

9.31 Borough of Runnemede

This section presents the jurisdictional annex for the Borough of Runnemede and includes resources and information to assist public and private sectors with reducing losses from future hazard events. This annex is not intended as guidance for actions to take during a disaster. Rather, this annex provides actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex includes a general overview of the municipality and who in the Borough participated in the planning process, an assessment of the Borough of Runnemede’s risk and vulnerability, the different capabilities used in the Borough, and an action plan that will be implemented to achieve a more resilient community.

9.31.1 Hazard Mitigation Planning Team

The Borough of Runnemede followed the planning process described in Section 2 (Planning Process) in Volume I of this plan update and developed the annex over the course of several months with input from many Borough departments as summarized in the table below. The primary and alternate points of contact represented the community on the 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, including the Borough of Runnemede’s hazard mitigation plan primary and alternate points of contact. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.31-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
<p>Name/Title: Charles Romond, Emergency Management Coordinator Address: 24 North Black Horse Pike, Runnemede, NJ Phone Number: 856-498-7931 Email: cmromond@comcast.net</p>	<p>Name/Title: Nick Kappatos, Mayor Address: 24 North Black Horse Pike, Runnemede, NJ Phone Number: 609-707-2507 Email: nkappatos@runnemedenj.org</p>
<p>NFIP Floodplain Administrator</p> <p>Name/Title: Charles Romond, Emergency Management Coordinator Address: 24 North Black Horse Pike, Runnemede, NJ Phone Number: 856-498-7931 Email: cmromond@comcast.net</p>	
<p>Additional Contributors</p> <p>Name/Title: Harry Wozunk, Superintendent of Public Works Method of Participation: Provided mitigation action review and building permits. Provided data for capability assessments. Attended Meetings and supported Mitigation Strategy.</p> <p>Name/Title: Keith Knightly, Construction Official Method of Participation: Provided building permit information</p>	

9.31.2 Municipal Profile

According to the U.S. Census, the 2010 population for the Borough of Runnemede was 8,468. The estimated 2019 population was 8,327, a 1.7 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.9 percent of the population is 5 years of age or younger and 14.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.31.3 Jurisdictional Capability Assessment and Integration

The Borough of Runnemede performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of planning, 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. Annex development included reviewing planning and policy documents and surveying each jurisdiction to obtain a better understanding of their progress in plan integration and how risk reduction is supported. Areas with current mitigation integration are summarized in this jurisdictional Capability Assessment (Section 9.1.3). The updated mitigation strategy includes opportunities the Borough of Runnemede identified for integration of mitigation concepts to be incorporated into municipal procedures.

9.31.3.1 Planning, Legal, and Regulatory Capability

Section 5 (Capability Assessment) provides an overview of the planning, legal, and regulatory capabilities. The table below summarizes the regulatory tools that are available to the Borough of Runnemede, what is present in the jurisdiction, and code citation and date.

Table 9.31-2. Planning, Legal, and Regulatory Capability

	Do you have this? (Yes/No)	Required by State? (Yes/No)	Citation and Date (code chapter and enactment date or name of plan and date of plan)	Authority (local, Borough, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations					
Building Code	Yes	Yes		State and Local	
Zoning/Land Use Code	Yes	Yes, if the jurisdiction has a planning board	PL 1975 C 291	Local	Planning Board Kandy Klehamer
Subdivision Ordinance	Yes	Yes, if the jurisdiction has a planning board	12/5/1978 ORD #333	Local	Planning Board Kandy Klehamer
Stormwater Management Ordinance	Yes	Yes	4/4/2006 ORD #06-08	Local	Borough Engineer Bach Associate
Post-Disaster Recovery/ Reconstruction Ordinance	No	No	-	-	-
Real Estate Disclosure	Yes	Yes		State	
Growth Management	Yes	Yes, if the jurisdiction has a planning board		Local	Planning Board Kandy Klehamer
Site Plan Ordinance	Yes	Yes, if the jurisdiction has a planning board	ORD #331	Local and County	Planning Board Kandy Klehamer
Environmental Protection Ordinance	Yes	Yes, depends on type of environmental areas	1968 Charter #245	Local	Planning Board Kandy Klehamer
Flood Damage Prevention Ordinance	Yes	Yes	8/3/2016 Ord #16-06	Federal, State, Borough and Local	Planning Board Kandy Klehamer
Wellhead Protection	No	No	-	-	-
Emergency Management Ordinance	No	No	-	-	-

	Do you have this? (Yes/No)	Required by State? (Yes/No)	Citation and Date (code chapter and enactment date or name of plan and date of plan)	Authority (local, Borough, state, federal)	Individual / Department / Agency Responsible
Climate Change Ordinance	No	No	-	-	-
Disaster Recovery Ordinance	No	No	-	-	-
Disaster Reconstruction Ordinance	No	No	-	-	-
Other	No	-	-	-	-

Codes, Ordinances, & Regulations Connection to Mitigation and Safe Growth

How are codes, ordinances and regulations contributing to risk reduction in your community?

