



SECTION 9. JURISDICTIONAL ANNEXES

9.4 CITY OF BORDENTOWN

This section presents the jurisdictional annex for the City of Bordentown that provides resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Bordentown participated in the planning process, an assessment of the City of Bordentown’s risk and vulnerability, the different capabilities used in the City of Bordentown, and an action plan that will be implemented to achieve a more resilient community.

9.4.1 Hazard Mitigation Planning Team

The City of Bordentown identified the hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Bordentown departments, including Emergency Management and the Planning Board. The Emergency Management Coordinator represented the community on the Burlington County Hazard Mitigation Planning Partnership and supported the local planning process requirements 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.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.4-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Sgt. Ryan J. Lynch, Emergency Management Coordinator	Name/Title:	Margaret Peak, Administrator
Address:	324 Farnsworth Avenue, Bordentown, NJ 08505	Address:	324 Farnsworth Avenue, Bordentown, NJ 08505
Phone Number:	(609) 865-8925	Phone Number:	(609) 298-0604
Email:	rlynch@cityofbordentownpd.com	Email:	mpeak@cityofbordentown.com
NFIP Floodplain Administrator			
Name/Title:	Jennifer Smith, Planning Board Secretary		
Address:	324 Farnsworth Avenue Bordentown, NJ 08505		
Phone Number:	(609) 298-2121		
Email:	jsmith@cityofbordentown.com		
Additional Contributors:			



Name/Title: Method of Participation:	Brian Maugeri, Sr., Deputy Emergency Management Coordinator (Former) Provided information on previous events and capabilities. Attended the Planning Partnership Risk Assessment Meeting and Mitigation Strategy Workshop. Reviewed draft annex.
Name/Title: Method of Participation:	Margaret Peak, Administrator Provided information on capabilities. Reviewed draft annex
Name/Title: Method of Participation:	Jennifer Smith, Planning Board Secretary Provided information on capabilities including floodplain administration capabilities. Reviewed draft annex
Name/Title: Method of Participation:	James Lynch, Jr., Mayor (Former) / Emergency Management Coordinator (Former) Provided information on capabilities. Reviewed draft annex
Name/Title: Method of Participation:	Robert Erickson, Public Works Superintendent Reviewed draft annex
Name/Title: Method of Participation:	Shaun Lafferty, Police Chief Reviewed draft annex

9.4.2 Municipal Profile

The City of Bordentown is located on the northern portion of Burlington County and encompasses one square mile. It is bordered to the northwest by the Delaware River and surrounded by the Township of Bordentown. The City has a total area of 0.968 square miles, including 0.929 square miles of land and 0.039 square miles of water.

The City of Bordentown has been governed under the Commission form of government (Walsh Act) since 1913, with a government consisting of three commissioners, one of whom is selected to serve as Mayor. Members are elected to four-year concurrent terms in office in non-partisan elections. Under this form, the Commissioners function as the legislative authority of the municipality.

According to the U.S. Census, the 2020 population for the City of Bordentown was 3,933, a 104.4 percent increase from the 2010 Census. Data from the 2021 American Community Survey 5-Year Population Estimates indicate that 19.3 percent is 65 years of age or older, 5.4 percent of the population is 5 years of age or younger, 0.4 percent is non-English speaking, 10.6 percent has a disability, and 5.7 percent is below the poverty level.

The Steering Committee also identified households that are above the Federal Poverty Level, but earn less than the basic cost of living as socially vulnerable. For the City of Bordentown, 34 percent of households earn less than the basic cost of living and are considered socially vulnerable.

Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.4.3 Jurisdictional Capability Assessment and Integration

The City of Bordentown performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment includes the following analyses:



- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities.
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

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

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Bordentown. The comment field provides information as to how the capability integrates hazard mitigation and risk reduction.

