

20 – HOLMDEL TOWNSHIP

PLANNING TEAM AND PARTICIPATION

Name	Title	Participation
Frank Allococo	Chief of Police	Primary Point of Contact, Municipal Workshop #1, and Municipal Workshop #2
Jay Delaney	Township Administrator	Municipal Workshop #1
Eric Hernando	OEM Coordinator	Assisted in reviewing appendix
Barbara Kovelesky	Purchasing Director Grant Manager	Assisted in reviewing appendix
Brian Nagle	Holmdel Director of Infrastructure	Assisted in reviewing appendix
Bob Yuro	T&M Associates Twp Engineers	Assisted in reviewing appendix

COMMUNITY PROFILE

Overview

The Township of Holmdel encompasses a total land area of 7.90 square miles. Holmdel has a variety of land uses including farms, suburban residential development, as well as large corporate campuses, highway commercial retail on State Route 35, and the PNC Bank Arts Center, a premier outdoor entertainment venue.

Established in 1857, the Township was a farming community. The construction of the iconic Bell Labs in the early 1960s (supporting research already taking place on the site) triggered a rapid boost in the Township's population, increasing 107 percent between 1960 and 1970. The Township is well known for its contributions to science and technology, being the birthplace of countless innovations made at Bell Labs, and the confirmation of the Big Bang Theory by the operators of the Holmdel Horn Antenna. Unsurprisingly, Holmdel is home to several Nobel Prize recipients. In 2024, Holmdel completed the purchase of 35 acres of land including the Holmdel Horn Antenna. The property will be renamed as Dr. Robert Wilson Park in honor of the Holmdel resident scientist who helped make the discovery.

In 2021, Holmdel adopted a Complete Streets Policy, resolving to "provide safe access for all users by designing and operating a comprehensive, integrated, connected, multi-modal network of transportation options." The Township as Safe Routes to School "Silver" rating.

Land Use, Development, & Growth

In Holmdel, residential, publicly owned and farmland together constitute a large portion of its area. However, from 2015 to 2020, the Township lost nearly 98 acres and 58 acres of agricultural and forested land respectively, while gaining nearly 133 acres of urban or developed land. In 2020, developed land accounted for 58 percent of Holmdel's total area, while forested land, wetlands and agricultural land made up 16 percent, 15 percent, and 8 percent respectively of its total land base.

Land Use Type	Total Acres (2015)	Total Acres (2020)	Percent Change
Agriculture	1047.5	949.6	-9%
Barren Land	29.2	67.0	129%
Forest	1931.1	1872.8	-3%
Urban	6614.8	6747.9	2%
Water	136.4	138.8	2%
Wetlands	1804.2	1786.9	-1%

NJDEP Land Use/Land Cover data, 2015-2020

Recent Major Development and Infrastructure from 2020 to Present

Recent major development in Holmdel includes the Cornerstone facility on Laurel Ave and Middle Road which has recently opened. The development contains 50 affordable units and is not located in the flood area. Brightview Senior Living facility is currently under construction on highway 35 between Union Ave and Laurel Ave. This development is not at risk for flooding and is located in a low wildfire risk area.

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

Like many suburban communities, Holmdel has an affordable housing obligation it is required to meet. The Township moved forward with rezoning numerous parcels in its northern section to allow higher density housing to meet the State mandate. Holmdel has a court-approved settlement agreement that calls for the construction of 280 new homes, with 93 of them set aside for families of low and moderate income.

A development has been proposed at 26 West Main Street (Route 520), west of Holmdel Village and just before Rte 34. It is across the road from the Prudential/Vonage property, named Heavenly Estates. The developer is seeking approval to subdivide two existing lots into 16 residential lots, three open space lots, and one large lot which will remain undeveloped. The property is within the Rural Conservation District (R-4R) Zone with its western, southern and eastern property lines bound by Willow Brook and its tributary.