- Building Code:
 - The State of New Jersey has adopted the 2018 International Building Code (IBC). Flood design provisions are found in the Building Subcode (Section 1612), Residential Subcode, Rehabilitation Subcode, and Plumbing, Mechanical, and Fuel Gas subcodes. The flood provisions are deemed by FEMA to meet or exceed NFIP requirements for buildings and structures.
 - The IBC includes design requirements for structural wind resistance. Design wind speeds in New Jersey vary based on structure type and location, with higher wind design speeds required in coastal areas.
- Flood Damage Prevention Ordinance:
 - A local flood damage prevention ordinance sets design standards for reducing flood losses and is required for participation in the National Flood Insurance Program.
 - The local flood damage prevention ordinance requires permits for floodplain development, adopts and enforces flood maps, requires new and substantially improved structures be elevated above the base flood elevation, among other standards.
 - In the State of New Jersey, all new and substantially improved structures are required to be elevated at least one foot above the base flood elevation.
- Stormwater Ordinance
 - New Jersey municipalities enact stormwater management ordinances to regulate runoff quantity and quality, groundwater recharge, and erosion control. Municipalities are required to update their municipal stormwater control ordinance to reflect amendments to the Stormwater Management rules at N.J.A.C. 7:8, adopted March 2, 2020 and should use [NJ DEP's Model Stormwater Control Ordinance for Municipalities](#).
 - Stormwater ordinances for major development require mitigating runoff by requiring that peak runoff rates for the 2, 10, and 100-year storms be below pre-construction conditions and not increase flood damage downstream of the site.

Prior to zoning changes or development approvals, does the jurisdiction review the hazard mitigation plan and other hazard analyses to ensure consistent and compatible land use? Yes

Does the zoning ordinance discourage development or redevelopment within natural areas including wetlands, floodways, and floodplains? No

Does the ordinance require developers to take additional actions to mitigate natural hazard risk? No

Do rezoning procedures recognize natural hazard areas as limits on zoning changes that allow greater intensity or density of use? No

Do the subdivision regulations restrict the subdivision of land within or adjacent to natural hazard areas? No

	Do you have this? (Yes/No)	Required by State? (Yes/No)	Citation and Date (code chapter and enactment date or name of plan and date of plan)	Authority (local, Borough, state, federal)	Individual / Department / Agency Responsible
Do the regulations provide for conservation subdivisions or cluster subdivisions in order to conserve environmental resources? PLACEHOLDER					
Do the regulations allow density/development transfers where hazard areas exist? PLACEHOLDER					
Planning Documents					
Master Plan	Yes	Yes	3/16/2018	Local	Master Plan Reevaluated
Capital Improvement Plan	Yes	Allowed			
Disaster Debris Management Plan	No	No	-	-	-
Floodplain Management or Watershed Plan	No	No	-	-	-
Stormwater Management Plan	Yes	All but Boroughs of Pine Valley and Tavistock	2019	Local	Harry Wozunk DPW Superintendent
Stormwater Pollution Prevention Plan	Yes	All but Boroughs of Pine Valley and Tavistock	2019	Local	Harry Wozunk DPW Superintendent
Urban Water Management Plan	No	No	-	-	-
Habitat Conservation Plan	No	No	-	-	-
Economic Development Plan	No	No	-	-	-
Shoreline Management Plan	No	No	-	-	-
Community Wildfire Protection Plan	No	No	-	-	-
Community Forestry Management Plan	No	No	-	-	-

	Do you have this? (Yes/No)	Required by State? (Yes/No)	Citation and Date (code chapter and enactment date or name of plan and date of plan)	Authority (local, Borough, state, federal)	Individual / Department / Agency Responsible
Transportation Plan	No	No	-	-	-
Agriculture Plan	No	No	-	-	-
Climate Action/ Resiliency Plan	No	No	-	-	-
Tourism Plan	No	No	-	-	-
Business/ Downtown Development Plan	Yes	No	Redevelopment Plan November 2009	Local	Planning Board
Other					
Planning Connection to Mitigation and Safe Growth					
<p>How are your plans contributing to risk reduction in your community? New development must adhere to Stormwater Pollution Prevention Plan and Stormwater Management Plan</p> <p>Does the future land use map clearly identify natural hazard areas? N/A</p> <p>Do the land use policies discourage development or redevelopment within natural hazard areas? No</p> <p>Does the land use plan provide adequate space for expected future growth in areas located outside natural hazard areas? N/A</p> <p>Is transportation policy used to guide growth to safe locations? No</p> <p>Are transportation systems designed to function under disaster conditions (e.g. evacuation)? No</p> <p>Are environmental systems that protect development from hazards identified and mapped (i.e., dunes, rip rap, defensible space, wetlands/natural shoreline)? No</p> <p>Do environmental policies maintain and restore protective ecosystems? No</p>					
Response/Recovery Planning					
Emergency Operations Plan	Yes	Yes	Updated 2020	Local	Emergency Management Charles Romond
Strategic Recovery Planning Report	No	No	-	-	-
Threat & Hazard Identification & Risk	No	No	-	-	-