Table 9.4-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.); Chapter 141 Construction Code Enforcing Agency	State & Local	New Jersey Department of Community Affairs
<i>How does this reduce risk?</i> As of September 1, 2023, all City of Bordentown permits for construction, building, electrical, plumbing, and fire protection are being issued by the Township of Bordentown’s Construction Office, under a shared services agreement between the two municipalities. The Township of Bordentown’s Construction Office is the enforcement agency for Chapter 141 of the City code.				
Zoning/Land Use Code	Yes	Chapter 300 Zoning	Local	Zoning Officer
<i>How does this reduce risk?</i> It is the purpose of the City of Bordentown in adopting this chapter to exercise the powers granted to the City by the Municipal Land Use Law to promote the orderly growth of lands within the City, taking into consideration the character of each district and its peculiar suitability for particular uses, and to encourage the most appropriate use of land through the police power generally. It is further the purpose of the City in adopting this chapter to limit and restrict buildings and structures to specified districts and to regulate buildings and structures according to their type and nature and the extent of their use and to regulate the nature and extent of use of land for trade, industry, residence, open space or other purposes in order to avoid undue concentration of population and to conserve the value of property in order to protect the public health, safety and morals and promote the general welfare throughout the entire community.				
Subdivision Ordinance	Yes	Chapter 244 Subdivision of Land and Site Plan Approval	Local	Planning Board
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<p>The purpose of this chapter is to provide rules, regulations, and standards to guide land subdivision and site planning in the City of Bordentown in a manner which will promote the public health, safety, morals, and general welfare. It will be administered to ensure an orderly growth and development which will not conflict with the development and general welfare of neighboring municipalities, the county and the state as a whole and to ensure adequate and suitable streets, water supply, drainage, shade trees, sewerage facilities and other necessary utilities, public area and open space, protection from flooding and conservation of soils and to promote desirable visual environment through creative development techniques and good civic design and arrangements.</p>				
Site Plan Ordinance	Yes	Chapter 244 Subdivision of Land and Site Plan Approval	Local	Planning Board
<p><i>How does this reduce risk?</i></p> <p>The purpose of this chapter is to provide rules, regulations, and standards to guide land subdivision and site planning in the City of Bordentown in a manner which will promote the public health, safety, morals, and general welfare. It will be administered to ensure an orderly growth and development which will not conflict with the development and general welfare of neighboring municipalities, the county and the state as a whole and to ensure adequate and suitable streets, water supply, drainage, shade trees, sewerage facilities and other necessary utilities, public area and open space, protection from flooding and conservation of soils and to promote desirable visual environment through creative development techniques and good civic design and arrangements.</p>				
Stormwater Management Ordinance	Yes	Chapter 237 Stormwater Management	Local	Public Works
<p><i>How does this reduce risk?</i></p> <p>Flood control, groundwater recharge, and pollutant reduction shall be achieved through the use of stormwater management measures, including green infrastructure best management practices (GI BMPs) and nonstructural stormwater management strategies. GI BMPs and low-impact development (LID) should be utilized to meet the goal of maintaining natural hydrology to reduce stormwater runoff volume, reduce erosion, encourage infiltration and groundwater recharge, and reduce pollution. GI BMPs and LID should be developed based upon physical site conditions and the origin, nature and the anticipated quantity, or amount, of potential pollutants. Multiple stormwater management BMPs may be necessary to achieve the established performance standards for water quality, quantity, and groundwater recharge.</p>				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<p><i>How does this reduce risk?</i></p>				
Real Estate Disclosure	Yes	Senate Bill 3110; P. L. 2023, c. 93, July 3, 2023	State	Sellers and Landlords of commercial or residential property
<p><i>How does this reduce risk?</i></p> <p>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.</p> <p>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.</p>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<p>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.</p> <p>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.</p> <p>The disclosure statement must contain the heading “Flood Risk” and ask the seller the following questions:</p> <ul style="list-style-type: none"> • 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? <p>Not all provisions of this law have become effective at the time of the writing of this plan.</p>				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
<p>Consider the following:</p> <ul style="list-style-type: none"> • Are environmental systems that protect development from hazards identified and mapped? • Do environmental policies maintain and restore protective ecosystems? • Do the ordinances prohibit development within, of filling of, wetlands, floodways, and floodplains? • Do environmental policies provide incentives to development that is located outside protective ecosystems? 				
Flood Damage Prevention Ordinance	Yes	Chapter 166 Flood Damage Prevention	Federal, State, Local	Planning Board Secretary
<i>How does this reduce risk?</i>				
<p>It is the purpose of this chapter to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <ol style="list-style-type: none"> Protect human life and health; Minimize expenditure of public money for costly flood control projects; Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; Minimize prolonged business interruptions; Minimize damage to public facilities and utilities, such as water and gas mains, electric, telephone and sewer lines, streets, bridges located in areas of special flood hazard; 				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<p>F. Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;</p> <p>G. Ensure that potential buyers are notified that property is in an area of special flood hazard; and</p> <p>H. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.</p> <p>The City has not adopted NJDEP's Model Code Coordinated Ordinance.</p>				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				
Planning Documents				
Comprehensive/Master Plan	Yes	Bordentown City Comprehensive Plan, June 2021	Local	Planning Board
<i>How does this reduce risk?</i>				
<p>The comprehensive plan provides a coordinated and strategic framework for future policy setting in zoning and coordinated public investment. The plan includes a vision with a set of goals and recommendations to guide land use and infrastructure planning in a manner intended to protect public health, safety, and the general welfare. The comprehensive plan has goals to:</p> <ol style="list-style-type: none"> 1. Preserve and enhance the historic, mixed-use character of the downtown and further integrate history into the City's strategies for economic development and resiliency. 2. Improve safety and comfort for pedestrians, bicyclists, and transit ridership through streetscape improvements and capital investment planning. 3. Strengthen pedestrian activity through a strategic balance of uses and integration with public spaces and streets. 4. Enhance connectivity and wayfinding to community assets like historic landmarks, transit stops, open space, and public parking. 5. Promote opportunities for contextually appropriate infill, redevelopment, and adaptive reuse of historic structures. 6. Manage parking and circulation to improve safety, visibility, mobility, and access for all modes of transportation. 7. Treat public streets as public spaces by continuing to explore opportunities for streetscape amenities, open streets, parklets, and integration of land uses with the streetscape. 8. Embrace the highway corridor by improving safety, access, and gateways into the City while strengthening the City's ratable base. 9. Stay current with emerging land uses, legislation, economic strategies, and administrative best management practices. 				
Capital Improvement Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Stormwater Pollution Prevention Plan	Yes	Stormwater Pollution Prevention Plan, June 2023	Local	Public Works
<i>How does this reduce risk?</i> This plan describes how the City will implement each permit requirement and provides a place for record keeping and documenting when permit requirements were met.				
Open Space Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Forest Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				
Response/Recovery Planning				
Emergency Operations Plan	Yes	Bordentown City Emergency Operation Plan	Local	City EMC



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i>				
The Emergency Operations Plan aims to assess the City's ability to respond to emergency and identifies recommendations to improve its capacity to prepare and respond to future events. The plan address both short- and long-term recovery.				
Continuity of Operations Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the City of Bordentown to oversee and track development.

Table 9.4-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	No	As of September 1, 2023, all City of Bordentown permits for construction, building, electrical, plumbing, and fire protection are being issued by the Township of Bordentown's Construction Office, under a shared services agreement between the two municipalities.
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain
Do you have a buildable land inventory? • If yes, please describe	No	-
Describe the level of build-out in your jurisdiction.	N/A	The southern portion of the City is fairly built out. The northern portion has some land that could potentially be developed.



Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Bordentown and their current responsibilities that contribute to hazard mitigation.