Demographics & Vulnerable Populations

This plan analyzed census-derived data on population trends and population age distributions to help illustrate potential vulnerability within the Township. A population increase or decrease can illustrate potential hazard vulnerability through development pressures on the built environment, or through physical and social impacts of marked population loss. A community with a large share of population under age five may indicate vulnerabilities in hazard response, resource allocation, and evacuation – FEMA identifies that the pediatric population is disproportionately affected during disasters and requires special consideration in categories of anatomy and physiology, psychological, and education vulnerabilities (FEMA, 2022, NLM, 2022). Individuals over age 65 are a growing share of the country's population and often represent the greatest share of deaths from extreme weather events and other natural disasters. A larger share of population over 65 may indicate local vulnerabilities to hazard events both before and after a disaster occurs – these populations may have mobility needs, uneven access to resources, and limited social networks that makes pre-disaster engagement challenging (FEMA, 2023).

The Township of Holmdel's total estimated population is 17,369, a 4.3% population growth since the 2013-2017 ACS survey period estimate. This population is estimated to be 3.4% under 5 years old, and 21.2% over age 65. With an aging population making up over twenty percent of their total community, Holmdel 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.

The community has two block groups identified as potentially overburdened (OBC) due to community characteristics of *Minority* populations. There are no parts of the Township designated as potentially vulnerable under CEJST or CDRZ criteria.

Demographics Summary	
Total Population (2018-2022 ACS 5-year Estimates)	17,369
Population Change since 2017	4.3%
Percent of Population Age < 5	3.4%
Percent of Population > 65	21.2%

Source: 2018-2022 ACS 5-Year Estimates, 2013-2017 ACS 5-Year Estimates

HAZARD IDENTIFICATION

One of the first steps in developing a risk assessment is for participating municipalities to review and prioritize the hazards that can affect them. This was done based on how often a hazard has occurred, how significant effects have been in the

past, the difficulty and cost of recovering from such events. Jurisdictions ranked the list of hazards as either high, medium, low, or no concern. The following include the Township's hazard ranking. The full risk assessment for each hazard is located in Section 4.0.

Hazard Ranking

High	Medium	Low
Natural Hazards		
Flood	Extreme Temperatures	Drought
Nor'easter	Extreme Wind	Earthquake
	Hurricane/Tropical Storm	Lightning
	Landslide	
	Tornado	
	Wildfire	
	Winter Storm	
Human-made Hazards		
Terrorism	Cyber Attack	Civil Unrest
	Economic Disruption	
	Power Failure	
	Pandemic	

Note: The Township ranked Coastal Erosion, Dam Failure, Wave Action, and Storm Surge as N/A.

Hazard Ranking Explanation

Landslide has been upgraded to a medium hazard ranking from the last plan update. The Township has many steep slopes and hilly areas. During wet periods there is potential for extensive damage. Terrorism has been upgraded to a hazard of high concern as well. Several locations including PNC Center and Bell Works are potential soft targets as well as the teleport satellite at the PNC Center due to its government usage. Extreme wind and hurricane/tropical storm are rated as "Medium +" by the Township.

Dam failure is ranked as not applicable to Holmdel as the community says are no dams located within the municipality or nearby which would threaten the town in the case of failure. Similarly, coastal erosion, wave action, and storm surge are ranked as not applicable because the Township is inland and away from the coast.

Significant Hazard Events Since Last Plan Update

The community reports that there has been some flooding in the north, the bridge across Middle Road near Palmer Ave on border with Middletown in recent years. The nearby creek (a tributary of Waackaack Creek) can't handle all the runoff from the roadway. Additional areas of concern related to flooding include McCampbell Road in the south of town near the intersection with Everett Road. This areas floods during periods of heavy rain. So far there has been no damage, just the flooded roadway, which requires the township to divert cars away from the area with barricades until water runs off. Several major thunderstorms have caused power outages. Wind blowing down trees on power lines caused the outages. There has been landslide damage on Cat Bird Alley near Crawford's Corner Road caused by heavy rain including trees which have been washed away.

Climate Change Impacts on Extent and Magnitude of Hazards

Climate change is expected to significantly impact the risks and hazards faced by Holmdel Township. As global temperatures rise, the frequency and intensity of extreme weather events such as hurricanes, tropical storms, and extreme wind events are likely to increase. This will exacerbate existing hazards like flooding, which is already a concern in areas such as the bridge across Middle Road near Palmer Ave and McCampbell Road1. The increased rainfall and storm surges associated with these events can lead to more severe and frequent flooding, putting additional strain on the Township's infrastructure and requiring more robust flood mitigation measures.

