

**ANNEX 13: BOROUGH OF ROCKAWAY**

**1 COMMUNITY CAPABILITIES ASSESSMENT**

Table 1 through Table 6 summarizes the different community capabilities and tools that are available to the community to potentially assist in mitigating the impacts of hazards.

**1.1 PLANNING, LEGAL AND REGULATORY CAPABILITIES**

The table below summarizes the legal and regulatory tools that are available to the Borough of Rockaway and where hazard mitigation has been integrated.

**Table 1: Planning, Legal and Regulatory Capability**

	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	State Mandated/Allowed	Has this been integrated? If yes- how?	
				If yes- how? Describe in comments	If no - can it be a mitigation action? If yes, add Mitigation Action #.
<b>Codes, Ordinances, &amp; Requirements</b>					
<b>Building Code</b>	Yes, 12/9/76, Ord. 17-76	Local and State	Yes	No	No
<b>Comment:</b> State mandated on local level under NJAC 5:23-3.14. International Building Code – New Jersey Edition, 2018, NJAC 5:24-3.14 Adopted 9/3/2019 . State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.)					
<b>Zoning Code</b>	Yes, 10/24/96, Ord. 12-96	Local	Yes, if have planning board	Yes	-
<b>Comment:</b> State permissive on local level. [note local ordinance # and date of adoption]. Per State of NJ Municipal Land Use Law (MLUL) L. 1975, s. 2, eff Aug 1, 1976, 40-55D-62: 49. Power to zone, requires all jurisdictions to have current zoning and other land development ordinances after the planning board has adopted the land use element and master plan. Enforced by Land Use Bd., Chapter 172, Sections 172-1 – 172-94; Zoning.					
<b>Subdivisions</b>	Yes, 10/24/96, Ord. 12-96	Local	Yes, if have planning board	Yes	-
<b>Comment:</b> P.L.1975, c.291 (C.40:55D-47): 40:55D-37. Grant of power; referral of proposed ordinance; county planning board approval . Dictated by the Municipal Land Use Law. NJ Statute 40:27-6.2The board of freeholders of any county having a county planning board shall provide for the review of all subdivisions of land within the county by said county planning board and for the approval of those subdivisions affecting county road or drainage facilities as set forth and limited hereinafter in this section. Enforced by Land Use Bd., Chapter 171, Sections 171-1 – 171-13; Requirements for subdivisions.					
<b>Stormwater Management</b>	Yes, 4/13/06, Ord. 12-96	State and Local	Yes	No	No
<b>Comment:</b> See Title 7 of the NJ Administrative Code, N.J.A.C. 7:8. Enforced by GB/Land Use Bd., Chapter 170, Sections 170-36 – 170-36.10; Stormwater control.					
<b>Post-Disaster Recovery</b>	No	-	No	-	-
<b>Comment:</b>					
<b>Real Estate Disclosure</b>	Yes	State	Yes	No	No
<b>Comment:</b> Before signing a contract of sale, all purchasers must receive a New Jersey Public Offering Statement (POS) approved by the New Jersey Real Estate Commission. The POS provides information such as proximity to hospitals, schools, fire and police, as well as any hazards, risks or nuisances in or around the subdivision. Enforced by Division of Consumer Affairs, N.J. A. C. 13:45A-29.1.					

	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	State Mandated/Allowed	Has this been integrated? If yes- how?	
				If yes- how? Describe in comments	If no - can it be a mitigation action? If yes, add Mitigation Action #.
<b>Growth Management</b>	No	Local and State	Yes	No	No
<p><b>Comment:</b> State Mandated on a municipal level. See Zoning Ordinance; Also - Plan Endorsement Process via the State Development &amp; Redevelopment Plan provides for the delineation of Growth Areas and Environs; Use of the endorsed plans in the implementation of state environmental regulations makes the Plan Endorsement process a growth management strategy.</p>					
<b>Shoreline Development</b>	No	-	Yes	-	-
<p><b>Comment:</b> NJ Coastal Area Facility Review Act (N.J.S.A. 13:19) or CAFRA regulates almost all development along the coast for activities including construction, relocation, and enlargement of buildings or structures, and excavation, grading, shore protection structures, and site preparation. This law is implemented through NJ's Coastal Zone Management Rules N.J.A.C. 7:7E-1 et seq.</p>					
<b>Site Plan Review</b>	Yes	Local	Yes	Yes	-
<p><b>Comment:</b> Dictated by the Municipal Land Use Law which sets forth minimum requirements for plans, etc., timeframes for development review. NJ Statute 40:27-6.2: The board of freeholders of any county having a county planning board shall provide for the review of all subdivisions of land within the county by county planning board and for the approval of those subdivisions affecting county road or drainage facilities. 40:27-6.10: Each municipal clerk shall file with the county planning board a copy of the planning and zoning ordinances of the municipality and shall notify the county planning board of the introduction of any revision or amendment of such an ordinance which affects lands adjoining county roads or other county lands, or lands lying within 200 feet of a municipal boundary, or proposed facilities or public lands shown on the county master plan or official county map. Enforced by Land Use Bd., Chapter 171, Sections 171-14 – 171-20; Requirements for site plans.</p>					
<b>Environmental Protection</b>	No	-	Yes	-	-
<p><b>Comment:</b> The rules that are utilized by the NJ Department of Environmental Protection and other environmental agencies are codified at Title 7 of the NJ Municipal Administrative Code.</p>					
<b>Flood Damage Prevention</b>	Yes	Local	No	Yes	-
<p><b>Comment:</b> The NJ State Law Flood Area Control Act (N.J.S.A. 58:16A-52) and the National Flood Control Act of 1968 (NFIP) are state and federal acts to support minimization of flood losses. They do not require local adoption but as enforced by the NJDEP, the floodplain ordinances of each municipality must be reviewed for compliance with these regulations. In addition, participation in the NFIP requires a floodplain ordinance. Enforced by Borough Engineer, Chapter 139A – Flood Damage Prevention.</p>					
<b>Wellhead Protection</b>	No	Local	No	-	-
<p><b>Comment:</b> Delineation of well head protection areas (WHPAs) is part of the NJ-approved 1991 well head protection plan (WHPP) for public community water supply wells. These are priority areas for efforts to prevent and clean up ground water contamination. Municipalities are empowered to regulate land use, physical facilities and other activities within WHPAs areas, the potential for groundwater contamination can be reduced under the provisions of the New Jersey Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq., which authorizes each municipality to plan and regulate land use to secure a safe and adequate drinking water supply for its residents. Also refer to Safe Drinking Water Regulations (NJAC 7:10-11.7(b)1).</p>					
<b>Emergency Management</b>	No	-	-	-	-
<p><b>Comment:</b> Per the NJ Civilian Defense and Disaster Control Act (App.A:9_43.2) Counties and municipalities must have written Emergency Operations Plans to be reviewed every 2 years. See Emergency Operations Plans below.</p>					
<b>Climate Change</b>	No	-	-	-	-
<p><b>Comment:</b></p>					