Table 9.4-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	The City of Bordentown Planning and Zoning Board functions as a combined Board and consists of a total of nine members including the Mayor and two alternates. Members of the Board are volunteer residents appointed by the Mayor and consist of members designated as Chair, Vice-Chair and two Alternate members. A Board Attorney, Township Engineer and Board Secretary make up the professional staff who assist the members of the Planning and Zoning Board. The powers, duties and regulations of the Planning and Zoning Board are contained in the Municipal Land Use Law (MLUL).
Zoning Board of Adjustment	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Bordentown City Environmental Commission is composed of nine members and two alternate members appointed by the Mayor. The purpose and mission of the Environmental Commission to educate the residents of the City as well as plan and maintain the environmental assets of the City. It is the obligation and responsibility of the Environmental Commission to be responsive to the Mayor, City Commissioners, and the residents of Bordentown on issues that directly impact the environmental welfare, safety, sustainability, and the general environs of the City.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	The Bordentown City Economic Development Advisory Committee assists in the development and maintenance of a positive business environment in the City, fosters an appropriate mix of business types throughout the City, and works to avoid a proliferation of vacant or underused commercial properties and the nuisances inherited with such conditions. This Committee is composed of eight voting members and one alternate member.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Public Works/Highway Department	Yes	Public Works is responsible for the maintenance of the City's roadways, trash collection, sidewalk and tree maintenance, striping the roads, and maintain parks and recreation facilities. Public Works also is charged with upholding the Stormwater Management City Code and maintaining the Stormwater Pollution Prevention Plan.
Construction/Building/Code Enforcement Department	No	The State of New Jersey, Department of Community Affairs Building Inspectors and Officials performs permitting in the City.
Emergency Management/Public Safety Department	Yes	The mayor serves as the Emergency Management Coordinator. The City has a standalone police department.
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Nixle
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Public Works is responsible for the maintenance of the City's roadways, trash collection, sidewalk and tree maintenance, striping the roads, and maintain parks and recreation facilities. Public Works also is charged with upholding the Stormwater Management City Code and maintaining the Stormwater Pollution Prevention Plan.
Mutual aid agreements	Yes	All City of Bordentown permits for construction, building, electrical, plumbing, and fire protection are being issued by the Township of Bordentown's Construction Office, under a shared services agreement between the two municipalities.
Human Resources Manual <i>e.g., Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?</i>	No	-
Other: Parks and Recreation Committee	Yes	The Parks and Recreation Commission advises and assists the Board of Commissioners and Clerk of the City of Bordentown. It can arrange and provide for the giving of indoor and outdoor exhibitions, concerts, games, contests, and sporting events. It can promulgate rules and regulations. It acts as an advisory board for all parks, recreational, historical, or leased properties owned by the City of Bordentown.
Other: Shade Tree Committee	Yes	The City of Bordentown Shade Tree Committee consists of seven members and has exclusive control with respect to the relocation, planting, care, culture, trimming, and development of shade trees in the City.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
		It develops and recommends to the Board of Commissioners a suitable shade tree program and Master Plan for the City and has the authority to promulgate rules and regulations, subject to the review and approval of the City Commissioners, as necessary, for the operation of the Committee. All trees and grounds within the exclusive jurisdiction of the Shade Tree Committee remain the sole legal responsibility of the Committee.
Other		
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Office of Housing Inspection and Code Enforcement
Engineers or professionals trained in building or infrastructure construction practices	Yes	Office of Housing Inspection and Code Enforcement
Planners or engineers with an understanding of natural hazards	Yes	Office of Housing Inspection and Code Enforcement
Staff with expertise or training in benefit/cost analysis	Yes	Office of Housing Inspection and Code Enforcement
Professionals trained in conducting damage assessments	Yes	Office of Housing Inspection and Code Enforcement
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	Yes	Office of Housing Inspection and Code Enforcement
Emergency Manager	Yes	Mayor
Grant writer(s) <i>Consider the following - Are data and maps from the HMP used to support documentation in grant applications?</i>	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	

Fiscal Capability

The table below summarizes financial resources available to the City of Bordentown.

Table 9.4-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes



Financial Resources	Accessible or Eligible to Use? (Yes/No)
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes – Water Utility
Impact fees for homebuyers or developers of new development/homes	No
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	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Bordentown.

Table 9.4-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Administration
Personnel skilled or trained in website development	Yes	Administration
Hazard mitigation information available on your website	Yes	Stormwater information is included on the municipal website.
Social media for hazard mitigation education and outreach	Yes	Facebook
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Nixle
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	Use of public events

Community Classifications

The table below summarizes classifications for community programs available to the City of Bordentown.

Table 9.4-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
---------	----------------------------	-----------------------------------	------------------------------------



Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	PPC 4	March 2015
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
New Jersey Sustainable Jersey Community	Yes	Silver	October 28, 2022
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

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 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’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 9.4-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam Failure	Moderate
Disease Outbreak	Strong
Drought	Moderate
Earthquake	Moderate
Extreme Temperatures	Strong
Flood	Moderate
Severe Weather	Moderate
Severe Winter Weather	Strong
Wildfire	Moderate

9.4.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Jennifer Smith, Planning Board Secretary



National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the City of Bordentown.

Table 9.4-9. NFIP Summary

Active Policies	Total Premium + Policy Fee	Number of Losses	Total Net Payment	Repetitive Loss Properties
3	\$1,695	8	\$32,407.54	2

Source: NFIP 2023

Notes: Data current as of October 2023

RL Repetitive Loss

SRL Severe Repetitive Loss

RL FMA Definition Any insurable building that has incurred flood-related damage on two occasions, in which the cost of the repair, on the average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event.

RL NFIP Definition Any insurable building for which two or more claims of more than \$1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling ten-year period, since 1978.

Flood Vulnerability Summary

The following table provides a summary of the NFIP program in the City of Bordentown.

Table 9.4-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	Flooding is usually limited to the Special Flood Hazard Area. The City does not maintain a list of damaged properties.
Do you maintain a list of property owners interested in flood mitigation? <ul style="list-style-type: none"> How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
How do you make Substantial Damage determinations? <ul style="list-style-type: none"> How many were declared for recent flood events in your jurisdiction? 	The City needs to develop Substantial Damage determination procedures.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	N/A
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	Planning Board Secretary
Are any certified floodplain managers on staff in your jurisdiction?	No
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
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Office of Housing Inspection and Code Enforcement
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Follow NFIP requirements
What are the barriers to running an effective NFIP program in the community, if any?	None identified
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)?	August 17, 1990 was most recent CAV.
What is the local law number or municipal code of your flood damage prevention ordinance? • Have you adopted NJDEP’s Model Code Coordinated Ordinance • What is the date that your flood damage prevention ordinance was last amended?	Chapter 166 No December 11, 2017
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Meet
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?	None identified
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.4.5 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. The table below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.4-11. Number of Building Permits for New Construction

Type of Development	2018		2019		2020		2021		2022	
Number of Building Permits for New Construction Issued Since the previous HMP* (total/within regulatory floodplain)	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
	Single Family	Information on building permits issued was not available for this plan update								
Multi-Family										



Type of Development	2018	2019	2020	2021	2022
Other (commercial, mixed-use, etc.)					
Total Permits Issued					

SFHA Special Flood Hazard Area (1% annual chance flood event)

* Only location-specific hazard zones or vulnerabilities identified.

