10. TOWNSHIP OF NORTH BERGEN

This jurisdictional annex to the Hudson County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Township of North Bergen with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of North Bergen, describes who participated in the planning process, assesses North Bergen's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

10.1 Hazard Mitigation Planning Team

The Township of North Bergen identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Township departments. The Office of Emergency Management represented the community on the Hudson County HMP Planning Partnership and Steering Committee, and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 10-1 summarizes Township officials who participated in the development of the annex and in what capacity. Additional documentation of the Township's planning activities through Planning Partnership meetings is included in Volume I.

Table 10-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: David Ricigliano, Office of Emergency Management Coordinator Address: 6100 Tonnelle Ave, North Bergen, NJ Phone Number: 201-330-7288 Email: dricigliano@northbergen.org	Name/Title: Bernard Mirandi, Engineer Address: 6100 Tonnelle Ave, North Bergen, NJ Phone Number: 201-641-0770 Email: bmirandi@boswellengineering.com
National Flood Insurance Program Floodplain Administrator	
Name/Title: Bernard Mirandi, Engineer Address: 6100 Tonnelle Ave, North Bergen, NJ Phone Number: 201-641-0770 Email: bmirandi@boswellengineering.com	
Additional Contributors	
Name/Title: David Ricigliano, Office of Emergency Management Coordinator Method of Participation: Provided input on hazard event history.	
Name/Title: Peter Hammer, Construction Official Method of Participation: Provided building permits and new development information.	
Name/Title: Bernard Mirandi, Engineer Method of Participation: Participated in the planning process.	
Name/Title: Paul Grygiel, Professional Planner Method of Participation: Participated in the planning process.	

Name/Title: Janet Castro, Administrator Method of Participation: Participated in the planning process.
Name/Title: Erin Barillas, Township Clerk Method of Participation: Participated in the planning process.
Name/Title: John Shaw, Public Works Superintendent Method of Participation: Participated in the planning process.
Name/Title: Dan Peschetti, Deputy Office of Emergency Management Coordinator Method of Participation: Participated in the planning process.

10.2 Community Profile

10.2.1 Brief History

The Township of North Bergen was officially incorporated on April 10, 1843, by an act of the New Jersey Legislature. Its origins trace back to February 10, 1843, when it separated from the northern portion of Bergen Township, a municipality established in 1661 by Dutch settlers that originally encompassed the areas now known as Hudson and Bergen Counties (Township of North Bergen 2024).

At the time of its incorporation, North Bergen covered a significantly larger area than it does today. Its southern boundary extended as far as present-day Journal Square. Over the following decades, portions of the township gradually separated to form new municipalities. The New Jersey Railroad initially served as a dividing line between townships until the formation of Hoboken in 1849, which also included what is now Weehawken.

Subsequent separations continued throughout the 19th century. In 1855, Hudson Town was formed, which is now known as Jersey City Heights. This was followed by the creation of Union Township in 1861, which later became West New York and West Hoboken, areas that now comprise downtown Union City. In 1864, Union Hill Township was established, corresponding to present-day uptown Union City. The final boundary change occurred in 1900 with the secession of Secaucus. These successive separations ultimately shaped the current geographic boundaries of North Bergen as they are known today (Township of North Bergen 2024).

10.2.2 Location

The Township is located in the northern portion of Hudson County, only four miles west of New York City on the majestic Palisades and Hudson River. The Town is located east of Hackensack Meadowlands Nature Preserve and shares its borders with Bergen County to the north, Town of Secaucus to the west, Jersey City to the south and Union City, West New York and Town of Guttenberg to the east.

10.2.3 Governing Body Format

The Township is located within the Meadowlands District, which is made up for 14 municipalities in Bergen and Hudson Counties. The District is 30.3 square miles and located approximately five miles west of New York City. The New Jersey Sports and Exposition Authority (NJSEA), an authority of the State of New Jersey, and serves as the regional planning

and zoning agency for the Meadowlands District. The NJSEA holds zoning jurisdiction over the portions of each municipality within its boundaries.

10.2.4 Population and Social Vulnerability

According to the U.S. Census, the 2020 population for North Bergen was 63,361, a 4.2 percent increase from the 2010 Census.

Research has shown that some populations are at greater risk from hazard events because of decreased resources or physical abilities. These populations can be more susceptible to hazard events based on a number of factors including their physical and financial ability to react or respond during a hazard, and the location and construction quality of their housing. Data from the 2020 U.S. Census indicates that 6.1 percent of the population is 5 years of age or younger, 16.6 percent is 65 years of age or older, 17.3 percent is non-English speaking, 11.6 percent is below the poverty threshold, and 9.7 percent is considered disabled.

10.2.5 ALICE in Hudson County

ALICE is an acronym for Asset Limited, Income Constrained, Employed – households that earn more than the Federal Poverty Level, but less than the basic cost of living for the County. While conditions have improved for some households, many continue to struggle, especially as wages fail to keep pace with the rising cost of household essentials (housing, child care, food, transportation, health care, and a basic smartphone plan). Households below the ALICE Threshold – ALICE households plus those in poverty – can't afford the essentials.

According to 2021 Point-in-Time-Data from ALICE, 24 percent of the 292,000 households in Hudson County are ALICE households (compared to the state average of 26 percent). The median household income in Hudson is $80,329, and the County sees a labor force participation rate of 69 percent. Hudson County faces low household income compared to the state average of $89,296 and while the County does carry a 3 percent higher labor participation rate compared to state numbers, 15 percent of Hudson households live in poverty.

10.3 Jurisdictional Capability Assessment and Integration

North Bergen performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume I describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Planning and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs

- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and /policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for North Bergen to identify opportunities for integrating mitigation concepts into ongoing Township procedures.

10.3.1 Planning and Regulatory Capability and Integration

Table 10-2 summarizes the planning and regulatory tools that are available to North Bergen.

Table 10-2. Planning and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
CODES, ORDINANCES, & REGULATIONS				
Building Code	Yes	NJAC 5.3 (2009)	State and Local	Building Department
How has or will this be integrated with the HMP and how does this reduce risk? The Township of North Bergen enforces the New Jersey State Codes as listed below. Building Code: • Uniform Construction Code – N.J.A.C. 5:23 • International Residential Code – N.J. 2021 EDITION • International Building Code – N.J. 2021 EDITION Plumbing: • National Standard Plumbing Code – 2021 EDITION • International Fuel Gas Code – 2021 EDITION • International Mechanical Code – 2021 EDITION • ICC/ANSI – 2017 (Accessibility) Electric: • National Electrical Code – 2020 EDITION Fire Prevention / Uniform Fire Code: • International Fire Code New Jersey Edition - 2021 Property Maintenance: International Property Maintenance Code – 2021 EDITION				
Zoning/Land Use Code	Yes	Title 1.1, Zoning Ordinance Ap. 6/99.	Local	Building Department
Zoning code helps identify vulnerable areas within the Township, allowing to be integrated with potential mitigation actions in natural hazard areas.				
Subdivision Code	Yes	69-84, Site Plan Review Requirements (12/6/84).	Local	Engineering Department

	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
Site Plan Code	Yes	69-84, Site Plan Review Requirements (12/6/84).	Local and County	Engineering Department
Site plan code helps identify vulnerable areas within the Township, allowing to be integrated with potential mitigation actions in natural hazard areas.				
Stormwater Management Code	Yes	1013-05 Stormwater Control (4/27/05).	Local	Engineering Department
This code allows to create better functionality for stormwater management to help overflow and flooding within the Township.				
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				

	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
Real Estate Disclosure Requirements	Yes	Senate Bill 3110; P. L. 2023, c. 93, July 3, 2023	State	Sellers and Landlords of commercial or residential property

How has or will this be integrated with the HMP and how does this reduce risk?

For leases, the law amends the New Jersey Truth-in-Renting Act, N.J.S.A. 46:8-43 et seq., to require every landlord to notify in writing each of the landlord's tenants, prior to lease signing or renewal, whether the property is located in the Federal Emergency Management Agency (FEMA) Special Flood Hazard Area ("100-year floodplain") or Moderate Risk Flood Hazard Area ("500-year floodplain") and if the landlord has actual knowledge that the rental premises or any portion of the parking areas of the real property containing the rental premises has been subjected to flooding. The law does not apply to (1) landlords who lease commercial space or residential dwellings for less than one month, (2) residential dwellings in a premises containing not more than two units, (3) owner-occupied premises containing not more than three units, or (4) hotels, motels, or other guest houses serving transient or seasonal guests for a period of less than 120 days.