	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	State Mandated/Allowed	Has this been integrated? If yes- how?	
				If yes- how? Describe in comments	If no - can it be a mitigation action? If yes, add Mitigation Action #.
<b>Disaster Recovery Ordinance</b>	No	-	-	-	-
<b>Comment:</b>					
<b>Disaster Reconstruction Ordinance</b>	No	-	-	-	-
<b>Comment:</b>					
<b>Other: Steep Slope Ordinance</b>	Yes, 10/24/96, Ord. 12-96	Local	-	Yes	-
<b>Comment:</b> Enforced by Land Use Bd., Chapter 170, Section 170-5; Steep slope.					
<b>Planning Documents</b>					
<b>Master Plan</b>	Yes	Local	Yes County: Yes	No	No
<b>Comment:</b> Per NJSA: Yes, if planning board (40:55D-28) and must be re-examined every ten years (40:55D-89.1); County: Yes (40:27-2). Enforced by the Land Use Bd., 1995. Re-examined 2002, 2008, 2018.					
<b>Capital Improvement Plan</b>	Yes	Local	Allowed	No	No
<b>Comment:</b> Per NJSA 40:55D-29) the governing body is authorized to direct the planning board to prepare a CIP with at least a six-year planning horizon. Enforced by Gov. Body.					
<b>Disaster Debris Management Plan</b>	No	-	No	No	No
<b>Comment:</b>					
<b>Floodplain or Watershed Plan</b>	No	-	No	No	No
<b>Comment:</b> U.S. Army Corps of Engineers Regulatory Program Regulations (33 CFR 320-332)					
<b>Stormwater Management Plan</b>	Yes, 4/13/06, Ord. 04-06	Local	Yes	No	No
<b>Comment:</b> Per NJDEP Storm Water Management Rule (N.J.A.C. 7:8, et seq.). The Municipal Stormwater Regulation Program was developed in response to the U. S. Environmental Protection Agency’s (USEPA) Phase II rules published in December 1999. The Department issued final stormwater rules on February 2, 2004 and four (4) NJPDES general permits authorizing stormwater discharges from Tier A and Tier B municipalities, as well as public complexes, and highway agencies that discharge stormwater from municipal separate storm sewers (MS4s), updated January 1, 2023. Enforced by Land Use Bd., Chapter 170, Sections 170-36 – 170-36.10; Stormwater control.					
<b>Stormwater Pollution Prevention Plan</b>	No	Local, State	Yes	No	No
<b>Comment:</b> Per NJDEP Storm Water Management Rule (N.J.A.C. 7:8, et seq.). The Municipal Stormwater Regulation Program was developed in response to the U. S. Environmental Protection Agency’s (USEPA) Phase II rules published in December 1999. The Department issued final stormwater rules on February 2, 2004 and four (4) NJPDES general permits authorizing stormwater discharges from Tier A and Tier B municipalities, as well as public complexes, and highway agencies that discharge stormwater from municipal separate storm sewers (MS4s), updated January 1, 2023.					
<b>Urban Water Management Plan</b>	No	-	No	No	No
<b>Comment:</b>					
<b>Habitat Conservation Plan</b>	No	-	No	No	No
<b>Comment:</b> May develop a conservation plan element in master plan per NJSA 40:5D-28b (8).					