Table 9.4-12. Recent and Expected Future Development

Property or Development Name	Type (e.g., Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2019 to Present					
None identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None anticipated					

9.4.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.2 (Methodology) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Bordentown’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Bordentown has significant exposure. The maps also show the location of potential new development, where available.



Figure 9.4-1. City of Bordentown Flood and Sea Level Rise Hazard Area Extent and Location Map

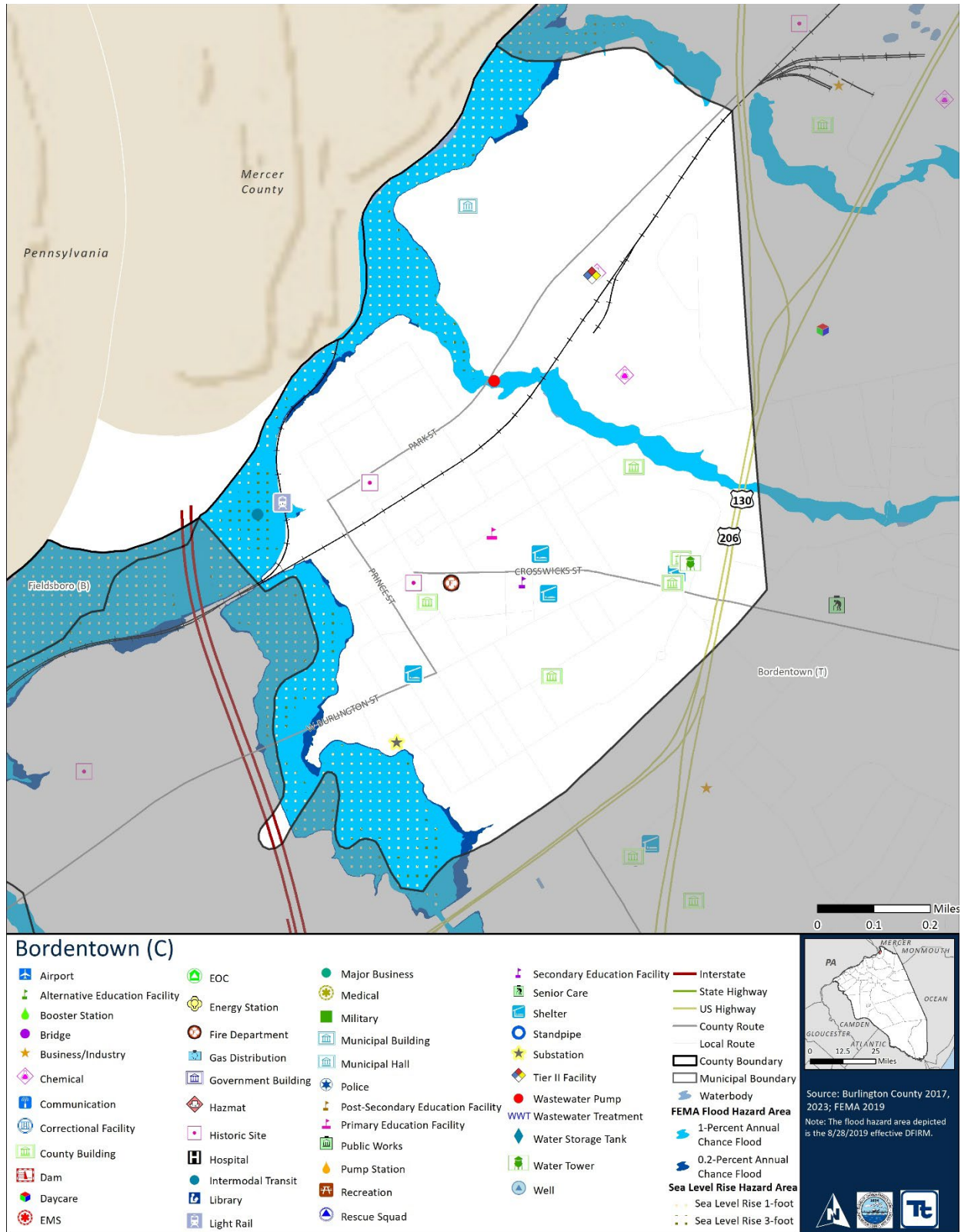
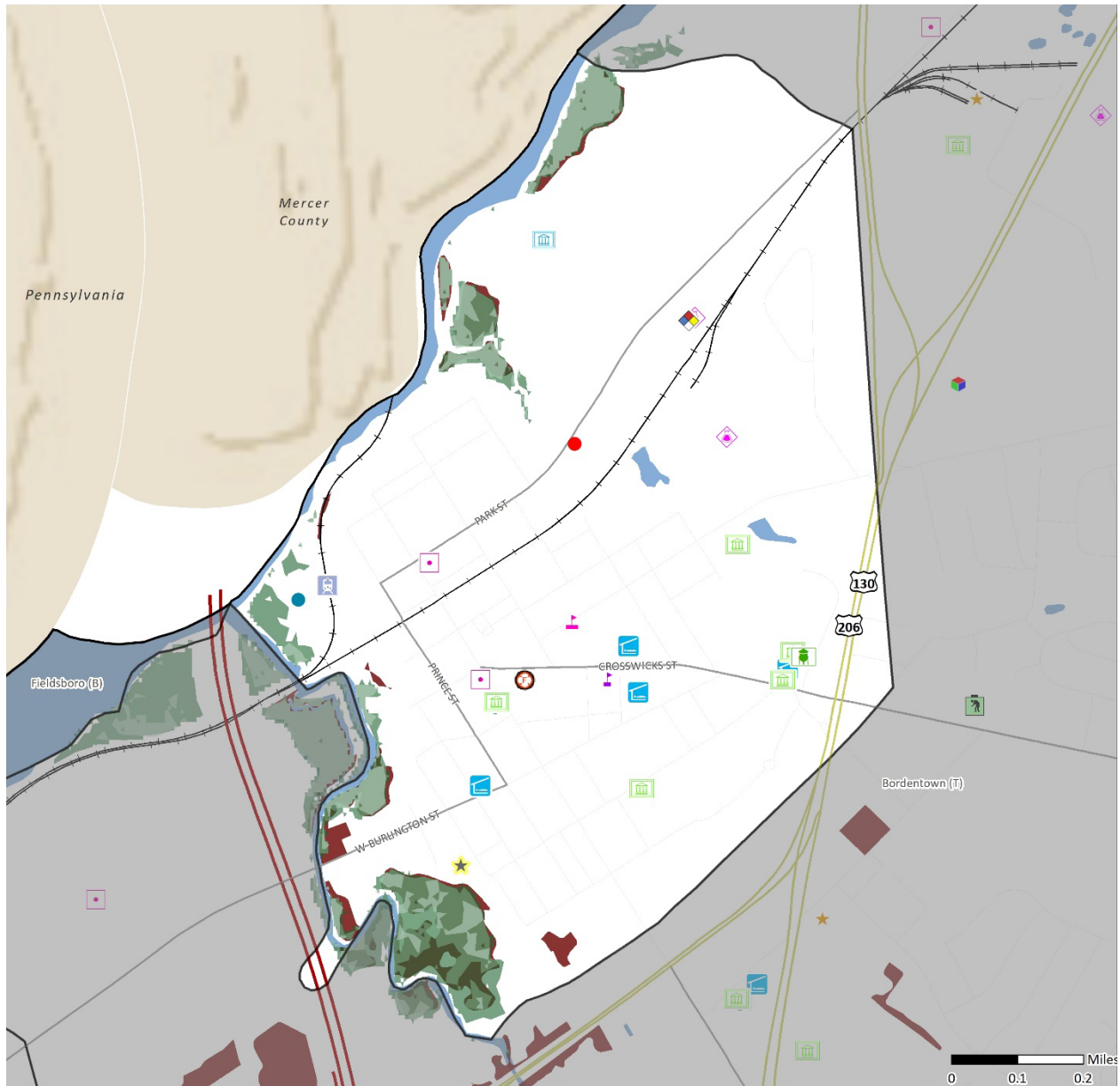




