases the ability to protect residents and property resulting from natural disaster
Tracking elevation certificates and/or Letter of Map Change	X			Increases the ability to protect residents and property from natural disaster
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		
Other ordinance and regulation that mitigate the impacts of natural hazards		X		

### Administrative and Technical Capabilities

West Long Branch Borough has the following Administrative and Technical capabilities:

Position	Yes	No	Explanation
Floodplain Administrator	X		Construction official
Grant Writer	X		Consultant
Staff trained to support mitigation	X		Police
Existing mutual aid or technical assistance agreements to support hazard mitigation projects	X		Adjacent Municipalities
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

West Long Branch Borough has the following Education and Outreach capabilities:

Education & Outreach Capability	Yes	No	Explanation
Communicate natural and human-based hazards to the public	X		Website, social media, "One", calls, emails, texts
StormReady	X		
Firewise USA		X	
Severe Weather Awareness Week	X		
Community Rating System (CRS)		X	

## Financial Capabilities

Within the last five years, West Long Branch 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:

- **Sustainable Jersey Participation Status:** Bronze



## MITIGATION STRATEGY

### Overview and Progress Since Last Plan Update

Since the last plan update, our mitigation strategy has prioritized updating communication efforts and methods to keep residents informed and prepared for all potentially hazardous events. Over the next five years, we will focus on investing time and resources for additional planning capabilities and management initiatives, and the advancement of artificial intelligence alternatives along with cybersecurity measures to protect critical systems. Our approach is to continually fortify against current vulnerabilities and proactively prepare for future risks.

### Completed or Removed Actions

Action	Name	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
Action 53-1	Purchase DPW Equipment for Stream Restoration	Improve or acquire better equipment for DPW to remove trees and clear the stream. With additional funding, manpower and equipment, DPW would be able to develop an efficient schedule for these stream cleanings.	Flooding, Lightning, Hurricane/ Tropical Storm	N/A	N/A	N/A	N/A	N/A	Withdrawn	The County has programs for this, buying equipment for West Long Branch would not be feasible.
53-2	Target Harden Critical Facilities by Installing Surveillance Cameras and Backup Servers	Harden the Municipal Building and DPW Yard with stronger security (cameras) and possibly relocate backup servers to a more secure location.	Terrorism	N/A	N/A	N/A	N/A	N/A	Completed	Upgrades to firewall have been completed. The Borough has requisitioned security cameras for our newly renovated DPW building (over \$7,000) as well as for Borough Hall (over \$14,000.00). In addition, we have purchased an additional server doubling our capacity. The police department is already equipped with an extensive security system.

### New and Ongoing Actions

Action	Name	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
53-3	Coordinate a Drainage Remediation Project for Whale Pond Brook	Coordinate a drainage remediation project with West Long Branch, Long Branch, Monmouth County properties, and Monmouth University.	Flood, Extreme Wind, Nor'easter, Hurricane and Tropical Storm	Medium	Borough Engineer	Borough Funding	\$125k	5 years	Ongoing	No action yet. Ocean Township has been removing trees from their side of the Brook (which is where the trees are falling) which has mitigated flooding.

Action	Name	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
53-4	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 and/or Acquisition of flood prone residential structures, with a focus on those in our community that are on FEMA's Repetitive Loss List.	Flood, Wave Action, Hurricane and Tropical Storm, Storm Surge, Winter Storm	High	Mayor and Council	FEMA HMA	TBD	5 years	Ongoing	Two RL properties are not yet elevated. Borough has not been in communication with property owners.
53-5	Create an Evacuation Plan and Purchase and Install a Generator for the Peter Cooper Village Senior Center	Create an evacuation plan and upgrade generator at Peter Cooper Village Senior Center.	All Hazards	High	Borough Administration	FEMA HMA, CDBG- DR	Staff time	2 years	Ongoing	Working with Peter Cooper. Complex has multiple pods of 8 – 10 apartments each of which needs a generator. Need funding for procuring multiple generators.
53-6	Install an Emergency Communications System Specific to West Long Branch	West Long Branch needs their own response system for emergency responders to properly communicate with each other. Right now, the Borough uses the County's system.	All Hazards	Medium	County, Borough	County budget, municipal budget	\$500K	2 year	Ongoing	An Emergency Operation Center has been set up on the 2 <sup>nd</sup> floor of the Police dept. premises. Lost a couple of dispatches recently. Borough is happy to take lead from county. County staff previously mentioned capacity issues during a heavy rainfall event.
53-7	Construct Flood Reduction Measures along Turtle Mill Brook and Whale Pond Brook	Construct minor structural project (e.g., floodwalls or small berms) along Turtle Mill Brook and Whale Pond Brook to protect Repetitive Loss Properties.	Flood, Lightening, Hurricane and Tropical Storm, Storm Surge	High	County, Borough	FEMA HMA	\$2M	2 years	Ongoing	Project involves coordination with several municipalities.
53-8	Clean the Turtle Mill Brook and Design a New Drainage System for the Brook	Develop a drainage remediation project servicing Turtle Mill Floodway as well as stream cleaning.	Flood, Hurricane and Tropical Storm	High	County, Borough	Municipal budget	\$2M	5 years	Ongoing	Project involves coordination with several municipalities.