Moreover, climate change will likely lead to higher temperatures and prolonged heatwaves, which can increase the risk of droughts and wildfires. These conditions can also exacerbate landslide risks, particularly in areas with steep slopes and hilly terrain, such as Cat Bird Alley near Crawford's Corner Road. The Township's aging population, with over 21% of residents being over 65 years old, may face heightened vulnerabilities during.

RISK ASSESSMENT

National Flood Insurance Program (NFIP) statistics

Holmdel Township	
Initial FIRM Date	3/1/82
Effective FIRM Date	9/25/2009
Number of Policies In-Force:	22
Total Losses:	12
Total Payments:	\$186,971.96
Number of RL Properties:	1
Number of Mitigated RL Properties:	0
RL – Total Losses:	2
RL – Total Paid:	\$8,995.84
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

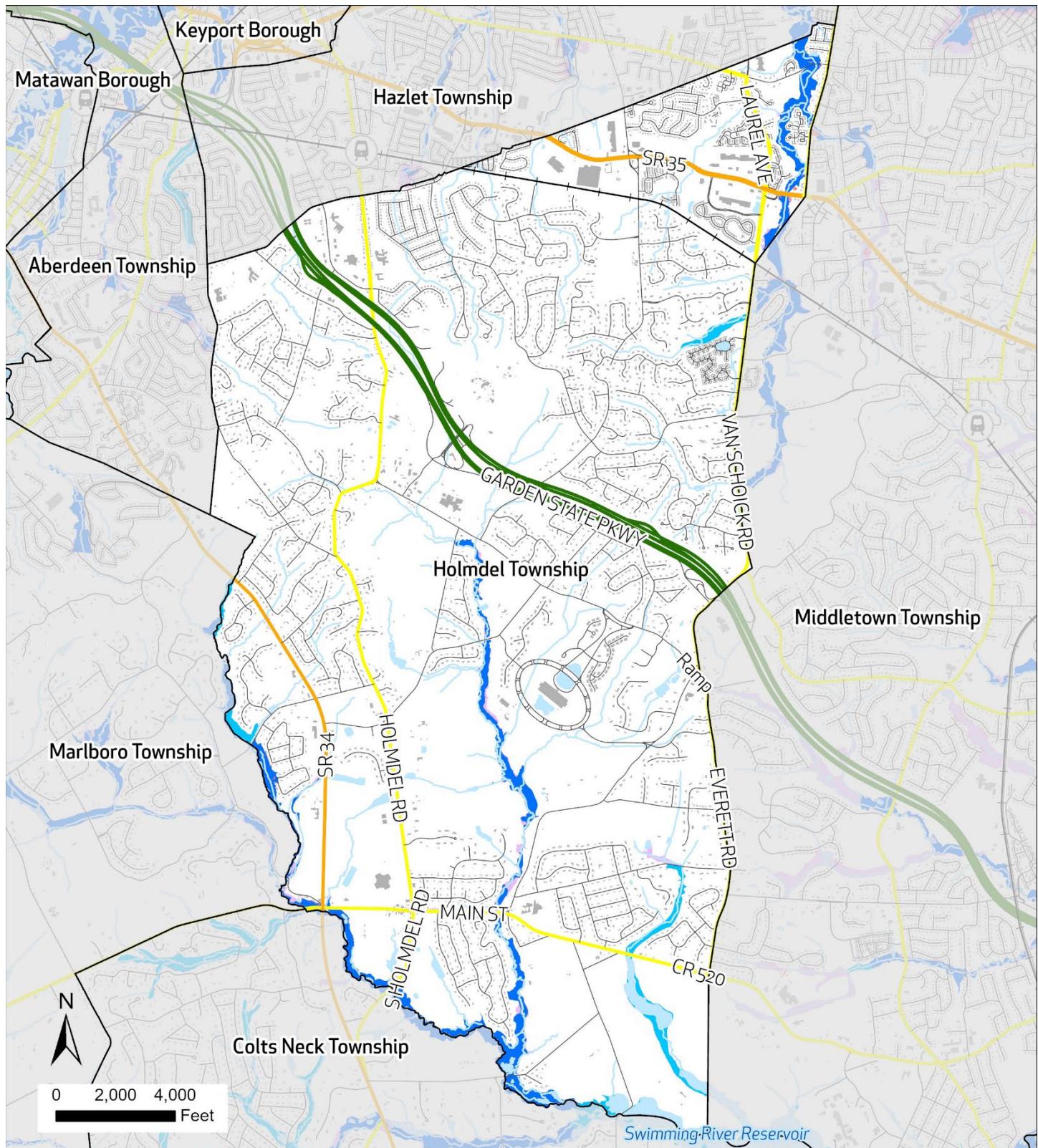
The Special Flood Hazard Area (SFHA) in the Township of Holmdel is primarily centered adjacent to the waterbodies of the borough; Hop and Willow Brooks, The Swimming River Reservoir, and Marlu Lake. Approximately 3.6 percent of the total area of Holmdel lies within the 1% annual chance flood zone as defined by FEMA. An additional 0.2 percent of the area of the municipality is in the 0.2% annual chance flood zone.