The model notice is to contain the heading "Flood Risk" and questions for the landlord to answer regarding the landlord's actual knowledge of past flooding of the property. The questions regarding the property being in a FEMA Special or Moderate Risk Flood Hazard Area shall not contain the option for "unknown." To determine how the questions are to be answered, FEMA's current flood insurance rate maps for the leased premises area must be consulted. The landlord will be required to answer whether the rental premises or any portions of the parking areas of the real property containing the rental premises ever experienced any flood damage, water seepage, or pooled water due to a natural flood event and, if so, the number of times that has occurred.

The notice to residential tenants must also indicate that flood insurance may be available to renters through FEMA's National Flood Insurance Program to cover their personal property and contents in the event of a flood and that standard renter's insurance does not typically cover flood damage.

For sales, the law also amends the New Jersey Consumer Fraud Act, N.J.S.A. 56:8-1 et seq., to require sellers of real property to disclose, on the property condition disclosure statement, whether the property is located in the FEMA Special or Moderate Risk Flood Hazard Area and any actual knowledge of the seller concerning flood risks of the property to the purchaser before the purchaser becomes obligated under any contract for the purchase of the property.

The disclosure statement must contain the heading "Flood Risk" and ask the seller the following questions:

- Is any or all of the property in the Special Flood Hazard Area ("100-year floodplain") or a Moderate Risk Flood Hazard Area ("500-year floodplain") according to FEMA's current flood insurance rate maps?
- Is the property subject to any requirement under federal law to obtain and maintain flood insurance on the property? Properties in the Special Flood Hazard Area with mortgages from federally regulated or insured lenders are required to obtain and maintain flood insurance.
- Have you ever received assistance from, or are you aware of any previous owners receiving assistance from FEMA, the U.S. Small Business Administration, or any other federal disaster flood assistance for flood damage on the property? For properties that have received flood disaster assistance, the requirement to obtain flood insurance passes down to all future owners.
- Is there flood insurance on the property? A standard homeowner's insurance policy typically does not cover flood damage.
- Is there a FEMA elevation certificate available for the property? If so, it must be shared with the buyer. An elevation certificate is a FEMA form, completed by a licensed surveyor or engineer, that provides critical information about the flood risk of the property and is used by flood insurance providers to determine the appropriate insurance rating for the property.
- Have you ever filed a claim for flood damage to the property with any insurance provider? If the claim was approved, what was the amount received?
- Has the property experienced any flood damage, water seepage, or pooled water due to a natural flood event, such as heavy rainfall, coastal storm surge, tidal inundation, or river overflow? If so, how many times?

Not all provisions of this law have become effective at the time of the writing of this plan.

	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
Growth Management	Yes	Master Plan 4/99	Local	Township Administration
Growth management will support development trends within natural hazard areas and HMP mitigation actions.				
Environmental Protection Ordinance(s)	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Flood Damage Prevention Ordinance	Yes	1065-06 (6/14/06)	Federal, State, County and Local	Engineering Department
This ordinance will support addressing flood hazard risk identified in the HMP and flood mitigation actions.				
Wellhead Protection	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Emergency Management Ordinance	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Climate Change Ordinance	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Other	-	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
PLANNING DOCUMENTS				
General/Comprehensive/Master Plan	Yes	Master Plan 4/99	Local	Building Department
How has or will this be integrated with the HMP and how does this reduce risk? The Master Plan was first adopted in 1987 and updated in 1994. A reexamination report was conducted in 2003 and 2009. The Housing Element and Fair Share Plan was added and adopted in 2009. The goals of the reexamination report are similar to those of the County's Hazard Mitigation Plan (ensure that any prospective development and/or redevelopment is responsive to North Bergen's environmental features). To achieve this goal, the Township's reviewing agencies undertake substantive reviews of all development applications to ensure that environmental impacts of proposed developments are scrutinized and addressed. During the next master plan update, the Township should review the County HMP and incorporate hazard areas into the plan.				
Capital Improvement Plan	Yes	Master Plan 4/99	Local	Township Administration
How has or will this be integrated with the HMP and how does this reduce risk?				
Disaster Debris Management Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Floodplain Management or Watershed Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				

	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
Stormwater Management Plan	Yes	Municipal Stormwater Management Plan, 2/2007	Local	Engineering Department
How has or will this be integrated with the HMP and how does this reduce risk? The goals of the plan include reducing flood damage including damage to life and property; minimize any increase in stormwater runoff from any new development; reducing soil erosion from any development or construction project; and maintain the integrity of stream channels for their biological functions as well as for drainage. The Township is working on incorporating several non-structural stormwater strategies into the zoning and site plan ordinances. These non-structural strategies will help reduce flooding and damage to life and property associated with flooding. To minimize stormwater runoff, the Residential Site Improvement Standards require a reduction in runoff during all rain events for residential developments. Commercial developments are required to follow NJAC 7:8 and 7:15. To reduce soil erosion, all development projects must obtain approval from the Bergen County Soil Conservation District if their area of disturbance is over 5,000 square feet. There are several maps that are part of the plan and include freshwater wetlands/water land uses, and floodplains.				
Stormwater Pollution Prevention Plan	Yes	Municipal Stormwater Pollution Prevention Plan, 05/21/2020	Local	Engineering Department
This plan will support pollution prevention within stormwaters, helping reduce flood risk and secondary issues that may come from flood such as polluted water.				
Open Space Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Urban Water Management Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Habitat Conservation Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Economic Development Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Community Wildfire Protection Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Community Forest Management Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Transportation Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Agriculture Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Climate Action/ Resilience/Sustainability Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				

	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
Tourism Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Business/ Downtown Development Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Other: Shoreline Management Plan	Yes	Township of North Bergen Shoreline Management Plan	State, Local	Building Department
This plan supports shoreline management and integrate potential hazard risk and mitigation actions to address any shoreline issues.				
RESPONSE/RECOVERY PLANNING				
Emergency Operations Plan	Yes	Emergency Response Plan	Local	Community Affairs and Office of Emergency Management
How has or will this be integrated with the HMP and how does this reduce risk? The OEM has detailed information covering preparedness, response, mitigation and recovery from a disaster that may occur within the Township. The North Bergen Township Emergency Operations Plan is approved by the New Jersey State OEM and focuses on the following areas: 01. Alerting and Warning 02. Fire and Rescue activities 03. Law Enforcement activities 04. Public Health awareness 05. Emergency Medical Services 06. Evacuation procedures 07. Shelter Reception and Care 08. Social Services 09. Resource Management 10. Coordination with the media 12. Department of Public Works activities 13. Emergency Operations Center coordination 14. Damage Assessments of public infrastructure and buildings 15. Handling of Hazardous Materials 16. Terrorism Incidents 17. Radiological Protection				
Continuity of Operations Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Substantial Damage Response Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				

	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
Threat and Hazard Identification and Risk Assessment	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Post-Disaster Recovery Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Public Health Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Other	-	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				

10.3.2 Development and Permitting Capability

Table 10-3 summarizes the capabilities of North Bergen to oversee and track development.

Table 10-3. Development and Permitting Capability

	Yes/No	Comment
Do you issue development permits? • If you issue development permits, what department is responsible? • If you do not issue development permits, what is your process for tracking new development?	Yes	The Township issues building permits through the Building Department. It should be noted that part of the Township makes up NJSEA. For development within NJSEA boundaries, any proposed development needs to be approved first by NJSEA then the Township.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	The Township currently does not have the ability to track permits by hazard area.
Do you have a buildable land inventory? • If you have a buildable land inventory, please describe	Yes	The Township has a buildable lands inventory. This is done through the master plan and the administration department
Describe the level of buildout in your jurisdiction.	N/A	The Township has a buildable lands inventory. This is done through the master plan and the administration department

10.3.3 Administrative and Technical Capability

Table 10-4 summarizes potential staff and personnel resources available to North Bergen and their current responsibilities that contribute to hazard mitigation.