Figure 9.4-2. City of Bordentown SLOSH and Wildfire Hazard Area Extent and Location Map



Bordentown (C)

- | | | | | |
|--------------------------------|---------------------|-----------------------------------|------------------------------|--|
| Airport | EOC | Major Business | Secondary Education Facility | Interstate |
| Alternative Education Facility | Energy Station | Medical | Senior Care | State Highway |
| Booster Station | Fire Department | Military | Shelter | US Highway |
| Bridge | Gas Distribution | Municipal Building | Standpipe | County Route |
| Business/Industry | Government Building | Municipal Hall | Substation | Local Route |
| Chemical | Hazmat | Police | Tier II Facility | County Boundary |
| Communication | Historic Site | Post-Secondary Education Facility | Wastewater Pump | Municipal Boundary |
| Correctional Facility | Hospital | Primary Education Facility | WWT Wastewater Treatment | Waterbody |
| County Building | Intermodal Transit | Public Works | Water Storage Tank | Hazard Areas |
| Dam | Library | Pump Station | Water Tower | SLOSH Category 1 |
| Daycare | Light Rail | Recreation | Well | SLOSH Category 2 |
| EMS | | Rescue Squad | | SLOSH Category 3 |
| | | | | Wildfire Extreme, Very High and High Fuel Risk |

Source: Burlington County 2017, 2023; NOAA 2022; NJFFS 2012





Hazard Event History

Burlington County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities.

The City of Bordentown’s history of federally declared (as presented by FEMA) and significant hazard events [as presented in NOAA-National Centers for Environmental Information (NCEI)] is consistent with that of the County. The table below provides details regarding municipal-specific loss and damages the City of Bordentown experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources.

Table 9.4-13. Hazard Event History Since 2019

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Closures, Damages, and Losses
March 6-7, 2018	Severe Winter Storm (DR-4368)	Yes	Banding and thundersnow produced pockets of heavier snow in the western sections of the area, closer to the Delaware River. The snow contained large amounts of liquid, making it heavy and wet. This resulted in downed trees, limbs, and wires, leading to numerous power outages across portions of New Jersey.	Salt Applied to roadway by public works. Public works along with Fire Department cleared roadway of any trees that had fallen. Public service repaired power lines. Emergency oxygen taken to Calare Estate. Police responded to all emergencies.
January 20, 2020 – May 11, 2023	Covid-19 Pandemic (EM-3451-NJ, DR-4488-NJ)	Yes	Burlington County accounted for 115,985 positive cases of COVID-19 in the State of New Jersey, and 1,265 of the reported deaths. A total of 991,269 vaccinations were delivered in the County to both residents and non-residents.	PPE given to Bordentown City by OEMS Burlington county, and was dispersed to EMS, FD, Police and Calare Estate by local OEM.
July 30, 2020	Thunderstorm Wind	No	Scattered thunderstorms, some of which became strong to severe, produced several reports of damaging winds. Wires were downed in Riverside, Burlington City, Mansfield, and Bordentown.	PSE&G called for down wires. Public Works along with FD to remove any road hazards within the City. Police responded to all 911 calls
August 4, 2020	Tropical Storm Isaias (DR-4574-NJ)	Yes	Tropical Storm Isaias brought high winds and heavy rain to Burlington County; some areas of the County reported more than 6 inches over several hours. Burlington County Central	Fire Department responded to pump out basements as needed. Public works after storm clean up. Police responded to all 911 calls.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Closures, Damages, and Losses
			Communications fielded over 400 emergency calls and 1,400 non-emergency calls, many for flooded basements and residences.	PSE&G repaired any down wires.
February 18-19, 2021	Winter Storm, Winter Weather	No	A wintry precipitation occurred with many areas seeing snow, some locally heavy, with a change to sleet and rain towards coastal areas. Snowfall reports include 6.4 inches in Delanco and 6.3 inches in Bordentown.	Roads pretreated and plowed as necessary by public works. Fire Department on standby to help with road hazards and clearing of fire hydrants. Police responded to all 911 calls.
June 14, 2021	Thunderstorm Wind	No	Strong and severe storms posed a risk of damaging winds along with some hail. Multiple trees and powerlines were downed in Bass River, Moorestown, Florence, and Bordentown.	Public service called in to remove fallen branches on power lines and repaired if needed. Fire department on standby along with public works if needed. After storm cleanup by public works. Police responded to all 911 calls.
July 1, 2021	Thunderstorm Wind	No	Severe storms capable of producing straight line wind damage caused reports of downed trees and power outages due to winds. Wires were reported down in Pemberton and Bordentown.	Fire Department put on storm stand by and removed any hazards from roadways and respond to any emergencies. Public service repaired any power lines and removal of trees from power lines. Police department responded to all 911 calls.
September 1-3, 2021	Remnants of Hurricane Ida (EM-3573-NJ, DR-4614-NJ)	Yes	The remnants of Hurricane Ida produced heavy rainfall, flash floods, and a tornado (EF-1) that moved through Edgewater Park, Beverly, Burlington Township and Burlington City. Rainfall totals exceed 3 inches in parts of County; 4 water rescues occurred due to flash flooding.	Fire Department was put on storm stand by to help with pumping of water from basements. Clear roadways of frees and brush. Public service called for wires to be repaired. Public works after storm cleanup of trees and brush. Police responded to all 911 calls.
February 18, 2022	Thunderstorm Wind	No	Locally damaging wind gusts occurred ahead of a weather system; isolated thunderstorms later developed. This system	PSE&G called for wires that needed to be repaired. And removal of trees from wires. Fire Department on standby.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Closures, Damages, and Losses
			strengthened and produced several instances of damaging wind near the I-95 corridor. Tree limbs were reported down in Mount Laurel and Bordentown.	Public works after storm clean up. Police responded to all 911 calls.