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				If yes- how? Describe in comments	If no - can it be a mitigation action? If yes, add Mitigation Action #.
<b>Economic Development Plan</b>	No	-	No	No	No
<b>Comment:</b> Per NJSA 40:55D-28b. (9) There can be a generic Economic Development Element of the County Comprehensive Plan. Municipality can establish Economic Development Commission that can facilitate incentive programs (façade programs, low-interest loans, etc.)					
<b>Shoreline Management Plan</b>	No	-	No	No	No
<b>Comment:</b>					
<b>Community Wildfire Protection Plan</b>	No	-	No	No	No
<b>Comment:</b>					
<b>Community Forest Management Plan</b>	No	-	No	No	No
<b>Comment:</b> Optional accreditation for county and municipalities for reduction of liability, New Jersey Urban and Community Forestry Program (NJUCF).					
<b>Transportation Plan</b>	No	-	No	No	No
<b>Comment:</b> May develop a circulation plan element in master plan per NJSA 40:55D-28b. (4).					
<b>Agriculture Plan</b>	No	-	No	No	No
<b>Comment:</b> May develop a farmland preservation plan element per NJSA 40:5D-28b (13).					
<b>Climate Action Plan</b>	No	-	No	No	No
<b>Comment:</b> May develop a green building and environmental sustainability plan element per NJSA 40:5D-28b (16).					
<b>Tourism Plan</b>	No	-	No	No	No
<b>Comment:</b>					
<b>Business Development Plan</b>	No	-	No	No	No
<b>Comment:</b>					
<b>Other: Shade Tree commission</b>	No	-	Allowed	No	No
<b>Comment:</b> 40:37-5. Powers; regulations; trees on highways; parks: Except as hereinafter provided, the shade tree commission may exercise exclusive control over the regulation, planting and care of shade and ornamental trees and shrubbery now situate or which may hereafter be planted in any public highway, park or parkway of the county, including: a. The planting, trimming, spraying, care and protection thereof; b. The regulation and control of the use of the ground surrounding the same so far as may be necessary for their proper growth, care and protection; c. The moving or requiring the removal of any tree or part thereof, dangerous to public safety; d. The care and control of the parks and parkways; e. The encouragement of arboriculture. Amended by L.1958, c. 41, p. 132, s. 2, eff. May 20, 1958.					
<b>Other - Historic Preservation</b>	No	-	Allowed	No	No
<b>Comment:</b> 40:32-6. Acquisition and preservation of historical buildings and data - Any county may acquire, by gift or purchase, any real estate or any interests therein, together with any and all buildings thereon within the limits of the county for historical purposes, or for the purpose of preserving therein or thereon historical data and objects of historical interest.					
<b>Response/Recovery Planning</b>					
<b>Emergency Operations Plan (EOP)</b>	No	-	Yes	No	No
<b>Comment:</b> Per the NJ Civilian Defense and Disaster Control Act (App.A:9_43.2) Counties and municipalities must have written Emergency Operations Plans to be reviewed every 2 years.					

	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	State Mandated/Allowed	Has this been integrated? If yes- how?	
				If yes- how? Describe in comments	If no - can it be a mitigation action? If yes, add Mitigation Action #.
<b>Threat &amp; Hazard Identification &amp; Risk Assessment (THIRA)</b>	No	-	No	No	No
<b>Comment:</b>					
<b>Post-Disaster Recovery Plan</b>	No	-	No	No	No
<b>Comment:</b>					
<b>Continuity of Operations Plan</b>	No	-	No	No	No
<b>Comment:</b>					
<b>Public Health Plan</b>	No	-	Yes/No	No	No
<b>Comment:</b>					
<b>Other</b>	No	-	Yes/No	No	No
<b>Comment:</b>					

Table 2: Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? - If no, who does? If yes, which department?	Yes Construction
Does your jurisdiction have the ability to track permits by hazard area?	Yes
Does your jurisdiction have a buildable lands inventory? -If yes, please describe briefly. -If no, please quantitatively describe the level of buildout in the jurisdiction.	No Borough is 95% built out

## 1.2 ADMINISTRATIVE AND TECHNICAL CAPABILITIES

The table below summarizes potential staff and personnel resources available to the Borough of Rockaway.

Table 3: Administrative and Technical Capabilities

Staff/Personnel Resource	Available?	Department/Agency/Position
<b>Administrative Capability</b>		
Planning Board	Yes	Borough Engineer/Borough Planner
Mitigation Planning Committee	No	-
Environmental Board / Commission	Yes	Environmental Advisory Committee – 3 Volunteers
Open Space Board / Committee	No	-
Economic Development Commission / Committee	No	-
Warning Systems / Services (reverse 911, outdoor warning signals)	Yes	Alert Morris
Maintenance program to reduce risk	No	-
Mutual aid agreements	Yes	Police and Fire Depts.

Staff/Personnel Resource	Available?	Department/Agency/Position
<b>Technical/Staffing Capability</b>		
Planners or engineers with knowledge of land development and land management practices	Yes	Borough Engineer/Borough Planner
Engineers or professionals trained in building or infrastructure construction practices	Yes	Borough Engineer
Planners or engineers with an understanding of natural hazards	Yes	Borough Engineer
Staff with training in benefit/cost analysis	Yes	Borough Engineer
Staff with training in green infrastructure	Yes	Borough Engineer
Staff with education/knowledge/training in low impact development	Yes	Borough Engineer
Surveyor	Yes	Borough Engineer
Stormwater engineer	Yes	Borough Engineer
Personnel skilled or trained in GIS applications	Yes	Borough Engineer
Local or state water quality professional	Yes	Water Department
Scientist familiar with natural hazards in local area	Yes	Borough Engineer
Emergency manager	Yes	Police Chief/OEM Coordinator
Watershed planner	Yes	Borough Engineer
Environmental specialist	Yes	Borough Engineer
Grant writers	Yes	Borough Engineer
Resilience Officer	No	-
Other	Yes	Borough Engineer – Certified Floodplain Manager

### 1.3 FISCAL CAPABILITIES

The table below summarizes financial resources available to the Borough of Rockaway.