Table 10-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
ADMINISTRATIVE CAPABILITY		
Planning Board	Yes	Planning Board
Zoning Board of Adjustment	Yes	Board of Adjustment
Planning Department	No	Planning responsibilities are handled by Jill Hartman (L & C Design Consultants, PA)
Mitigation Planning Committee	Yes	Local Emergency Planning Committee
Environmental Board/Commission	Yes	The Township of North Bergen Green Team is derived of township officials, DPW, Sanitation, Health, Police, and schools. The Green Team conducts education, actions, and efforts to address energy and sustainability.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Public Works is responsible for street sweeping, salting, pothole repair, and sewerage and stormwater system maintenance.
Construction/Building/Code Enforcement Department	Yes	Building/Code Enforcement/Zoning
Emergency Management/Public Safety Department	Yes	The Department of Public Safety is responsible for police protection. The department is also responsible for the overall planning and coordination of programs related to the protection of the public, including, but not limited to, various educational programs and administration of grants relating to law enforcement. The North Bergen Office of Emergency Management focuses on the protection of life and property for all residents, businesses, visitors and the traveling public. OEM provides protection through the latest body of knowledge and current Emergency Management practices as set forth in federal, state, and county regulations. OEM personnel provide protection through study, planning and application of all phases of Emergency Management, while concentrating on mitigation, preparedness, response and recovery. OEM fosters the "TEAM" approach through education, coaching and partnering with each member. Members include municipal officials, the Emergency Management Council, the Local Emergency Planning Committee, emergency services and all municipal departments as outlined in the Townships Emergency Operations Plan. OEM will provide direction and obtain resources to members of the TEAM in events such as natural and technological disasters. OEM will provide coordination and assistance to police, fire, rescue, emergency medical and municipal government.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	General maintenance of roads, trees, catch basins, etc. to help reduce storm impacts and damages. The Township retrofits all

Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
		existing inlets with NJDEP approved curb pieces to help limit debris in the stormwater system and prevent blockages.
Mutual aid agreements	Yes	Surrounding municipalities, Hudson County, UASI
Human Resources Manual - Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?	No	-
Other	-	-
TECHNICAL/STAFFING CAPABILITY		
Planners or engineers with knowledge of land development and land management practices	Yes	Boswell Engineering
Engineers or professionals trained in building or infrastructure construction practices	Yes	Boswell Engineering
Planners or engineers with an understanding of natural hazards	Yes	Boswell Engineering
Staff with expertise or training in benefit/cost analysis	Yes	Township of North Bergen, CFO, Contract support
Professionals trained in conducting damage assessments	Yes	Contract support
Personnel skilled or trained in GIS and/or Hazus applications	Yes	Boswell Engineering
Staff that work with socially vulnerable populations or underserved communities	Yes	Karen Pianese
Environmental scientists familiar with natural hazards	Yes	Boswell Engineering
Surveyors	Yes	Boswell Engineering
Emergency manager	Yes	David Ricigliano
Grant writers	Yes	Millennium Strategies
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	-	-

10.3.4 Fiscal Capability

Table 10-5 summarizes financial resources available to North Bergen.

Table 10-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvement project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state funding programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes

10.3.5 Education and Outreach Capability

Table 10-6 summarizes the education and outreach resources available to North Bergen.

Table 10-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment
Public information officer or communications office	Yes	Full time staff member
Personnel skilled or trained in website development	Yes	Township staff and contractors
Hazard mitigation information available on your website	Yes	Located on the OEM section of the Township website. Information includes hurricane warnings online, develop safety kits, etc.
Social media for hazard mitigation education and outreach	Yes	The Township uses Facebook and Twitter
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Township Office of Emergency Management
Warning systems for hazard events	Yes	Everbridge, reverse 911, the police department uses digital message boards, County has air horns that are used during emergencies as well. The Township is looking into a Nixle-type program for traffic conditions. They will use this program to issue traffic warnings during flood events, road repairs, and construction.
Natural disaster/safety programs in place for schools	Yes	Township Emergency Operations Plan

Outreach Resources	Available? (Yes/No)	Comment
Organizations that conduct outreach to socially vulnerable populations and underserved populations	Yes	Hispanic Affairs Community Service Program
Public outreach mechanisms / programs to inform citizens on natural hazards, risk, and ways to protect themselves during such events	Yes	North Bergen (NB) Connect Notification System which enables the Township of North Bergen to provide critical information quickly in a variety of situations, such as severe weather, unexpected road closures, missing persons, and evacuation of buildings or neighborhoods.

10.3.6 Community Classifications

Table 10-7 summarizes classifications for community programs available to North Bergen.

Table 10-7. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	IBC	2015
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
National Weather Service StormReady Certification	No	-	-
Firewise Communities classification	No	-	-
Sustainable Jersey	Yes	Bronze	9/12/2023
Other: Organizations with mitigation focus (advocacy group, non-government)	-	-	-

N/A = Not applicable
— = Unavailable

10.3.7 Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 10-8 summarizes the adaptive capacity for each identified hazard of concern and the Township's capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement

Table 10-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak
Dam and Levee Failure	Moderate
Drought	Moderate
Extreme Temperatures	Moderate
Flood	Strong
Geological Hazards	Moderate
Severe Weather	Moderate
Severe Winter Weather	Moderate
Wildfire	Moderate

10.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The floodplain administrator listed in Table 10-1 is responsible for maintaining this information.

10.4.1 NFIP Statistics

Table 10-9 summarizes the NFIP policy and claim statistics for North Bergen.

Table 10-9. North Bergen NFIP Summary of Policy and Claim Statistics

# Policies	**411**
# Claims (Losses)	**146**
Total Loss Payments	**$5,488,320.98**
# Repetitive Loss Properties (NFIP definition)	**15**
# Repetitive Loss Properties (FMA definition)	**0**
# Severe Repetitive Loss Properties (NFIP definition)	**5**
# Severe Repetitive Loss Properties (FMA Definition)	**5**

NFIP Definition of Repetitive Loss: The NFIP defines a repetitive loss property as any insurable building for which two or more claims of more than $1,000 were paid by the NFIP within any rolling 10-year period since 1978.

FMA Definition of Repetitive Loss: FEMA's Flood Mitigation Assistance (FMA) program defines a repetitive loss property as any insurable building that has incurred flood-related damage on two occasions, in which the cost of the repair, on average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event.

Definition of Severe Repetitive Loss: A residential property covered under an NFIP flood insurance policy and: (a) That has at least four NFIP claim payments over $5,000 each, and the cumulative amount of such claims payments exceeds $20,000; or (b) For which at least two separate claims payments have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building. At least two of the claims must have occurred within any 10-year period, more than 10 days apart.

Source: FEMA 2024

10.4.2 Flood Vulnerability Summary

Table 10-10 provides a summary of the NFIP program in North Bergen.

Table 10-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	Per Municipal Stormwater Management Plan: Dell Avenue between 40th and 49th Streets, 83rd Street between Tonnelle and West Side Avenues, 91st Street (West of Tonnelle Avenue), Railroad Avenue along the border between North Bergen and Fairview, Roe Harbor condominium at 8000 River Road.
Do you maintain a list of properties that have been damaged by flooding?	There is currently no formal list of properties damaged by flooding. Multiple properties in the municipality were damaged during Hurricane Ida, including but not limited to: • 8509 Liberty Ave. • 8600 Tonnelle Ave. The township will maintain a list of damaged properties going forward if required to by the county.
Do you maintain a list of property owners interested in flood mitigation?	There is no list for this item. The Township will maintain a list of property owners going forward if required to by the County.
How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	This quantity is unknown. See above response.
Are any RiskMAP projects currently underway in your jurisdiction? If so, state what projects are underway.	No
How do you make Substantial Damage determinations?	Determinations are made by Inspecting the damage on the site, followed by a construction estimate.
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	There is no list for this item. The Township will maintain a list going forward if required to by the County.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? If there are mitigation properties, how were the projects funded?	There is no list for this item. The Township will maintain a list going forward if required to by the County.
Do your flood hazard maps adequately address the flood risk within your jurisdiction? If not, state why.	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	The Engineering Department is responsible. North Bergen currently hires a consultant, Boswell Engineering , as the Township Engineer.
Are any certified floodplain managers on staff in your jurisdiction?	Yes, certified floodplain managers are available via the Township's Engineering consultant.
Do you have access to resources to determine possible future flooding conditions from climate change?	Yes

NFIP Topic	Comments
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No assistance is currently needed.
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	The Township's engineering consultant is able to provide all required NFIP services.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Our process consists of the estimated cost, and review of the extent and nature of proposed improvements.
What are the barriers to running an effective NFIP program in the community, if any?	None
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	Unable to locate the date of last CAV or CAC.
What is the local law number or municipal code of your flood damage prevention ordinance?	Ordinance 1065-06
What is the date that your flood damage prevention ordinance was last amended?	June 14,2006
Does your floodplain management program meet or exceed minimum requirements? If exceeds, in what ways?	The floodplain management program meets the minimum requirements.
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Yes, the Township has municipal stormwater management plans and ordinances that are considered by the zoning and planning boards.
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	The community is considering joining the CRS program.

10.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. Recent and expected future development trends, including major residential/commercial development and major infrastructure development, are summarized in Table 10-11 through Table 10-13.