Source: FEMA 2023, NOAA NCEI 2023

Notes:

DR Major Disaster Declaration (FEMA)

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Volume 1, Section 4 (Risk Assessment) have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the City of Bordentown’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). 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; and community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), each participating jurisdiction has differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Bordentown. The City of Bordentown reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the City of Bordentown indicated the following:

- The City agreed with the calculated hazard rankings.

Table 9.4-14. Hazard Ranking Input

Hazard	Hazard Ranking – High/Medium/Low
Dam Failure	Low
Disease Outbreak	Medium
Drought	Low



Hazard	Hazard Ranking – High/Medium/Low
Earthquake	Low
Extreme Temperatures	Medium
Flood	High
Severe Weather	High
Severe Winter Weather	Medium
Wildfire	Low

Critical Facilities

The table below identifies critical facilities and lifelines in the community located in the 1-percent and 0.2-percent floodplain and presents Hazus-MH estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.4-15. Potential Flood Losses to Critical Facilities and Community Lifelines

Name	Type	Exposure	
		1% Event	0.2% Event
Bordentown Station, NJ Transit	Transportation	Yes	Yes
Bordentown Sewerage Authority	Water Systems	Yes	Yes

Source: Burlington County 2023; Burlington County Planning Partnership 2023; FEMA 2019

Identified Issues

After review of the City of Bordentown’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the City of Bordentown identified the following vulnerabilities within their community:

- The City’s flood damage prevention ordinance requires update to meet the new model code coordinated ordinance.
- During a disaster that results in debris, a plan with outlined responsibilities is needed to adequately address post-disaster cleanup operations.
- 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.
- The City does not have a natural disaster preparation program that ensures the safety of school age children from natural disasters during school hours.
- The City has critical facilities that may lack backup power.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The City has two repetitive loss properties, but other properties may be impacted by flooding as well.



9.4.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2019 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update and are included in the tables with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such and previously presented in the 'Capability Assessment' earlier in this annex.



Table 9.4-16. Status of Previous Mitigation Actions

Project #	Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2024 HMP (i.e., there is still a need, this is still a priority)?		
				Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
C. Bordentown-1 (former BoC-1)	Evaluate benefits of participating in CRS program	Twp. Committee, Planning, OEM, Floodplain Adm.	No Progress. The City has a limited number of flood insurance policies.	No	-	-
C. Bordentown-2 (former BoC-2)	Conduct and facilitate community and public education and outreach for residents and businesses to promote natural hazard risk reduction to include: <ul style="list-style-type: none"> • Disaster preparedness • Hazard mitigation 	Municipality with support from Planning Partners, County Planning, NJOEM, FEMA	Ongoing Capability	No	-	-
C. Bordentown-3 (former BoC-4)	Obtain and install backup power sources at all critical facilities to include shelters	Municipality engineering, OEM with support from County, NJOEM and FEMA	No Progress. Funding restrictions.	Yes	The City is unaware of critical facilities that require backup power.	Engineer
C. Bordentown-4 (former BoC-11)	Retrofit the Water Treatment Plant and wells located in Hamilton Township, Mercer County to address flooding issues	Municipality with support from Planning and Engineer	No Progress. The City does not have jurisdiction.	No	-	-
C Bordentown-5	Coordinate with the facilities manager at the Bordentown Intermodal Transit facility to support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or relocation to protect structures from future damage.	Municipality with support from Planning, Intermodal Transit facility	No Progress. Action has not been implemented and is not considered a priority.	No	-	-



Project #	Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2024 HMP (i.e., there is still a need, this is still a priority)?		
				Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
	Phase 1: Identify most cost-effective mitigation option Phase 2: Work with facility manager to implement selected action based on available funding and local match ability.					
C. Bordentown-6	Coordinate with the facilities manager at the Bordentown Sewerage Authority to support the mitigation of the Wastewater Pump via retrofit (e.g. elevation, flood-proofing) or relocation to protect structures from future damage. Phase 1: Identify most cost-effective mitigation option Phase 2: Work with facility manager to implement selected action based on available funding and local match ability.	Municipality with support from Planning, Bordentown Sewerage Authority	No Progress. Action has not been implemented and is not considered a priority.	No	-	-
C. Bordentown-7	During the update of the municipal master plan, hazard mitigation principles will be integrated into the different elements of the master plan. This ensures that hazard assessment information is incorporated into future land use for the City and the other elements of the plan.	Municipality with support from Planning	Ongoing Capability	No	-	-
C. Bordentown-8	The City will continue to promote and support non-structural flood hazard mitigation alternatives for at risk properties within the floodplain,	Municipality with support from Planning, Engineering	No Progress. The City currently has two repetitive loss properties	Yes	The City has two repetitive loss properties but other properties could be	Floodplain administrator



Project #	Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	Yes/No	If you did not complete the action, should the action be included in the 2024 HMP (i.e., there is still a need, this is still a priority)? If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
	including those that have been identified as Repetitive Loss (RL) and Severe Repetitive Loss (SRL), such as acquisition/relocation or elevation depending on feasibility. The parameters for this initiative would be: funding, benefits versus cost, and willing participation of property owners.				subject to flooding damages as well.	