About 69.0 percent of Holmdel is considered developed. Of the developed parcels of the town, 4.0 percent fall within the 1% annual chance flood zone and 0.2 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
Developed Parcels	4%	0.2%
Community Lifelines and Critical Facilities	3.3%	0.0%
Exposed Land Area	3.6%	0.2%

During the planning process, Holmdel 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 33 total facilities. Of these facilities, 3 percent are within the 1% floodplain, and none are within the 0.2% floodplain.

Community Lifeline Type	Number in the 1% Floodplain	Number in the 0.2% Floodplain	Number within 5 feet of Sea Level Rise
Water Systems	NA	NA	NA



Flood Risk Holmdel Township

FEMA Flood Zone

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

Garden State Parkway

Interstate Highways

State Routes

County Routes

Local Roads

Rail Lines

Municipal Boundaries

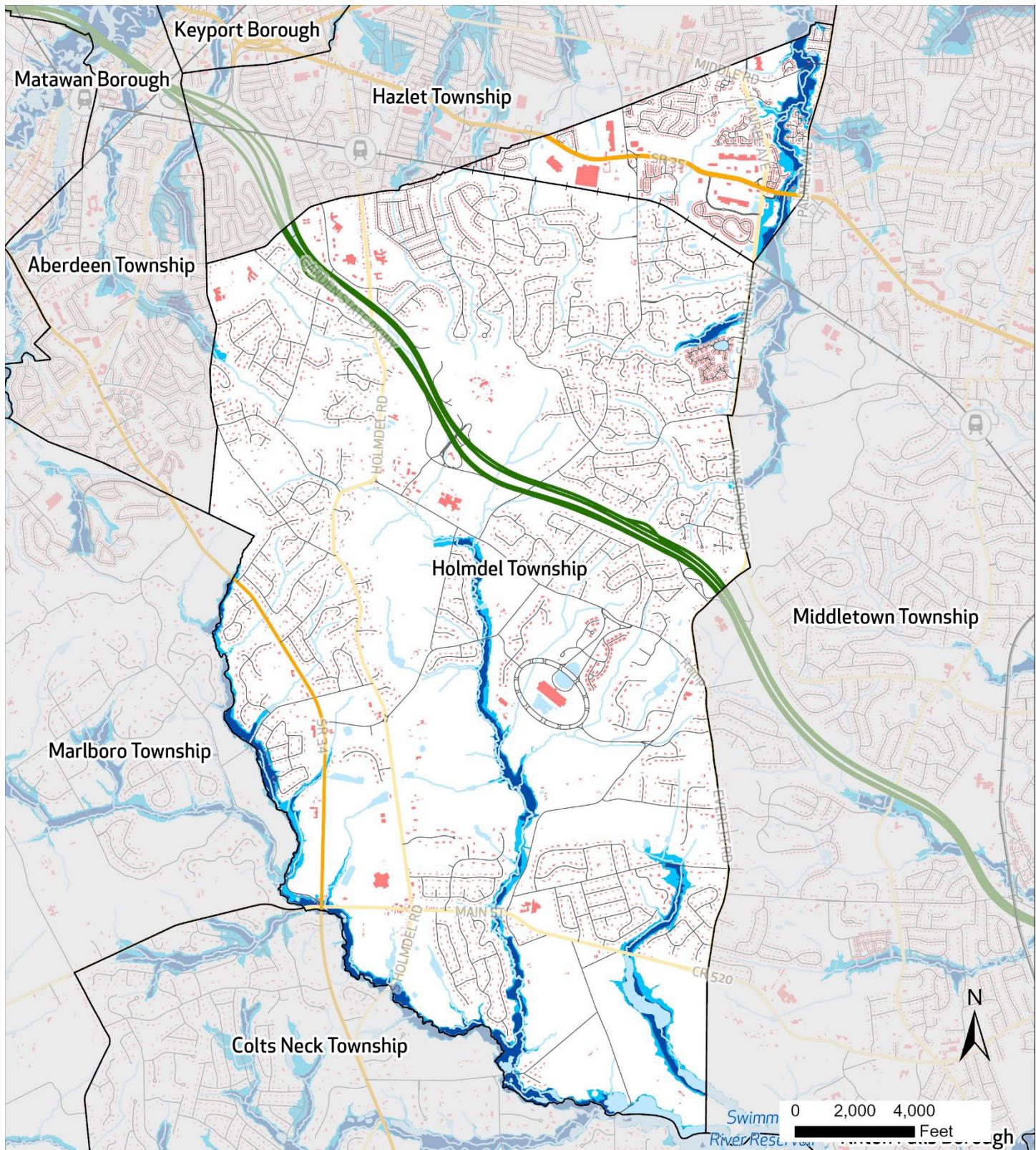
Building Footprints

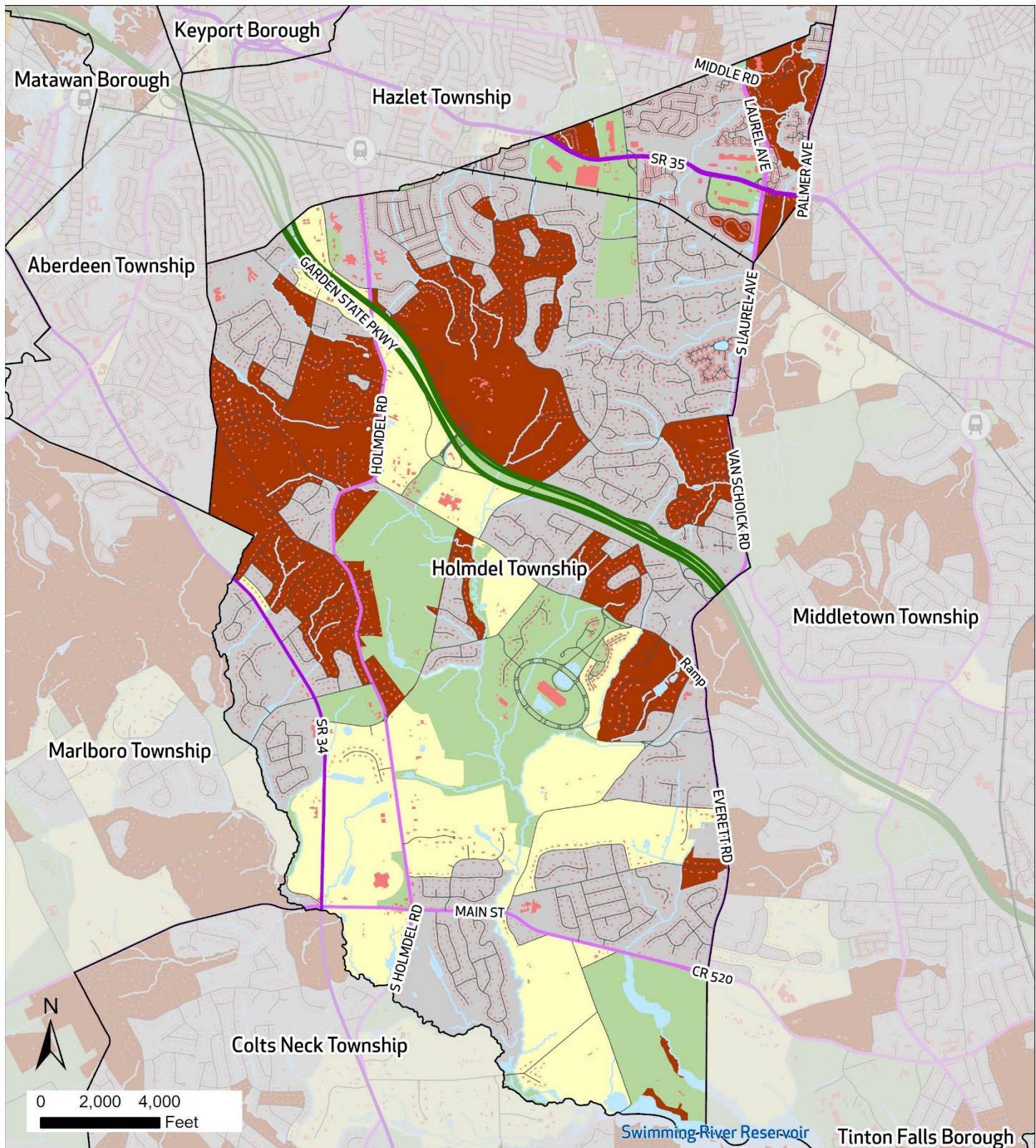
Building Footprints within

Floodplain

Water

Source: FEMA NJDEP, NJOIT, NJTransit





Wildland Urban Interface (WUI) Classification

Holmdel Township

- Intermix
- Medium and High Density Housing
- Low and Very Low Density Housing
- No Housing

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

- Rail Lines
- NJ Transit Rail Station
- Municipal Boundaries
- Building Footprint
- Water

Source: USFS, NJDEP, NJOIT, NJTransit

CAPABILITY ASSESSMENT

Planning & Regulatory Capabilities