Table 10-11. Number of Building Permits for New Construction Issued Since the Previous HMP

	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
2019				

	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
Total Permits	2	10	6	18
Permits within SFHA	0	2	1	3
2020				
Total Permits	0	11	5	16
Permits within SFHA	0	0	0	0
2021				
Total Permits	5	9	2	16
Permits within SFHA	0	0	0	0
2022				
Total Permits	3	4	3	10
Permits within SFHA	0	0	1	1
2023				
Total Permits	0	10	3	13
Permits within SFHA	0	0	2	2

SFHA = Special Flood Hazard Area (1% flood event)

Table 10-12. Recent Major Development and Infrastructure from 2017 to Present

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zones*	Description / Status of Development
N/A					

** Only location-specific hazard zones or vulnerabilities identified.*

Table 10-13. Known or Anticipated Major Development and Infrastructure in the Next Five Years

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zones*	Description / Status of Development
7711 15 River Rd Asso.	Residential	157	7711 River Rd		Bd./County Approval
77 RR LLC	Mix	-	7701 River Rd		Bd. Approved
Riverview Development LLC.	Residential	300+	8200 River Rd		Bd. Approved

Commented [SU1]: TOWN: This was a handwritten sheet. Please verify I captured these correctly.

10.6 Jurisdictional Risk Assessment

The hazard profiles in Volume I provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of North Bergen's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

10.6.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Township are shown in Figure 10-1 through Figure 10-3. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which North Bergen has significant exposure. The maps show the location of potential new development, where available.

Figure 10-1. North Bergen Hazard Area Extent and Location Map 1

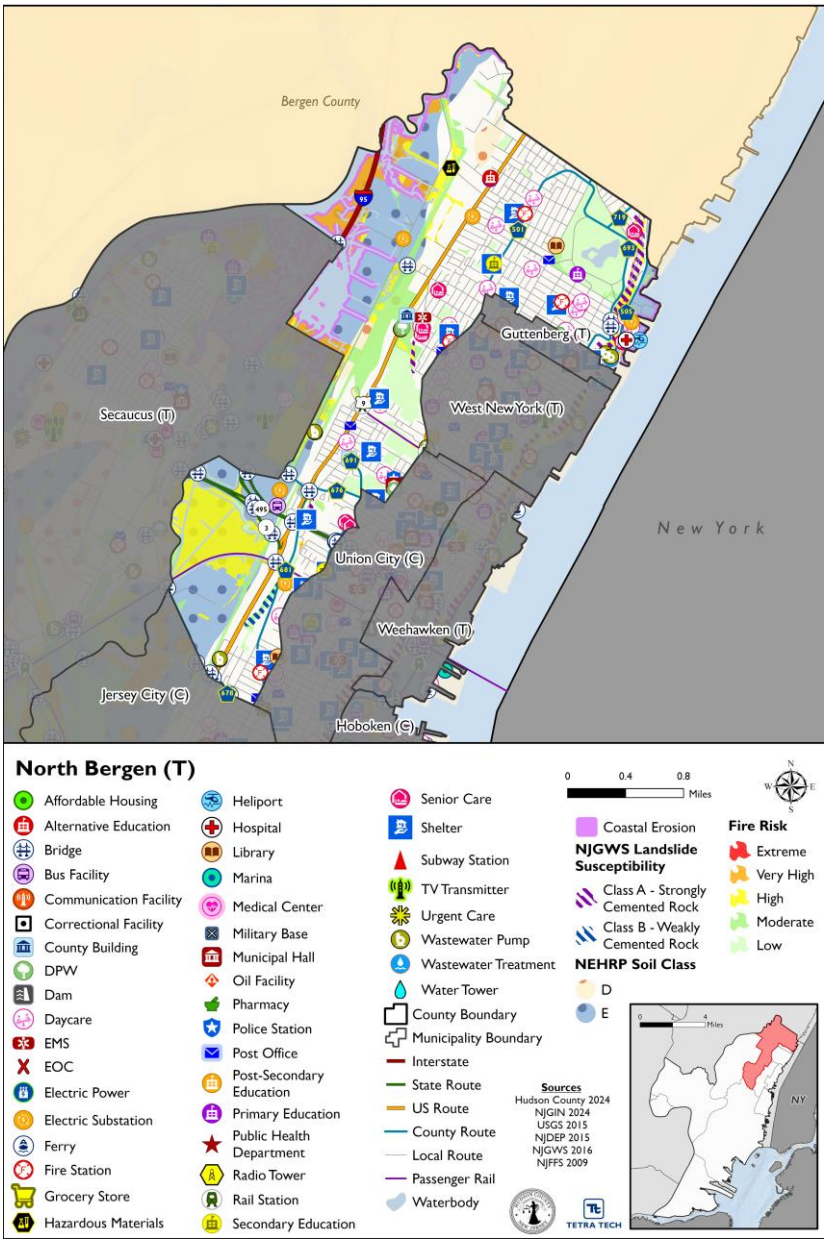


Figure 10-2. North Bergen Hazard Area Extent and Location Map 2

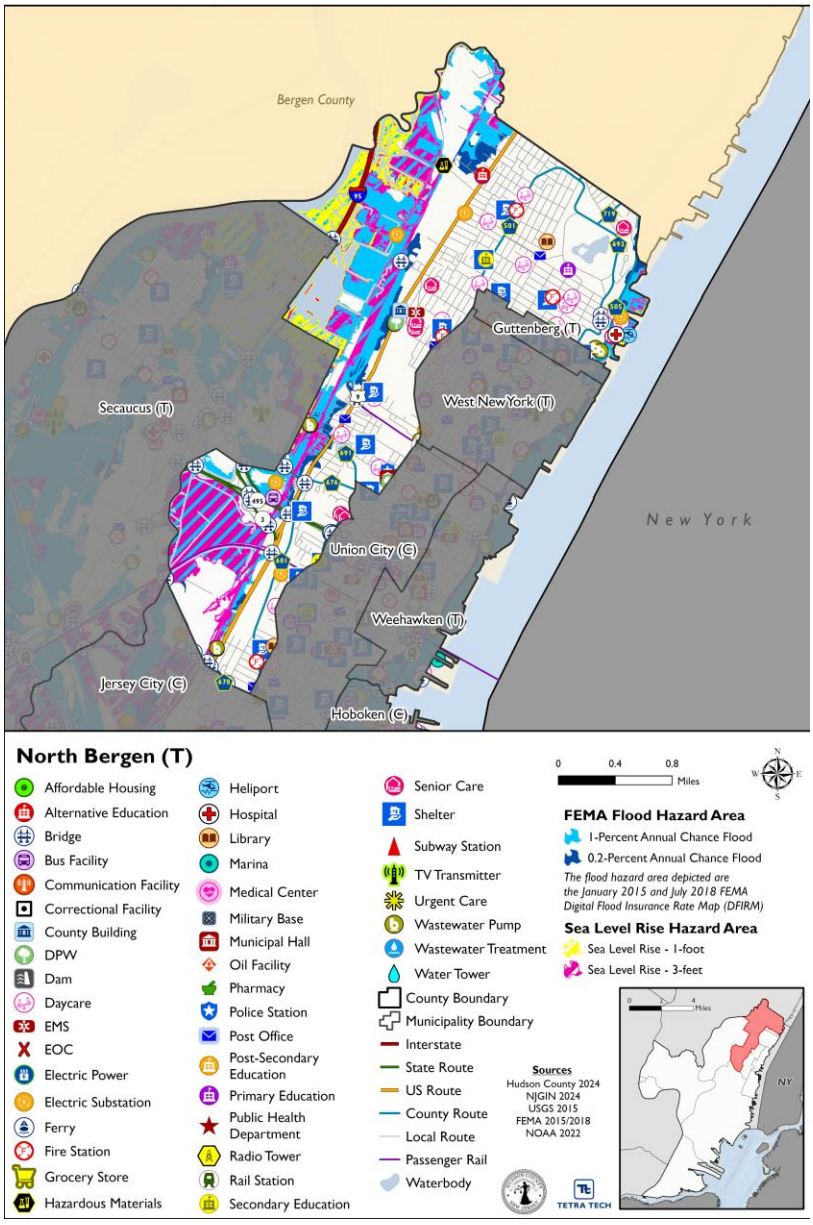
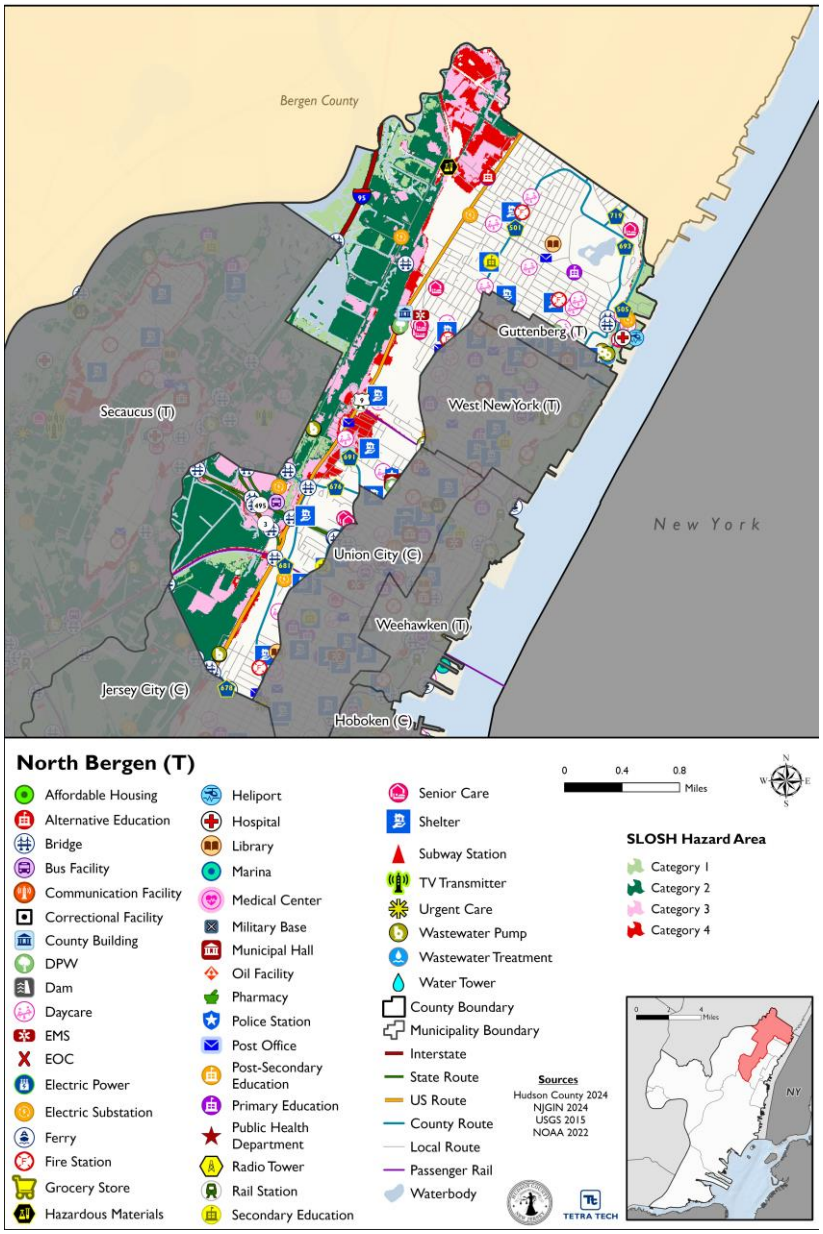