Additional Mitigation Efforts

In addition to the mitigation initiatives completed in the table above, the City of Bordentown identified the following mitigation efforts completed since the last HMP:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Bordentown participated in a mitigation action workshop in October 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Flood prone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories. Both 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.

Table 9.4-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA						CRS			
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam Failure	X			X	X		X			X
Disease Outbreak	X			X	X		X			X
Drought	X			X	X		X			X
Earthquake	X			X	X		X			X
Extreme Temperatures	X			X	X		X			X
Flood	X			X	X		X			X
Severe Weather	X			X	X		X			X
Severe Winter Weather	X			X	X		X			X
Wildfire	X			X	X		X			X

Note: Mitigation categories are described below the Mitigation Initiatives.



The following pages list the specific mitigation initiatives City of Bordentown would like to pursue in the future to reduce the effects of hazards. The initiatives 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 City priorities.



Action 2024-City of Bordentown-01. Code Coordinated Ordinance

Lead Agency:	Floodplain Administrator
Supporting Agencies:	Construction Official, Administration, NFIP State Coordinator, FEMA Regional Office
Hazard(s) of Concern:	Flood
Description of the Problem:	<p>A recent audit of New Jersey’s model ordinances by FEMA for conformance with NFIP, resulted in a review of existing local flood damage prevention ordinances. Based upon FEMA’s review, specific language related to NFIP regulations was not consistent. Additionally, it was determined that better coordination was needed between the three sets of regulations that regulate development and construction in the floodplain. These regulations are: the NFIP implemented by local floodplain administrators, the New Jersey Flood Hazard Area Control Act (FHACA) implemented at the State level by the NJDEP, and the Uniform Construction Code (UCC) implemented by the local Construction Official. NJDEP used this feedback to develop a model Code Coordinated Ordinance and continues to work with municipalities to update flood damage prevention ordinances to the Code Coordinated Ordinance.</p> <p>The City’s ordinance requires update.</p>
Description of the Solution:	After obtaining the appropriate review and concurrence by the NFIP State Coordinator and the FEMA Regional Office, the municipality will update and adopt the Code Coordinated Ordinance.
Estimated Cost:	Staff time
Potential Funding Sources:	Municipal budget
Implementation Timeline:	Within 5 years
Goals Met:	1, 2, 5, 7
Benefits:	The updated ordinance will improve floodplain management, meet NFIP requirements, and increase resilience of new and substantially improved structures in the floodplain.
Impact on Socially Vulnerable Populations:	The action will result in better regulation of construction standards within the Special Flood Hazard Area where significant risk to socially vulnerable populations exists.
Impact on Future Development:	The action will result in stronger regulation of construction standards for future development in the Special Flood Hazard Area.
Impact on Critical Facilities/Lifelines:	Critical facilities and lifelines located in the Special Flood Hazard Area will be required to meet the same requirements as general building construction that are set forth in the ordinance.
Impact on Capabilities:	This action will improve floodplain management capabilities through better outlining of responsibilities and administrative procedures.



Climate Change Considerations:	The updated ordinance includes the State’s higher standards that are in place to address heightened flood risk due to climate change such as those for floodway rise and mandatory freeboard have been incorporated in these new model ordinances.	
Mitigation Category:	Local Plans and Regulations	
CRS Category:	Preventative	
Priority:	High	
Alternatives:	Action	Evaluation
	No Action	Current problem exists
	Modify existing flood damage prevention ordinance	Time intensive
	Leave NFIP	Residents lose flood insurance coverage



Action 2024-City of Bordentown-02. Disaster Debris Management Plan

Lead Agency:	Public Works	
Supporting Agencies:	Emergency Management Coordinator	
Hazard(s) of Concern:	Dam Failure, Drought, Earthquake, Extreme Temperature, Flood, Severe Weather, Severe Winter Weather, Wildfire	
Description of the Problem:	Major disaster events can result in large amounts of debris that overwhelm normal trash collection operations. Depending on the amount generated, temporary staging areas for debris collection may be needed. The municipality does not have a disaster debris management plan in place. During a disaster that results in debris, the municipality A plan with outlined responsibilities is needed to adequately address post-disaster cleanup operations.	
Description of the Solution:	The municipality will develop a disaster debris management plan. This plan will establish procedures and guidelines for managing disaster debris in a coordinated, environmentally responsible, and cost-effective manner. The plan will identify responsibilities for execution of the plan. The plan will align with permitted temporary collection areas.	
Estimated Cost:	Staff time	
Potential Funding Sources:	Municipal budget	
Implementation Timeline:	Within 5 years	
Goals:	5, 6	
Benefits:	The action will result in increased quicker and more efficient cleanup after disaster events.	
Impact on Socially Vulnerable Populations:	N/A	
Impact on Future Development:	N/A	
Impact on Critical Facilities/Lifelines:	N/A	
Impact on Capabilities:	The action will result in increased post disaster capabilities.	
Climate Change Considerations:	Climate change may result in an increase in the frequency and severity of weather-related disaster events. This action will increase the capabilities to respond to these events.	
Mitigation Category:	Local Plans and Regulations	
CRS Category:	Emergency Services	
Priority:	High	
Alternatives:	Action	Evaluation
	No Action	-



	Rely on federal cleanup	These services may or may not be available
	Rely on state cleanup	These services may or may not be available