Table 4: Fiscal Capabilities

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants (CDBG, CDBG-DR)	Yes – Engineer/Finance
Capital Improvements Project Funding	Yes – Finance
Authority to Levy Taxes for Specific Purposes	Yes – Finance
User Fees for Water, Sewer, Gas or Electric Service	Yes – Water Dept. collects fees set by Governing Body
Incur Debt through General Obligation Bonds	Yes – Finance
Incur Debt through Special Tax Bonds	Yes – Finance
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes – Engineer/Finance
Development Impact Fees for Homebuyers or Developers	Yes
Clean Water Act 319 Grants (Nonpoint Source Pollution)	No
Other	No

### 1.4 EDUCATION AND OUTREACH CAPABILITIES

The table below summarizes the education and outreach resources available to the Borough of Rockaway.

**Table 5: Education and Outreach Capabilities**

Criterion	Response
Do you have a public information officer or communications office?	Yes
Do you have personnel skilled or trained in website development?	No
Do you have hazard mitigation information available on your website? <ul style="list-style-type: none"> <li>If yes, briefly describe.</li> </ul>	Yes. Link to OEM website. <a href="https://www.rockawayborough.org/departments/oem/">https://www.rockawayborough.org/departments/oem/</a>
Do you use social media for hazard mitigation education and outreach? <ul style="list-style-type: none"> <li>If yes, briefly describe.</li> </ul>	Yes. Facebook
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <ul style="list-style-type: none"> <li>If yes, briefly describe.</li> </ul>	Yes. Environmental Commission.
Do you have any other programs already in place that could be used to communicate hazard-related information? <ul style="list-style-type: none"> <li>If yes, briefly describe.</li> </ul>	Borough website, tax mailing, water bill, sewer bill
Do you have any established warning systems for hazard events? <ul style="list-style-type: none"> <li>If yes, briefly describe.</li> </ul>	Yes. AlertMorris

### 1.5 COMMUNITY CLASSIFICATIONS

The table below summarizes the classifications for community programs available to the Borough of Rockaway.

**Table 6: Community Classifications**

Program	Participating?	Classification	Date Classified
Community Rating System	No		
Building Code Effectiveness Grading Schedule (BCEGS)	No		
Public Protection (Fire ISO Protection Class)	Yes	4	1995
Storm Ready Certification	No		
Firewise Community Classification	No		

### 1.6 NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE

This section provides specific information on the management and regulation of the regulatory floodplain.

**Table 7: National Flood Insurance Program Compliance**

Criterion	Response
What local department is responsible for floodplain management?	Engineering
Who is your floodplain administrator? (name, department/position)	Engineer
Are any certified floodplain managers on staff in your jurisdiction?	Engineer
What is the date that your flood damage prevention ordinance was last amended?	02/26/2015
Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> <li>If exceeds, in what ways?</li> </ul>	Meet
When was the most recent Community Assistance Visit or Community Assistance Contact?	11/05/1992

Criterion	Response
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> <li>If so, state what they are.</li> </ul>	No
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> <li>If so, state what they are.</li> </ul>	County
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> <li>If no, state why.</li> </ul>	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program?	No
<input checked="" type="checkbox"/> If so, what type of assistance/training is needed?	n/a
Does your jurisdiction participate in the Community Rating System (CRS)? <ul style="list-style-type: none"> <li>If yes, is your jurisdiction interested in improving its CRS Classification?</li> <li>If no, is your jurisdiction interested in joining the CRS program?</li> </ul>	No
How many flood insurance policies are in force in your jurisdiction? <ul style="list-style-type: none"> <li>What is the insurance in force?</li> <li>What is the premium in force?</li> </ul>	47 \$13,218,800 \$113,453
How many total loss claims have been filed in your jurisdiction? <ul style="list-style-type: none"> <li>How many claims are still open or were closed without payment?</li> <li>What were the total payments for losses?</li> </ul>	84 11 \$1,463,817
Do you maintain a list of properties that have been damaged by flooding?	No
Do you maintain a list of property owners interested in flood mitigation?	No

## 2 HAZARD ANALYSIS AND RISK ASSESSMENT

### 2.1 HAZARD AREA EXTENT AND LOCATION

Hazard area extent and location maps were generated for the Borough of Rockaway that illustrate the probable areas impacted within the municipality. 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 have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Borough of Rockaway has significant exposure. Refer to Figure 1 and Figure 2.

### 2.2 REPETITIVE FLOOD LOSSES

The following summarizes the repetitive and severe repetitive flood losses in the Borough of Rockaway.

- Number of repetitive loss (RL) properties: 8
- Number of severe repetitive loss (SRL) properties: 1
- Number of RL/SRL properties that have been mitigated: 0

### 2.3 CRITICAL FACILITIES

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain.

**Table 8: Potential Flood Losses to Critical Facilities and Lifelines**

Name	Type	1% Event	0.2% Event
McWilliams Forge Co. Inc	Hazardous Material	X	X
Weldon Asphalt	Potable Water Facility	X	X
Well #1	Well		X
Well #6	Well		X

*\* Identified lifeline*

## 2.4 HAZARD RANKING

This section includes the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 3 (Risk Assessment). This input supports the mitigation action development to target those hazards with highest level of concern. As discussed in Section 3.4 (Hazard Ranking), each plan participant may have differing degrees of risk exposure and vulnerability compared to Morris County as a whole. Therefore, each jurisdiction reviewed the degree of countywide risk to each hazard and adjusted risk rankings as necessary to best reflect its own risk for each assessed hazard. The table below summarizes the hazard rankings of potential natural hazards for the Borough of Rockaway.