Figure 10-3. North Bergen Hazard Area Extent and Location Map 3



10.6.2 Hazard Event History

The history of natural and non-natural hazard events in North Bergen is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 10-14 provides details on loss and damage in North Bergen during hazard events since the last hazard mitigation plan update.

Table 10-14. Hazard Event History in North Bergen

Dates of Event	Event Type (Disaster Declaration)	County Designated?	Summary of Event	Summary of Damage and Losses in North Bergen
February 25, 2019	Strong Wind, High Wind	No	Widespread damaging wind gusts occurred as storms moved through Hudson County. Wind gusts reached an estimated 58 miles per hour. Damages from these strong, damaging winds totaled over $50,000 across the County.	
January 20, 2020 – May 11, 2023	Covid-19 Pandemic (EM-3451-NJ, DR-4488-NJ)	Yes	As of March 4, 2023, Hudson County accounts for 219,191 positive cases of COVID-19 in the State of New Jersey, and 2,671 of the reported deaths. A total of 1,565,233 vaccinations have been delivered in the County to both residents and non-residents.	
February 7, 2020	Strong Wind, High Wind	No	Widespread damaging wind gusts occurred as storms moved through Hudson County. Wind gusts reached an estimated 53 miles per hour. Damages from these strong, damaging winds totaled over $50,000 across the County.	
April 13, 2020	Strong Wind, High Wind	No	Widespread damaging wind gusts occurred as storms moved through Hudson County. Wind gusts reached an estimated 58 miles per hour. Damages from these strong, damaging winds totaled over $50,000 across the County.	
August 4, 2020	Tropical Storm Isaias (DR-4574-NJ)	Yes	The remnants of Hurricane Ida produced heavy rainfall, flash floods, widespread wind damage, and power outages. There were multiple disruptions to mass transit and road closures due to downed power lines and trees were noted, with numerous water systems having to move to alternate power. One person was injured in Hudson County because of this event.	
November 15, 2020	Heavy Rains and Tornado	No	Buildings damaged, fences and trees flattened.	

Commented [SU2]: TOWN: Please indicate any damages or losses in North Bergen caused by these hazard events.

Dates of Event	Event Type (Disaster Declaration)	County Designated?	Summary of Event	Summary of Damage and Losses in North Bergen
September 1-3, 2021	Remnants of Hurricane Ida (EM-3573-NJ, DR-4614-NJ)	Yes	Extremely heavy rainfall associated with the remnants of Hurricane Ida overspread northeast New Jersey during the evening of September 1 and continued through the early morning hours of September 2. Rainfall totals ranged from 5-8+ inches across much of the region, with much of that rain falling in just a few hours.This resulted in widespread flash flooding leading to numerous road closures and water rescues in addition to extensive river flooding. One fatality and seven injuries occurred in Hudson County as a result of this storm.	
January 28-29, 2022	Winter Storm	No	A Nor'easter brought snow and gusty winds. Wind gusts of 40 mph were reported. Snow and blowing snow impacted Hudson County, with snow totals amounting to 8.5 inches in Hudson County.	
February 24, 2022	Winter Storm	No	Snow and winds forecast required a township delayed opening.	
November 11, 2022	Remnants of Hurricane Nicole	No	Heavy winds and rain.	
December 23, 2022	Forecast Heavy Rains/ Flooding	No	Storm prompted the Hackensack/PGH hospital to activate command center.	
April 30,2023	Heavy Rains and Winds	No	Storm caused an uptown power outage.	
June 7, 2023	Canadian Wildfires	No	Poor air quality.	
September 29,2023	Heavy Rains	No	Numerous roads flooded and closes, motorists stranded and rescued.	
December 13, 2023	Landslide	No	Rock collapse on the Palisades requiring evacuations.	
January 9, 2024	Heavy Rains	No	Numerous road closures, trees and wires down, floding	
March 23, 2024	Heavy Rains	No	Roadways flooded and closed; motorists stranded.	
April 3, 2024	Heavy Rain and Winds	No	Multiple trees and wires down, building damage.	
April 5, 2024	Earthquake	No	Tremors felt in the tri-state area during a 4.7 earthquake event in New Jersey.	

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)
N/A = Not applicable

Commented [SU2]: TOWN: Please indicate any damages or losses in North Bergen caused by these hazard events.

10.6.3 Hazard Ranking and Vulnerabilities

The hazard profiles in Volume I have detailed information regarding each planning partner's vulnerability to the identified hazards. The following presents key risk assessment results for North Bergen.

10.6.3.1 Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume I. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions. North Bergen reviewed the County hazard ranking and individual results to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the Township indicated the following:

- Geological hazards changed from low to medium. The Town indicated that there have been a few rockslides along the Palisades Cliffs down towards properties fronting River Rd.

Table 10-15 shows North Bergen's final hazard rankings for identified hazards of concern. Mitigation action development uses the ranking to target hazards with the highest risk.

Table 10-15. Hazard Ranking

Hazard	Rank
Dam and Levee Failure	Low
Drought	Medium
Extreme Temperatures	Low
Flood	High
Geological Hazards	Medium
Severe Weather	High
Severe Winter Weather	Medium
Wildfire	Low

Note: The scale is based on the hazard rankings established in Volume I, modified as appropriate based on review by the jurisdiction

10.6.3.2 Critical Facilities

Table 10-16 identifies critical facilities in the community located in the 1 percent and 0.2 percent annual chance floodplains.