Action 2024-City of Bordentown-03. Substantial Damage Management Plan

Lead Agency:	Floodplain Administrator
Supporting Agencies:	Public Works, Emergency Management Coordinator, Office of Housing Inspection and Code Enforcement
Hazard(s) of Concern:	Dam Failure, Drought, Earthquake, Extreme Temperature, Flood, Severe Weather, Severe Winter Weather, Wildfire
Description of the Problem:	<p>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:</p> <ul style="list-style-type: none"> • 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. <p>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.</p>
Description of the Solution:	<p>The municipality will develop a Substantial Damage Management Plan, following the six step planning process in 2021 <i>Developing a Substantial Damage Management Plan</i> (https://crsresources.org/files/500/developing_subst_damage_mgmt_plan.pdf). This plan will outline responsibilities for Substantial Damage determinations, determining market value, and permit approval processes following a disaster event.</p>
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:	1, 2 5, 7
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	
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



Action 2024-City of Bordentown-04. Natural Disaster School Program

Lead Agency:	City OEM	
Supporting Agencies:	Participating School Districts	
Hazard(s) of Concern:	Dam Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Severe Weather, Severe Winter Weather, Wildfire	
Description of the Problem:	The City does not have a natural disaster preparation program that ensures the safety of school age children from natural disasters during school hours.	
Description of the Solution:	The City will work with School Districts within the City limits to provide school age children with assemblies and/or programs that educate children on what to do during emergency hazard events that take place during school hours.	
Estimated Cost:	Staff Time	
Potential Funding Sources:	City Budget	
Implementation Timeline:	Ongoing	
Goals Met:	1, 3	
Benefits:	School age children will be better prepared on how to handle natural hazard events that take place during school hours.	
Impact on Socially Vulnerable Populations:	Some children may need additional assistance on evacuations or sheltering capabilities and this action will provide these children and their staff with knowledge on how they should shelter and protect themselves from impending natural disasters. Some school children and adults may also be immune compromised and will need additional tools to reduce vulnerability from disease outbreaks.	
Impact on Future Development:	N/A	
Impact on Critical Facilities/Lifelines:	N/A	
Impact on Capabilities:	This action increases public hazard preparedness and awareness to children and their supervisors.	
Climate Change Considerations:	Climate change is leading to an increase in frequency and intensity of storms and weather-related disasters.	
Mitigation Category	Education and Awareness Program	
CRS Category	Public Information, Preventative	
Priority	High	
Alternatives:	Action	Evaluation
	No Action	-
	Ask schools to conduct outreach without input from City	May not meet expectations



	Hire outside groups to come into schools to conduct outreach	Higher cost
--	--	-------------



Action 2024-City of Bordentown-05. Backup Power

Lead Agency:	Engineer	
Supporting Agencies:	Emergency Management Coordinator, Public Works	
Hazard(s) of Concern:	Dam Failure, Drought, Earthquake, Extreme Temperature, Flood, Severe Weather, Severe Winter Weather, Wildfire	
Description of the Problem:	The City has critical facilities that may lack backup power.	
Description of the Solution:	The Engineer will survey critical facilities to determine backup power needs. The City will purchase the appropriate sized generators. Public Works will oversee installation of generators and necessary electrical components to supply backup power to each critical facility in need. Public Works will be responsible for maintenance and testing of the generator following installation.	
Estimated Cost:	High	
Potential Funding Sources:	HMGP, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Annual Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2	
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	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 2024-City of Bordentown-06. Repetitive Loss Mitigation

Lead Agency:	Floodplain Administrator
Supporting Agencies:	Engineer
Hazard(s) of Concern:	Severe Weather, Flood
Description of the Problem:	Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The City has two repetitive loss properties, but other properties may be impacted by flooding as well.
Description of the Solution:	Conduct outreach to five flood-prone property owners, including RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).
Estimated Cost:	Low for outreach, high for acquisition or elevation
Potential Funding Sources:	BRIC, FMA, HMGP, match from property owners
Implementation Timeline:	Within 5 years
Goals Met:	1, 2
Benefits:	Eliminates flood damage to homes and residences, which creating an open space for the municipality and increasing flood storage.
Impact on Socially Vulnerable Populations:	Removing homes from the floodplain immediately removes the risk to life and property. Socially vulnerable populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.
Impact on Capabilities:	Removing the risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed.
Climate Change Considerations:	Climate change is likely to increase the frequency and severity of severe rainfall, flash flooding, riverine flooding, and coastal flooding from sea level rise and storm surge events. Removing structures from the floodplain will reduce the response and recovery costs as a result of these events,



	and decrease the loss of human life as a result of these events. Elevating structures will reduce the recovery costs as a result of these events.	
Mitigation Category	Structure and Infrastructure Project	
CRS Category	Property Protection	
Priority	Medium	
Alternatives:	Action	Evaluation
	No Action	-
	Levee around floodplain	Costly, not enough room
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.



The prioritization criteria provided in Volume 1, Section 6 (Mitigation Strategy) identify 14 evaluation/prioritization criteria to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as 'High', 'Medium', or 'Low.' The table below provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Table 9.4-18. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Political	Legal	Fiscal	Environmental	Social Vulnerability	Administrative	Hazards of Concern	Climate Change	Timeline	Community Lifelines	Other Community Objectives	Total	High / Medium / Low
2024-City of Bordentown-01	Code Coordinated Ordinance	1	1	1	1	1	1	1	1	1	0	1	0	0	1	11	High
2024-City of Bordentown-02	Disaster Debris Management Plan	1	1	1	1	1	1	1	1	1	1	1	0	0	1	12	High
2024-City of Bordentown-03	Substantial Damage Management Plan	1	1	1	1	1	1	1	1	1	1	1	0	0	1	12	High
2024-City of Bordentown-04	Natural Disaster School Program	1	0	1	1	1	1	1	1	1	1	1	0	0	1	11	High
2024-City of Bordentown-05	Backup Power	1	1	1	1	1	0	1	1	1	1	1	0	1	1	12	High
2024-City of Bordentown-06	Repetitive Loss Mitigation	1	1	1	0	1	0	1	1	1	1	1	0	0	1	10	Medium

Note: Volume 1, Section 6 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14).