**Table 9: Borough of Rockaway Hazard Ranking Input**

Hazard	Ranking	Hazard	Ranking
<b>Drought</b>	Medium	<b>Hazardous Substances</b>	High
<b>Earthquake</b>	Medium	<b>Severe Weather</b>	High
<b>Extreme Temperature</b>	Medium	<b>Severe Winter Storm</b>	High
<b>Flood</b>	Medium	<b>Wildfire</b>	Low
<b>Geological Hazards</b>	Low		

**2.5 COMPLETED ACTIONS**

Borough of Rockaway reported no completed actions.

The Borough of Mountain Lakes reported the following completed actions.

2020 Action	Mitigation Action Name	Project Description	Project Results
2020-Rockaway Borough-001	Fox Lake Dam Needs Repair	Reconstruct Fox Lake Dam with a new spillway, low flow outlet, seepage protection, and armoring of side slopes. This dam was last inspected 10/15/19 and EOP updated 10/25/19.	The rehab of Fox Lake Dam was completed in 2022

**2.6 CANCELLED ACTIONS**

The Borough of Mountain Lakes reported the following cancelled actions.

2020 Action	Mitigation Action Name	Project Description	Justification
2020-Rockaway Borough-002	Area is subject to flooding	Perform engineering study to determine source of flooding and recommended mitigation actions.	No longer a priority
2020-Rockaway Borough-003	Area is subject to flooding on roadway	Perform engineering study to determine source of flooding and recommend mitigation actions.	No longer a priority
2020-Rockaway Borough-004	Wells #1 and #6 are critical infrastructure in the floodplain. Both have connections to portable backup generators.	Determine mitigation strategies, if any, to secure the wells during events.	No longer a priority

2020 Action	Mitigation Action Name	Project Description	Justification
2020-Rockaway Borough-005	Weldon Asphalt is a critical facility in the floodplain.	Notify the owner of Weldon Asphalt that the area of Franklin Ave is in the floodplain.	No longer a priority
2020-Rockaway Borough-006	McWilliams Forge is a critical facility in the floodplain.	Notify the owner of McWilliams Forge that the area of Franklin Ave is in the floodplain.	No longer a priority
2020-Rockaway Borough-007	Nine properties have repetitive losses. Many are single family homes in the Rockaway River Floodplain.	Educate the owners of the RL property that the property is identified as RL and the status of the property location within or outside the floodplain. Provide them with mitigation options and apply for grant funding if needed to implement actions.	No longer a priority

## 2.7 HAZARD MITIGATION STRATEGY

### 2.7.1 BACKGROUND INFORMATION

Action	Jurisdiction	Mitigation Action Name	What is the problem the action is solving?	How does the action solve the problem?	Is this a continuing action from 2020 plan? Yes/No	2024 Project Status Provided by Respondent (not applicable to any new actions) Not Started In Progress
1	Rockaway Borough	GIS Mapping of Catch Basin & General Stormwater Facilities	The location of all catch basins and stormwater facilities, both private and public, need to be identified, mapped, and located for planning, maintenance, and proposed upgrades to the system. This is done by creating a GIS Mapping system. This must be complete by the end of 2025 per NJDEP MS4	Infrastructure mapping is critical to emergency response, review of issues, and creating recommendations for improvements	No	New

Action	Jurisdiction	Mitigation Action Name	What is the problem the action is solving?	How does the action solve the problem?	Is this a continuing action from 2020 plan? Yes/No	2024 Project Status Provided by Respondent (not applicable to any new actions)  Not Started In Progress
			Permit. \$25,000 grant from NJDEP for mapping, obtained.			
2	Rockaway Borough	Develop All Hazards Public Education & Outreach program for Hazard Mitigation & Preparedness	Need for a All Hazards Public Education & Outreach program for Hazard Mitigation & Preparedness	Create and continuously update All Hazards Public Education & Outreach program for Hazard Mitigation & Preparedness	No	New
3	Rockaway Borough	Review & update the Rockaway Borough Flood Hazard Area Ordinance	The Rockaway Borough Flood Hazard Area Ordinance should be consistent with FEMA requirements. Updating is required periodically and will be required when FEMA issues the new digital mapping to replace the prior paper maps	The Borough anticipates reviewing and updating the Flood Hazard Area Ordinance upon the adoption of the new FEMA maps to replace the prior maps. Status is on-going and the adoption has not been scheduled. This will improve regulatory and enforcement capabilities to manage flood risk.	No	New
4	Rockaway Borough	Water Filter Plant generator	The existing generator is 43 years old and at the end of its useful life. This generator is at risk of failing at any time and back-up power to the filter plant is critical to serve the public.	A new generator would be reliable. Recommend increasing from existing 230 kw generator to 300 kw generator due to proposed future expansions of filter plant. Proposed 300 kw, mounted diesel generator	No	New
5	Rockaway Borough	Well #1, Back-Up Generator	There is currently no back-up power at the well except for a portable generator hook-up. The well is at risk due to this if portable power cannot be provided in short time	A generator would serve as back-up power for power failures at this site. Proposed 60 kw, diesel generator with	No	New