Table 10-16. Critical Facilities Flood Vulnerability

Name	Type	Vulnerability	
		1% Annual Chance Event	0.2% Annual Chance Event
8Th Street Ps-PS02	Wastewater Pump	X	X
61ST St Ps- PS03 (Controls, Pumps, Wet Well)	Wastewater Pump	-	X
APPLEVIEW EARLY LEARNING CTR	Daycare	X	X
Central Ps-PS01	Wastewater Pump	X	X
Conrail Light Rail	Bridge	-	X
CSX RAIL	Bridge	X	X
HMH PALISADES CHILDCARE CENTER	Daycare	X	X
Homestead Sub.	Electric Substation	X	X
Meter (Central Ps)-PS01	Wastewater Pump	X	X
NJ TRANSIT PARK & RIDE	Bus Facility	X	X
North Bergen Sub.	Electric Substation	X	X
NORTHERN SEC. & RAMP A	Bridge	X	X
Palisades Medical Center	Hospital	X	X
Palisades Medical Center Heliport	Heliport	X	X
PAUNPECK CREEK	Bridge	X	X
River Road Sub.	Electric Substation	X	X
The Harborage at Pallisades	Senior Care	X	X
Tonnelle Ave Station	Rail Station	-	X
W.r. Grace & Co. Conn. - Grace Construct	Hazardous Materials	X	X
Woodcliff P.S (River Rd)-PS01W	Wastewater Pump	X	X
Woodcliff Sewage Treatment Plant	Wastewater Treatment	X	X

Source: Hudson County; HIFLD; NJGIN

In addition to critical facilities that are exposed to flooding, the following high hazard dams are located in North Bergen:

- None Identified

10.6.4 Identified Issues

After review of North Bergen's hazard event history, hazard rankings, hazard location, and current capabilities, North Bergen identified the following vulnerabilities within the community:

- Mazzoni Place and lower section of the High Tech High School floods during rain/storm events.
- West 91st Street constantly floods during rain and storm events.
- Power outages at critical facilities owned by the Township Board of Education (BOE).

- Flooding during rain/storm events coupled with tide cycle cause flooding along West Side Ave to 91st Street / Fairview Ave and Railroad Ave.
- Supplying backup power to critical structure, Health Dept. located at 1116 43rd street.
- Facility has insufficient generator capacity to remain fully functional during an emergency.
- Officials in NFIP-participating communities are responsible for regulating all development in SFHAs by issuing permits and enforcing local floodplain requirements, including Substantial Damage, for the repairs of damaged buildings. After any disaster event, they must:
    - Determine where the damage occurred within the community and if the damaged structures are in an SFHA.
    - Determine what to use for "market value" and cost to repair; uniformly applying regulations will protect against liability and promote equitable administration.
    - Determine if repairing plus improving the damaged structure equals or exceeds 50% of the structure's pre-damage value.
    - Require permits for floodplain development.

  The municipality does not have a Substantial Damage Management Plan in place, nor do they have a formal process in place when conducting substantial damage determinations. The municipality is in need of a formal process and plan to provide a framework for conducting such inspections and determinations.

* This issue was identified as a specific area of concern based on resident response to the Hudson County Hazard Mitigation Citizen survey.

10.7 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous HMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

10.7.1 Past Mitigation Action Status

Table 10-17 indicates progress on the Township's mitigation strategy identified in the 2020 HMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

10.7.2 Additional Mitigation Efforts

In addition to the mitigation actions completed in Table 10-17, North Bergen identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, North Bergen has made significant mitigation progress in the following areas:

- None Identified

Table 10-17. Status of Previous Mitigation Actions

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-NORTH BERGEN-001	Flood mitigation for Mazzoni Place / Flood Proof High Tech High School	Coastal Storm, Severe Weather, Flood Coastal Storm, Severe Weather, Flood	North Bergen Engineering with support from Hudson County Engineering	**Problem:** Mazzoni Place and Lower section of the High Tech High School Floods during rain/storm events. **Solution:** Study was complete and result show that flood proofing the Mazzoni Place near lower section of High School will eliminate flooding in the area.	1. In Progress 2. -	1. Include 2.No changes needed 3. N/A
2020-NORTH BERGEN-002	Proposed stormwater diversion along culvert south of 91st Street	Coastal Storm, Severe Weather, Flood	North Bergen Engineering with support from Hudson County Engineering	**Problem:** West 91st Street constantly floods during rain and storm events. **Solution:** Upsize approximately 1600 feet of stormwater piping to 91st Street.	1. In Progress 2. Under contract and expected to be constructed by the end of 2025	1. Include 2. Change in scope to New 36" Line – coming down from 84th street from New Kirk and From Tonnelle to new CSO tank. 3. N/A

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-NORTH BERGEN-003	Pump station and tide gate along northwestern municipal quadrant / River Road mitigation	Coastal Storm, Severe Weather, Flood	North Bergen Engineering with support from Hudson County Engineering	**Problem:** Flooding during Rain/storm events coupled with tide cycle cause flooding along West Side Ave to 91st Street / Fairview Ave and Railroad Ave. **Solution:** To mitigate flooding hazards caused by rain/storm events along the north western quadrant of the municipality. Install a pump station along West Side Avenue incorporating backflow preventers. Tide gates installed at Fairview Ave. / Railroad Ave. intersection and dredging of Bellman's Creek to prevent surcharge upstream between 91st Street and Railroad Ave. to reduce flooding in the area.	1. In Progress 2. Belman's Creek Dredging in environmental planning phase. Replacement of culvert on 91st street under construction currently, expected to be finished before the end of 2025	1. Include 2. Include that the action is in environmental planning phase. 3. N/A

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-NORTH BERGEN-004	Backup Power for North Bergen BOE Facilities	Coastal Storm, Severe Weather, Severe Winter Weather	North Bergen BOE	**Problem:** Power outages at critical facilities owned by the Township Board of Education **Solution:** Install a stand-alone natural gas generator with automatic transfer switch to provide emergency power for the following North Bergen Board of Education-owned critical facilities, as identified in the HCSRR: • North Bergen High School – Main shelter location & medical Point of Distribution (POD) • Lincoln School - Midtown shelter location & medical Point of Distribution (POD) Kennedy School - Downtown shelter location	1. In Progress 2. North Bergen High School Generated – Complete Lincoln School and Kennedy School not started, awaiting funding source	1. Include 2. Include updated progress in solution statement. 3. N/A

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-NORTH BERGEN-005	North Bergen Health Dept. Backup Power	Coastal Storm, Severe Weather, Severe Winter Weather	North Bergen DPW	**Problem:** Supplying backup power to critical structure, Health Dept. located at 1116 43rd street. **Solution:** Install stand-alone natural gas generator and automatic transfer switch to provide emergency power for vital records, clinic and medical point of distribution at 1116 43rd Street in North Bergen.	1. No Progress 2. Awaiting funding source	1. Include 2. No Changes 3. N/A
2020-NORTH BERGEN-006	Retrofit DPW Tonnelle & add two generators	Coastal Storm, Severe Weather, Severe Winter Weather	North Bergen DPW	**Problem:** Facility has insufficient generator capacity to remain fully functional during an emergency. **Solution:** Adding generator capacity would be supplied to maintain the DPW, the Repair shop and the Police sub-station. The generator would be built at a height above flood stage. This facility has been identified as a critical facility in the risk assessment of this plan.	1. No Progress 2. Awaiting funding source	1. Include 2. No Changes 3. N/A

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-NORTH BERGEN-007	Mitigating floodprone properties	Coastal Storm, Flood, Severe Weather	Township Floodplain Administrator	**Problem:** There are 14 repetitive loss properties in the Township of North Bergen. These 14 properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** Conduct outreach to 14 floodprone property owners and provide information on mitigation alternatives.	1. Ongoing 2. -	1.Discontinue 2.N/A 3.Ongoing capability
2020-NORTH BERGEN-008	Critical Facility Outreach – Child Care Centers	Flood, Coastal Storm, Severe Weather	Township Engineer	**Problem:** There are two childcare facilities located in the floodplain and exposed to flood damage. **Solution:** Provide public outreach to property owners informing them that their facility is located within a floodplain and might be susceptible to flood damages. Outreach will include mitigation options to protect the facility from flood damage.	1. Ongoing 2. -	1.Discontinue 2.N/A 3.Ongoing capability

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-NORTH BERGEN-009	Critical Facility Outreach – Electric Substations	Flood, Coastal Storm, Severe Weather	Township Engineer	**Problem:** There are two electric substation facilities located in the floodplain and exposed to flood damage. **Solution:** Provide public outreach to property owners informing them that their facility is located within a floodplain and might be susceptible to flood damages. Outreach will include mitigation options to protect the facility from flood damage.	1. Ongoing 2. -	1.Discontinue 2.N/A 3.Ongoing capability
2020-NORTH BERGEN-010	Critical Facility Outreach – Hazmat Facility	Flood, Coastal Storm, Severe Weather	Township Engineer	**Problem:** There is one hazmat facility located in the floodplain and exposed to flood damage. **Solution:** Provide public outreach to property owners informing them that their facility is located within a floodplain and might be susceptible to flood damages. Outreach will include mitigation options to protect the facility from flood damage.	1. Ongoing 2. -	1.Discontinue 2.N/A 3.Ongoing capability