Holmdel Township has the following additional Planning & Regulatory capabilities:

Plan and Regulation	Yes	No	Date of last update	How does this capability support hazard mitigation?
Master Plan	X		2020	To be updated
Capital Improvement Plan	x		2024-2025	In progress
Local Emergency Operations Plan/Continuity of Operations Plan	X		2024-2025	In progress
Floodplain Development Ordinance	X		2022	Handled by Community Development Office
Floodplain Management Plan	X		2022	Community Development Office
Stormwater Management Ordinance	X		2024	
Stormwater Management Plan	X		2024	Overseen by Township Engineers and Dept of Public Works
Watershed Management Plan		X	2024	Overseen by Township Engineers and Dept of Public Works
Sheltering Plan	X			Holmdel relies on Monmouth County
Evacuation Plan	X			
Substantial Damage/Improved Structures Response		X		
Repetitive Loss Plan		X		
Disaster Debris Management Plan	X			Dept of Public Works
Tracking elevation certificates and/or Letter of Map Change		X		
Post-Disaster Recovery Plan				
Current/recent redevelopment plans or studies	X		2024	
Community Wildfire Protection Plan	X		2025	In progress
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

Holmdel Township has the following Administrative and Technical capabilities:

Position	Yes	No	Explanation
Floodplain Administrator	X		Community Development
Grant Writer	X		There are a number of Twp Employees task for grant writing
Staff trained to support mitigation	X		Construction, Fire Bureau, DPR and Police Department
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		FD / EMS, MRSSA, Gas Company, JCP&L
Organizations that work with socially vulnerable or underserved populations	X		CGP&H

Education and Outreach Capabilities

Holmdel Township has the following Education and Outreach capabilities:

Education & Outreach Capability	Yes	No	Explanation
Communicate natural and human-based hazards to the public	X		Holmdel utilizes social media platforms and Code Red messaging
StormReady	X		Code Red
Firewise USA			
Severe Weather Awareness Week	X		Information disseminated through Holmdel OEM
Community Rating System (CRS)	X		

Financial Capabilities

Within the last five years, Holmdel Township 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		Debris removal for Storm Isias 7/2020
FEMA HMGP		X	
Non-FEMA Federal Funding Programs			
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

The Township of Holmdel is committed to becoming a community resilient to damage from natural disasters and climate concerns. The Township and its stakeholders have formed critical partnerships to develop plans and identify much-needed upgrades and changes. The Township recently completed a Stormwater Management survey and updated emergency response plans. We continue to prioritize areas for improvement and look for alternatives to achieve our goals. As the Township moves forward, we will maintain transparency with the community and will distribute plans as they are developed.