Action	Jurisdiction	Mitigation Action Name	What is the problem the action is solving?	How does the action solve the problem?	Is this a continuing action from 2020 plan? Yes/No	2024 Project Status Provided by Respondent (not applicable to any new actions)  Not Started In Progress
				automatic transfer switch and sound proofing.		
6	Rockaway Borough	Well #6, Back-Up Generator	There is currently no back-up power at the well except for a portable generator hook-up. The well is at risk due to this if portable power cannot be provided in short time	A generator would serve as back-up power for power failures at this site. Proposed 60 kw, diesel generator with automatic transfer switch and sound proofing.	No	New
7	Rockaway Borough	Hillside Water Tank Stand by Generator	There is currently no back-up power at the water tank. The water tank is at risk of communication to the water system going down and being unable to detect tank levels during event of a power failure.	A generator would serve as back-up power for power failures at this site. Proposed 6 kw, natural gas generators with automatic transfer switch.	No	New
8	Rockaway Borough	Robert St Water Tank Stand by Generator	There is currently no back-up power at the water tank. The water tank is at risk of communication to the water system going down and being unable to detect tank levels during event of a power failure.	A generator would serve as back-up power for power failures at this site. Proposed 6 kw, natural gas generators with automatic transfer switch.	No	New
9	Rockaway Borough	Main St Pump Station	There is currently no back-up power at pump station. The pump station is at risk due to this if portable power cannot be provided in short time.	A generator would serve as back-up power for power failures at this site. Proposed 130 kw, diesel generator with automatic transfer switch and sound proofing.	No	New

Action	Jurisdiction	Mitigation Action Name	What is the problem the action is solving?	How does the action solve the problem?	Is this a continuing action from 2020 plan? Yes/No	2024 Project Status Provided by Respondent (not applicable to any new actions)  Not Started In Progress
10	Rockaway Borough	Analysis of nine repetitive loss properties in the Borough.	9 properties within Rockaway Borough as subject to repetitive losses from flood and severe storm events. An analysis should be conducted to see if these homes would be candidates for elevations, buy-outs, or other mitigation actions. Based on the results of the analysis, a mitigation action can be put into planning for the properties.	This analysis will determine the appropriate mitigation strategy (elevate, buy-out, flood vents, etc.) to protect the property owners from repetitive losses	Yes; but with revisions as requested	Not Started
11	Rockaway Borough	Rockaway River Streambank Stabilization	A section of the Rockaway River in Rockaway Borough has eroded over time. The eroded area is adjacent to Jackson Avenue across from Mott Place and extends about 200-300 linear feet along the streambank. The Borough has the engineering design and NJDEP permitting in its 2024 capital budget request.	This action is for an engineered solution to install stabilization along an eroded streambank	No	New
12	Rockaway Borough	Union Street Canal Cleaning Project	This is for the removal of sediment from an existing drainage basin and drainage channel that has become impaired over time from severe storms and floods. This project has been designed and permitted. The project will go to bid in 2024.	Re-establishes existing drainage patterns and capacity.	No	New
13	Rockaway Borough	Burton Lane Drainage Improvements	During large storm events, existing drainage structures and facilities in the vicinity of Burton Lane become inundated and impact residential homes. The Borough regularly receives complaints on the drainage problems in this area.	Infrastructure improvements will better manage severe storms and flooding events	No	New
14	Rockaway Borough	Smith Field Drainage Basin Analysis and Upgrades	An analysis should be conducted to determine what upgrades are necessary to the Smith Field Drainage Basin. The results of	Infrastructure improvements will better manage severe storms and flooding events	No	New

Action	Jurisdiction	Mitigation Action Name	What is the problem the action is solving?	How does the action solve the problem?	Is this a continuing action from 2020 plan? Yes/No	2024 Project Status Provided by Respondent (not applicable to any new actions)  Not Started In Progress
			the study (to enlarge basin) should be implemented.			
15	Rockaway Borough	Ogden & Drake Avenue Drainage Improvements	An open drainage channel is piped into a 54" elliptical pipe which causes backflow due to lack of capacity. The elliptical pipe needs to be analyzed and upgraded, as needed.	Infrastructure improvements will better manage severe storms and flooding events	No	New
16	Rockaway Borough	Fairview Development Drainage Analysis	There is no existing stormwater infrastructure in this neighborhood. During large storm events, there are significant amounts of run-off that impact residential properties.	Infrastructure improvements will better manage severe storms and flooding events	No	New
17	Rockaway Borough	Hill Street Development Drainage Analysis	There is no existing stormwater infrastructure in this neighborhood. During large storm events, there are significant amounts of run-off that impact residential properties.	Infrastructure improvements will better manage severe storms and flooding events	No	New

2.7.2 IMPLEMENTATION INFORMATION

	What is the main hazard from the 2025 update that the action mitigates?	List any additional hazards from the 2025 mitigation plan update that the action mitigates	What is the main goal that the action addresses?	List any additional goals that the action addresses	What agencies will lead the implementation of this action?	What agencies will support the implementation of this action?	What are potential sources of funding that can support this mitigation action?	What benefits does this action provide?
1	Severe Weather	Severe Winter Weather, Flood, Drought	Goal 3	Goal 1; Goal 5	<u>Engineering</u>	Administration	NJDEP Grant funding, Capital Budget	Improved data collection, reduction in hazard impacts; identify hazards
2	Severe Weather	ALL Hazards	Goal 2	Goal 1; Goal 5	<u>Engineering</u>	Administration	Operating budget	Improve education and outreach
3	Severe Weather	Severe Winter Weather, Flood	Goal 4	Goal 1; Goal 5	<u>Engineering</u>	Administration	Operating budget	Improve capabilities, coordination at Municipal level
4	Severe Weather	Severe Winter Weather, Flood	Goal 4	Goal 1; Goal 5	<u>DPW</u>	Engineering, Administration	Capital Budget, HMGP	Reduce hazard impacts, improve capabilities and coordination at Municipal Level; pursue opportunities to mitigate losses
5	Severe Weather	Severe Winter Weather, Flood	Goal 4	Goal 1; Goal 5	<u>DPW</u>	Engineering, Administration	Capital Budget, HMGP	Reduce hazard impacts, improve capabilities and coordination at Municipal Level; pursue opportunity to mitigate losses