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-NORTH BERGEN-011	Critical Facility Outreach – Wastewater Pumps	Flood, Coastal Storm, Severe Weather	Township Engineer	**Problem:** There are four wastewater pump facilities located in the floodplain and exposed to flood damage. **Solution:** Provide public outreach to property owners informing them that their facility is located within a floodplain and might be susceptible to flood damages. Outreach will include mitigation options to protect the facility from flood damage.	1. Ongoing 2. -	1.Discontinue 2.N/A 3.Ongoing capability
2020-NORTH BERGEN-012	Critical Facility Outreach – Wastewater Treatment	Flood, Coastal Storm, Severe Weather	Township Engineer	**Problem:** There are two wastewater treatment facilities located in the floodplain and exposed to flood damage. **Solution:** Provide public outreach to property owners informing them that their facility is located within a floodplain and might be susceptible to flood damages. Outreach will include mitigation options to protect the facility from flood damage.	1. Ongoing 2. -	1.Discontinue 2.N/A 3.Ongoing capability

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-NORTH BERGEN-013	Critical Facility Outreach – Senior Facility	Flood, Coastal Storm, Severe Weather	Township Engineer	**Problem:** There is one senior facility located in the floodplain and exposed to flood damage. **Solution:** Provide public outreach to property owners informing them that their facility is located within a floodplain and might be susceptible to flood damages. Outreach will include mitigation options to protect the facility from flood damage.	1. Ongoing 2. -	1.Discontinue 2.N/A 3.Ongoing capability

10.7.3 Proposed Hazard Mitigation Actions for the HMP Update

North Bergen participated in the mitigation strategy workshop for this HMP to identify appropriate actions to include in a local hazard mitigation strategy. Its comprehensive consideration of all possible activities to address hazards of concern included review of the following FEMA documents:

- FEMA 551 "Selecting Appropriate Mitigation Measures for Floodprone Structures" (March 2007)
- FEMA "Mitigation Ideas—A Resource for Reducing Risk to Natural Hazards" (January 2013).

The action worksheets included at the end of this annex list the mitigation actions that North Bergen would like to pursue in the future to reduce the effects of hazards. The actions are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in Township priorities.

Table 10-18 indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table to further demonstrate the wide range of activities and mitigation measures selected.

Volume I identifies 14 evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric rank is assigned (-1, 0, or 1) for each of the evaluation criteria. Table 10-19 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 10-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	Actions That Address the Hazard, by Action Category									
	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam and Levee Failure	X				X					X
Drought	X				X					X
Extreme Temperatures	X				X					X
Flood	X	X			X	X				X
Geological Hazards	X				X					X
Severe Weather	X	X			X	X				X
Severe Winter Weather	X	X			X					X
Wildfire	X				X					X

Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.

Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct structures to reduce the impact of hazards.

Natural Systems Protection (NSP)—These are actions that minimize damage and losses and preserve or restore the functions of natural systems.

Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.

Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.

Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.

Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.

Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities

Table 10-19. Summary of Prioritization of Actions

Project Number	Project Name	Scores for Evaluation Criteria															High / Medium / Low
		Life Safety	Property Protection	Cost-Effectiveness	Political	Legal	Fiscal	Environmental	Social Vulnerability	Administrative	Hazards of Concern	Climate Change	Timeline	Community Lifelines	Other Local Objectives	Total	
2025-NorthBergen-001	Mazzoni Place and High Tech High School	1	1	1	1	0	0	0	1	1	1	1	1	1	1	**11**	High
2025-NorthBergen-002	Stormwater Diversion	1	1	1	1	1	0	0	1	1	1	1	1	1	0	**11**	High
2025-NorthBergen-003	Pump Station and Tide Gate	1	1	1	1	1	0	0	1	1	1	1	1	1	0	**11**	High
2025-NorthBergen-004	Backup Power for Board of Education Facilities	1	1	1	1	1	0	0	1	1	1	1	1	1	1	**12**	High
2025-NorthBergen-005	Backup Power for Health Department	1	1	1	0	1	0	0	0	1	1	1	1	1	0	**9**	Medium
2025-NorthBergen-006	Retrofit DPW	1	1	1	1	1	0	0	0	1	1	1	1	1	0	**10**	Medium
2025-NorthBergen-007	Substantial Damage Management Plan	0	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High

Note: Volume I, Section 6 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14).

Action 2025-NorthBergen-001. Flood Mitigation – Mazzoni Place and High Tech High School

Lead Agency:	Town Engineering
Supporting Agencies:	Hudson County Engineering
Hazards of Concern:	Flood, Severe Weather
Description of the Problem:	Mazzoni Place and lower section of the High Tech High School floods during rain/storm events.
Description of the Solution:	The Town Engineer conducted a study and results show that flood proofing the Mazzoni Place near the lower section of High Tech High School will eliminate flooding in the area.
Estimated Cost:	High
Potential Funding Sources:	HMGP, Municipal Budget, County Budget
Implementation Timeline:	1-5 years
Goals Met:	1,2,6,7
Benefits:	This school serves as an emergency shelter for the community. It is critical to maintain this facility during an emergency.
Impact on Socially Vulnerable Populations:	Flooding disproportionately affects socially vulnerable populations. Flood-proofing Mazzoni Place will help protect these groups by reducing their exposure to flood risks and providing a shelter for those in need during a flood event.
Impact on Future Development:	Flood-proofing efforts will make the area more resilient to severe weather, potentially encouraging future development by reducing the risk of flood damage.
Impact on Critical Facilities/Lifelines:	Protecting Mazzoni Place and High Tech High School from flooding ensures that these critical facilities remain operational during emergencies, safeguarding essential services such as shelter and education.
Impact on Capabilities:	Enhancing flood resilience will improve the community's overall disaster response capabilities, ensuring quicker recovery and better preparedness for future flood events.
Climate Change Considerations:	Climate change is expected to increase the frequency and intensity of severe weather events, including flooding. Flood-proofing measures will help mitigate these impacts, making the community more resilient to climate-related hazards.
Mitigation Category	Structural and Infrastructure Project
CRS Category	Property Protection
Priority	High
Alternatives	

Action	Evaluation
No Action	-
Elevate Structures	Complex and costly
Flood Barriers	Requires regular maintenance

Commented [SU3]: TOWN: Do you have an idea of how you will flood proof? I'd like to indicate that in this statement, if possible.

Action 2025-NorthBergen-002. Stormwater Diversion

Lead Agency:	Township Engineering
Supporting Agencies:	County Engineering
Hazards of Concern:	Flood, Severe Weather
Description of the Problem:	West 91st Street constantly floods during rain and storm events.
Description of the Solution:	Install a new 36" stormwater line extending from 84th Street, connecting New Kirk and Tonnelle Avenue to the new CSO tank. This project is currently under contract and is expected to be completed by the end of 2025.
Estimated Cost:	High
Potential Funding Sources:	FEMA PDM, Municipal Budget, County Budget
Implementation Timeline:	1-5 years
Goals Met:	1,2,6
Benefits:	Reduces loss and vulnerability to flooding in commercial section of the Township.
Impact on Socially Vulnerable Populations:	The new stormwater line will reduce flooding on West 91st Street, improving living conditions for vulnerable residents.
Impact on Future Development:	Better stormwater management will make the area more attractive for new residential and commercial projects.
Impact on Critical Facilities/Lifelines:	The project will protect essential services like healthcare and emergency response from flood disruptions.
Impact on Capabilities:	The new infrastructure will help the community handle heavy rain and storms more effectively.
Climate Change Considerations:	The stormwater line is designed to manage increased rainfall and severe storms due to climate change.
Mitigation Category	Structural and Infrastructure Project
CRS Category	Property Protection
Priority	High

Alternatives	**Action**	**Evaluation**
	No Action	-
	Rain Gardens	Requires significant land area and maintenance
	Underground Detention Systems	High cost and complex