Completed or Removed Actions

Action	Name	Description	Hazards Addressed	Pri-ority	Responsible Party	Potential Funding	Cost Estimate	Tim e-line	Action Status	Notes
Action 20-1	Purchase and Install Generators for Critical Facilities	Purchase and install generators for local gas stations and generators for traffic lights at high-traveled intersections.	All Hazards	N/A	Township Administration	FEMA HMA, DOT, Municipal budget	270,433	N/A	Completed	The Twp has generators at all critical sites
Action 20-2	Conduct a Fire Analysis Study	Develop a Fire Analysis Study to increase fire capabilities in southern Holmdel.	All Hazards	N/A	Township Planning and Fire	FEMA HMA, Municipal budget	3,805,545	N/A	Completed	New Firehouse was constructed by the Township
Action 20-3	Conduct Ongoing Maintenance of the Morrhoris Brook/Waycaake Creek	Desnagging and desilting Morrhoris Brook/Waycaake Creek.	Flood, Nor'easter, Hurricane and Tropical Storm, Winter Storm	N/A	Township Engineering	Municipal budget	N/A	N/A	Completed	Monmouth County did desnag in 2023

New and Ongoing Actions

Action	Name	Description	Hazards Addressed	Pri-ority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
Action 25-4	Flood Study revised 2024 by Twp Engineers	Identification of all areas in need of structural remediation or other mitigation	-120 Hazards throughout the township identified	High	Twp Engineer -	-FEMA HMA Municipal Budget	3,386,165	3years-	Ongoing	The study is currently being reviewed to set priorities on projects identified.
Action 25-5	Acquire, elevate, or relocate buildings and infrastructure in flood prone areas, with a focus on	Elevation and/or Acquisition of Flood prone Residential Structures, with particular focus on those in our community that are on FEMA's Repetitive Loss List.	Flood, Wave Action, Nor'easter, Hurricane and Tropical Storm, Storm	High	Mayor and Council	FEMA HMA	TBD on property	2 years	Ongoing	

Action	Name	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Time-line	Action Status	Notes
	Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties		Surge, Winter Storm							
Action 25-6	Conduct a Flood Mitigation Study for Route 35	An engineering study is needed to solve flooding along Route 35, specifically the commercial property of 2028 Highway 35.	Flood, Nor'easter, Hurricane and Tropical Storm	Medium	Township Engineering	Municipal budget, DOT, FEMA HMA		2 years	Ongoing	This study is currently being conducted by the State Hwy Authority
Action 25-7	Target Harden Critical Facilities by Installing Surveillance Camera and Fencing	Install camera systems and secure fencing at all Township-owned parks, municipal buildings, schools, and pump stations. Additionally, coordinate with NJ American Water on how to secure their water treatment plant at Phyllis Park.	Terrorism	Medium	Township OEM	Homeland Security grants, Municipal budget	\$300,000	2 years	Ongoing	Town hasn't yet received funding approval to install the cameras
Action 25-8	Tree Trimming Maintenance Program	Create a tree trimming maintenance program and purchase new tree-trimming equipment.	Flood, Extreme Wind, Lightening, Nor'easter, Hurricane and Tropical Storm, Wildfire	Low	Township DPW	Municipal budget	15,000	2 years	Ongoing	Holmdel DPW trims all trees on Township owned property and buildings, yearly
Action 25-9	Construct Flood Measure (e.g. floodwalls or small berms) along Hop Brook	Use minor structural projects that are smaller and more localized (e.g., floodwalls or small berms) along Hop Brook.	Flood	High	Township Engineering	FEMA HMA	100,000	3 years	Ongoing	No progress has been made on this action since the last plan update.