	What is the main hazard from the 2025 update that the action mitigates?	List any additional hazards from the 2025 mitigation plan update that the action mitigates	What is the main goal that the action addresses?	List any additional goals that the action addresses	What agencies will lead the implementation of this action?	What agencies will support the implementation of this action?	What are potential sources of funding that can support this mitigation action?	What benefits does this action provide?
6	Severe Weather	Severe Winter Weather, Flood	Goal 4	Goal 1; Goal 5	<u>DPW</u>	Engineering, Administration	Capital Budget, HMGP	Reduce hazard impacts, improve capabilities and coordination at Municipal Level; pursue opportunity to mitigate losses
7	Severe Weather	Severe Winter Weather, Flood	Goal 4	Goal 1; Goal 5	<u>DPW</u>	Engineering, Administration	Capital Budget, HMGP	Reduce hazard impacts, improve capabilities and coordination at Municipal Level; pursue opportunity to mitigate losses
8	Severe Weather	Severe Winter Weather, Flood	Goal 4	Goal 1; Goal 5	<u>DPW</u>	Engineering, Administration	Capital Budget, HMGP	Reduce hazard impacts, improve capabilities and coordination at Municipal Level; pursue opportunity to mitigate losses
9	Severe Weather	Severe Winter Weather, Flood	Goal 4	Goal 1; Goal 5	<u>DPW</u>	Engineering, Administration	Capital Budget, HMGP	Reduce hazard impacts, improve capabilities and coordination at Municipal Level; pursue opportunity to mitigate losses

	What is the main hazard from the 2025 update that the action mitigates?	List any additional hazards from the 2025 mitigation plan update that the action mitigates	What is the main goal that the action addresses?	List any additional goals that the action addresses	What agencies will lead the implementation of this action?	What agencies will support the implementation of this action?	What are potential sources of funding that can support this mitigation action?	What benefits does this action provide?
10	Flood	Severe Weather	Goal 4	Goal 1; Goal 5	<u>Engineering</u>	Administration	Capital Budget	Reduce hazard impacts, improve capabilities and coordination at Municipal Level; pursue opportunity to mitigate losses
11	Flood	Severe Weather	Goal 4	Goal 1; Goal 5	<u>Engineering</u>	Administration	Capital Budget	Reduce hazard impacts, improve capabilities and coordination at Municipal Level; pursue opportunity to mitigate losses
12	Flood	Severe Weather	Goal 4	Goal 1; Goal 5	<u>Engineering</u>	Administration	Capital Budget	Reduce hazard impacts, improve capabilities and coordination at Municipal Level; pursue opportunity to mitigate losses
13	Severe Weather	Flood	Goal 4	Goal 1; Goal 5	<u>Engineering</u>	Administration	Capital Budget	Reduce hazard impacts, improve capabilities and coordination at Municipal Level; pursue opportunity to mitigate losses

	What is the main hazard from the 2025 update that the action mitigates?	List any additional hazards from the 2025 mitigation plan update that the action mitigates	What is the main goal that the action addresses?	List any additional goals that the action addresses	What agencies will lead the implementation of this action?	What agencies will support the implementation of this action?	What are potential sources of funding that can support this mitigation action?	What benefits does this action provide?
14	Severe Weather	Flood	Goal 4	Goal 1; Goal 5	<u>Engineering</u>	Administration	Capital Budget	Reduce hazard impacts, improve capabilities and coordination at Municipal Level; pursue opportunity to mitigate losses
15	Severe Weather	Flood	Goal 4	Goal 1; Goal 5	<u>Engineering</u>	Administration	Capital Budget	Reduce hazard impacts, improve capabilities and coordination at Municipal Level; pursue opportunity to mitigate losses
16	Severe Weather	Flood	Goal 4	Goal 1; Goal 5	<u>Engineering</u>	Administration	Capital Budget	Reduce hazard impacts, improve capabilities and coordination at Municipal Level; pursue opportunity to mitigate losses
17	Severe Weather	Flood	Goal 4	Goal 1; Goal 5	<u>Engineering</u>	Administration	Capital Budget	Reduce hazard impacts, improve capabilities and coordination at Municipal Level; pursue opportunity to mitigate losses