Action 2025-NorthBergen-003. Pump Station and Tide Gate

Lead Agency:	Town Engineering
Supporting Agencies:	County Engineering
Hazards of Concern:	Flood, Severe Weather
Description of the Problem:	Flooding during rain/storm events coupled with tide cycle cause flooding along West Side Ave to 91st Street / Fairview Ave and Railroad Ave.
Description of the Solution:	To mitigate flooding hazards caused by rain/storm events along the northwestern quadrant of the municipality, Town Engineering will install a pump station along West Side Avenue incorporating backflow preventers. Tide gates will be installed at the Fairview Ave. / Railroad Ave. intersection, and dredging of Bellman's Creek will be conducted to prevent surcharge upstream between 91st Street and Railroad Ave. The dredging of Bellman's Creek is currently in the environmental planning phase. Additionally, the replacement of the culvert on 91st Street is under construction and is expected to be completed before the end of 2025.
Estimated Cost:	High
Potential Funding Sources:	HMGP, FMA, Municipal Budget, County Budget
Implementation Timeline:	1-5 years
Goals Met:	1,2,6
Benefits:	The western businesses, including warehouses, trucking facilities, and the municipal recreation complex, will remain operational and undisturbed during rain and storm events.
Impact on Socially Vulnerable Populations:	The project will reduce flooding, improving living conditions for vulnerable residents.
Impact on Future Development:	Better flood management will make the area more attractive for new development.
Impact on Critical Facilities/Lifelines:	The project will protect essential services like healthcare and emergency response from flood disruptions.
Impact on Capabilities:	The new infrastructure will help the community handle heavy rain and storms more effectively.
Climate Change Considerations:	The project is designed to manage increased rainfall and severe storms due to climate change.
Mitigation Category	Structure and Infrastructure Project
CRS Category	Property Protection
Priority	High

Alternatives

Action	Evaluation
No Action	_
Rain Gardens	Requires significant land area and maintenance
Underground Detention Systems	High cost and complex

Action 2025-NorthBergen-004. Backup Power for Board of Education Facilities

Lead Agency:	Town Board of Education
Supporting Agencies:	-
Hazards of Concern:	Severe Weather, Severe Winter Weather
Description of the Problem:	Power outages at critical facilities owned by the Township Board of Education (BOE).
Description of the Solution:	Install stand-alone natural gas generators with automatic transfer switches to provide emergency power for the following North Bergen Board of Education-owned critical facilities, as identified in the HCSRR: • **North Bergen High School** – Main shelter location & medical Point of Distribution (POD) (Completed) • **Lincoln School** – Midtown shelter location & medical Point of Distribution (POD) (Awaiting funding source) • **Kennedy School** – Downtown shelter location (Awaiting funding source)
Estimated Cost:	Medium
Potential Funding Sources:	BOE Budget, HMGP, PDM
Implementation Timeline:	1-5 years
Goals Met:	1,5,6,7
Benefits:	This action ensures continued operation of a critical facility and its essential functions during a power outage.
Impact on Socially Vulnerable Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.
Impact on Future Development:	This action results in protection of a critical facility that could support future development.
Impact on Critical Facilities/Lifelines:	This action ensures continued operation of a critical facility and its essential functions during a power outage.
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.
Climate Change Considerations:	Climate change is likely to increase severe weather events such as flooding, wind, and extreme temperatures that result in power failures. This action accounts for a likely increase in power failure events.
Mitigation Category	Structure and Infrastructure Projects
CRS Category	Emergency Services
Priority	High

Alternatives

Action	Evaluation
No Action	-
Microgrid	Costly and difficult to implement.
Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2025-NorthBergen-005. Backup Power for Health Department

Lead Agency:	Town DPW
Supporting Agencies:	-
Hazards of Concern:	Severe Weather, Severe Winter Weather
Description of the Problem:	Supplying backup power to critical structure, Health Dept. located at 1116 43rd street.
Description of the Solution:	Install stand-alone natural gas generator and automatic transfer switch to provide emergency power for vital records, clinic and medical point of distribution at 1116 43rd Street in North Bergen.
Estimated Cost:	Medium
Potential Funding Sources:	Town Budget, HMGP, PDM
Implementation Timeline:	1-5 years
Goals Met:	1,5,6,7
Benefits:	This action protects public health and safety and ensures continued operation of a critical facility and its essential functions during a power outage.
Impact on Socially Vulnerable Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.
Impact on Future Development:	This action results in protection of a critical facility that could support future development.
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of a critical facility and its essential functions during a power outage.
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.
Climate Change Considerations:	Climate change is likely to increase severe weather events such as flooding, wind, and extreme temperatures that result in power failures. This action accounts for a likely increase in power failure events.
Mitigation Category	Structure and Infrastructure Projects
CRS Category	Emergency Services
Priority	Medium
Alternatives	

Action	Evaluation
No Action	-
Microgrid	Costly and difficult to implement.
Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2025-NorthBergen-006. Retrofit DPW

Lead Agency:	Town DPW
Supporting Agencies:	-
Hazards of Concern:	Severe Weather, Severe Winter Weather
Description of the Problem:	Facility has insufficient generator capacity to remain fully functional during an emergency.
Description of the Solution:	Adding generator capacity would be supplied to maintain the DPW, the Repair shop and the Police sub-station. The generator would be built at a height above flood stage. This facility has been identified as a critical facility in the risk assessment of this plan.
Estimated Cost:	High
Potential Funding Sources:	HMGP, PDM
Implementation Timeline:	1-5 years
Goals Met:	1,5,6,7
Benefits:	This action ensures continued operation of a critical facility and its essential functions during a power outage.
Impact on Socially Vulnerable Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.
Impact on Future Development:	This action results in protection of a critical facility that could support future development.
Impact on Critical Facilities/Lifelines:	This action ensures continued operation of a critical facility and its essential functions during a power outage.
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.
Climate Change Considerations:	Climate change is likely to increase severe weather events such as flooding, wind, and extreme temperatures that result in power failures. This action accounts for a likely increase in power failure events.
Mitigation Category	Structure and Infrastructure Projects
CRS Category	Emergency Services
Priority	Medium

Alternatives

Action	Evaluation
No Action	-
Microgrid	Costly and difficult to implement.
Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2025-NorthBergen-007. Substantial Damage Management Plan

Lead Agency:	Floodplain Administrator
Supporting Agencies:	Town OEM, Town DPW
Hazards of Concern:	Dam and Levee Failure, Drought, Extreme Temperatures, Flood, Geological Hazards, Severe Weather, Severe Winter Weather, Wildfire
Description of the Problem:	Officials in NFIP-participating communities are responsible for regulating all development in SFHAs by issuing permits and enforcing local floodplain requirements, including Substantial Damage, for the repairs of damaged buildings. After any disaster event, they must: • Determine where the damage occurred within the community and if the damaged structures are in an SFHA. • Determine what to use for "market value" and cost to repair; uniformly applying regulations will protect against liability and promote equitable administration. • Determine if repairing plus improving the damaged structure equals or exceeds 50% of the structure's pre-damage value. • Require permits for floodplain development. The municipality does not have a Substantial Damage Management Plan in place, nor do they have a formal process in place when conducting substantial damage determinations. The municipality is in need of a formal process and plan to provide a framework for conducting such inspections and determinations.
Description of the Solution:	The municipality will develop a Substantial Damage Management Plan, following the six step planning process in 2021 *Developing a Substantial Damage Management Plan* (https://crsresources.org/files/500/developing_subst_damge_mgmt_plan.pdf). This plan will outline responsibilities for Substantial Damage determinations, determining market value, and permit approval processes following a disaster event.
Estimated Cost:	Low
Potential Funding Sources:	Municipal budget
Implementation Timeline:	Within 5 years to develop the plan; ongoing to maintain and update the plan
Goals Met:	3, 6
Benefits:	This plan will provide a process in making Substantial Damage Determinations and allow the municipality to make these determinations and meet NFIP requirements more quickly.
Impact on Socially Vulnerable Populations:	Substantially damaged structures are required to be rebuilt to be compliance with current codes. Socially vulnerable populations may not have the financial means to make these improvements. This action may allow for the identification of potential resources to address substantial damages to structures owned by socially vulnerable populations.
Impact on Future Development:	A Substantial Damage Management Plan would include all existing, current, and future development in the municipality.
Impact on Critical Facilities/Lifelines:	A Substantial Damage Management Plan would include all critical facilities and lifelines in the municipality.
Impact on Capabilities:	This action improves disaster recovery capabilities.
Climate Change Considerations:	Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action provides additional planning for disaster recovery.
Mitigation Category	Local Plans and Regulations

CRS Category	Emergency Services, Preventative Measure	
Priority	High	
Alternatives	**Action**	**Evaluation**
	No Action	-
	Rely on state or federal resources following disaster events	Resources may not be available during major widespread events
	Establish MOUs with outside agencies to conduct Substantial Damage Determinations	A plan outlining responsibilities is still necessary to prevent missing important requirements