2.7.3 STRATEGY RAKING AND PRIORITIZATION

	What is the estimated cost of this action?	What is the estimated timeline for this action to be implemented?	Potential for Lives Saved 1 - Little Potential 2 - Some Potential 3 - Major Potential	Potential for Reduced Property Damages 1 - Little Potential 2 - Some Potential 3 - Major Potential	Potential for Reduced Response Actions 1 - Little Potential 2 - Some Potential 3 - Major Potential	Benefits Exceed Costs 1 - BCA equal 2 - Minor Exceedance 3 - Major Exceedance	Community Action Priority Ranking 1 - Low Priority 2 - Medium Priority 3 - High Priority	Total	Action Priority
1	Under \$50k	1-3 years	1	2	3	3	3	12	Medium
2	Under \$50k	1-3 years	3	3	2	1	2	11	Medium
3	Under \$50k	Under 1 year	1	3	3	3	3	13	High
4	\$50k-250k	3-5 years	2	1	3	3	3	12	Medium
5	\$50k-250k	3-5 years	2	1	3	3	3	12	Medium
6	\$50k-250k	3-5 years	2	1	3	3	3	12	Medium
7	\$50k-250k	3-5 years	2	1	3	3	3	12	Medium
8	\$50k-250k	3-5 years	2	1	3	3	3	12	Medium
9	\$50k-250k	3-5 years	2	1	3	3	3	12	Medium
10	Under \$50k	3-5 years	2	3	1	1	1	8	Low
11	\$250k-\$500k	1-3 years	1	3	2	2	3	11	Medium
12	\$50k-250k	Under 1 year	1	2	3	3	3	12	Medium
13	\$50k-250k	1-3 years	1	3	2	1	2	9	Medium
14	\$250k-\$500k	1-3 years	1	3	2	1	2	9	Medium
15	\$250k-\$500k	1-3 years	1	3	2	1	2	9	Medium
16	\$250k-\$500k	3-5 years	1	3	2	1	2	9	Medium
17	\$250k-\$500k	3-5 years	1	3	2	1	2	9	Medium

Figure 1: Borough of Rockaway Hazard Area Extent and Location Map 1

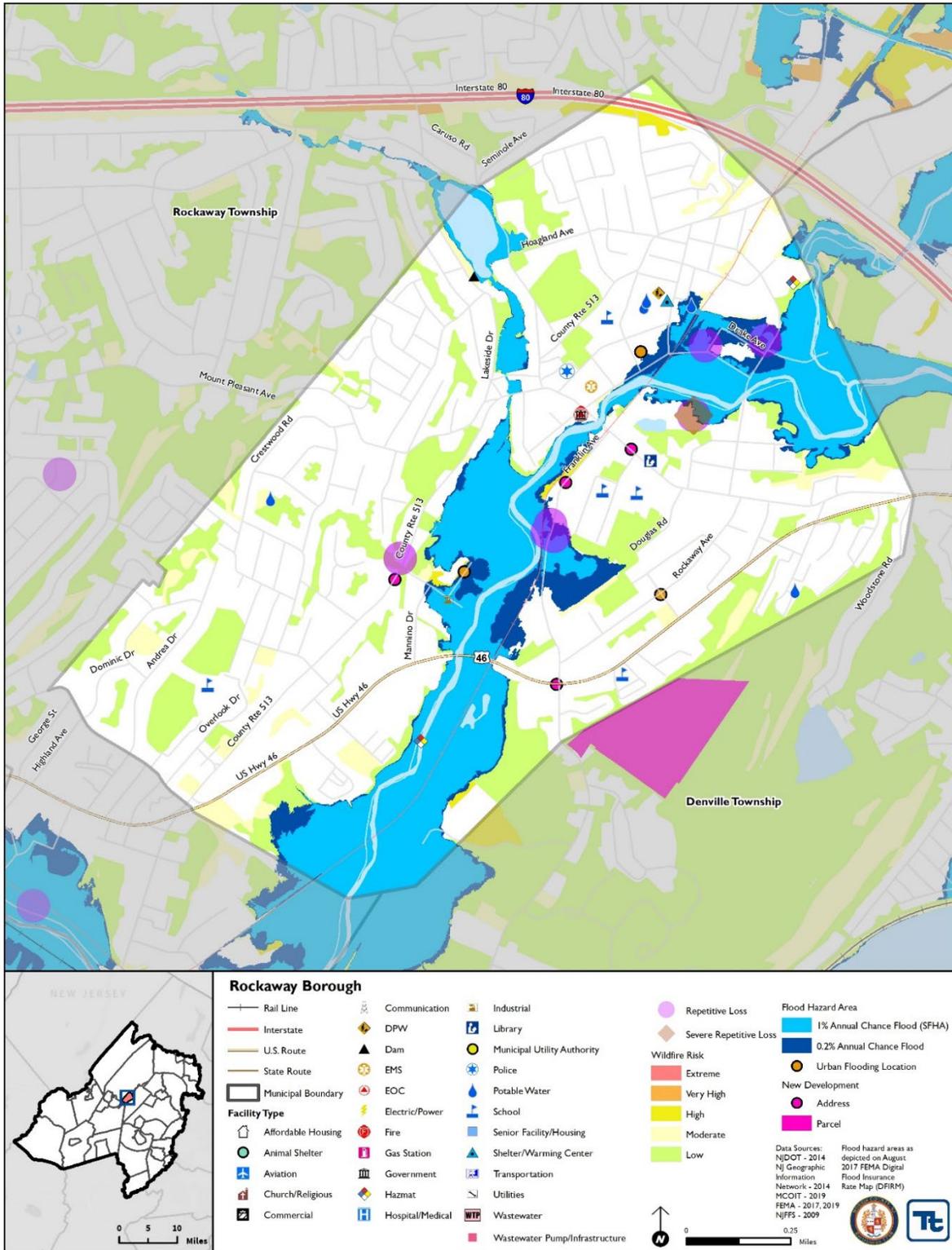


Figure 2: Borough of Rockaway Hazard Area Extent and Location Map 2