	Do you have this? (Yes/No)	Required by State? (Yes/No)	Citation and Date (code chapter and enactment date or name of plan and date of plan)	Authority (local, Borough, state, federal)	Individual / Department / Agency Responsible
Assessment (THIRA)					
Post-Disaster Recovery Plan	No	No	-	-	-
Continuity of Operations Plan	No	No	-	-	-
Public Health Plan	No	No	-	-	-
Other	No	No	-	-	-
Response/Recovery Planning Connection to Mitigation and Safe Growth					
<p>How do your response/recovery plans contribute to risk reduction in your community?</p> <ul style="list-style-type: none"> Emergency Operations Plan (EOP): <ul style="list-style-type: none"> NJ Rev Stat § App.A:9-43.2 (2013) requires a written Emergency Operations Plan (EOP) for each Borough and municipality in the State that coordinates with neighboring jurisdictions. EOPs must address the needs of animals and individuals with animals; evacuation procedures for hospitals and health care facilities; and addressing evacuation of families and dependents of emergency responders. EOPs must include a basic plan as well as Emergency Support Functions (ESF) annexes that address public information, hazardous materials, emergency warnings, and related subjects. Emergency operations plans must be certified for approval by the New Jersey Office for Emergency Management. <p>Does your EOP cover short-term response and long-term recovery to address communications, evacuation, and housing necessary for identified hazards? EOP covers short term response.</p>					

9.31.3.2 Development and Permitting Capability

The table below summarizes the capabilities of the Borough of Runnemede to oversee and track development.

Table 9.31-3. 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? - If no, what is your process for development?	No	Planning Board Review Subdivision and Site Plans
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? - If yes, describe. - If no, quantitatively describe the level of buildout in the jurisdiction.	No	Less Than 1 Square Mile of Vacant or Agricultural Land

9.31.3.3 Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Borough of Runnemede and their current responsibilities which contribute to hazard mitigation.

Table 9.31-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	Site Plan Review
Zoning Board of Adjustments	Yes	Kandy Klehamer
Planning Department	Yes	Kandy Klehamer
Mitigation Planning Committee	Yes	OEM Charles Romond
Environmental Board/Commission	Yes	Green Team-John Ranieri-Chair
Open Space Board/Committee	Yes	Parks & Recreation-Luis Cepero
Economic Development Commission/Committee	Yes	Planning Board And Borough Council; Reimagine Runnemede-J Ranieri, Chair
Public Works/Highway Department	Yes	Harry Wozunk Superintendent
Construction/Building/Code Enforcement Department	Yes	Keith Knight
Emergency Management/Public Safety Department	Yes	Police Chief Paul Daley
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Fire Department Chief Pat Moriarty
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	DPW Harry Wozunk Superintendent
Mutual aid agreements	Yes	OEM Charles Romond
Human Resources Manual - Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Borough Engineer Bach Associate
Engineers or professionals trained in building or infrastructure construction practices	Yes	Borough Engineer Bach Associate
Planners or engineers with an understanding of natural hazards	Yes	Borough Engineer Bach Associate
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Borough Engineer Bach Associates
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Scientist familiar with natural hazards	No	
Surveyor(s)	Yes	Borough Engineer Bach Associates
Emergency Manager	Yes	Charles Romond
Grant writer(s)		Are data and maps from the HMP used to support documentation in grant applications?
Resilience Officer	Yes	Mayor Nick Kappatos
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Borough Engineer Bach Associates Public Works Storm Water Coordinator
<p>How do your administrative/technical capabilities contribute to risk reduction in your community? Administrative and technical capabilities allow for thorough, rapid and immediate evaluation of hazard situations as needed and allow for effective planning to reduce risks in future.</p>		

9.31.3.4 Fiscal Capability

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

Table 9.31-5. Fiscal Capabilities

Financial Resources	Are these accessible or eligible to use for mitigation? (Yes/No) If yes, please describe. If no, can this be used to support in the future?
Community development Block Grants (CDBG, CDBG-DR)	Yes, cdbg in eligible track
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes, assessments
User fees for water, sewer, gas or electric service	Yes, quarterly billing
Impact fees for homebuyers or developers of new development/homes	Yes, sewer connection fees
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes if pursuant to njsa 40a:2
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state funding programs	No; future: usda, infrastructure trust, fire grant possible
Open Space Acquisition funding programs	No; future: county open space possible
Other	No
<p>Fiscal Connection to Mitigation and Safe Growth</p> <p>How do your fiscal capabilities contribute to risk reduction in your community? Fiscal capabilities create possibility of improvements to mitigate hazards as budgets and local economy allow.</p> <p>When constructing upcoming budgets, hazard mitigation actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the hazard mitigation goals. Yes</p>	

Financial Resources	Are these accessible or eligible to use for mitigation? (Yes/No) If yes, please describe. If no, can this be used to support in the future?
<p>Annually, the jurisdiction will review mitigation actions when allocating funding. As budget allows.</p> <p>Do budgets limit expenditures on projects that would encourage development in areas vulnerable to natural hazards? Yes</p> <p>Do infrastructure policies limit extension of existing facilities and services that would encourage development in areas vulnerable to natural hazards? Yes</p> <p>Do budgets provide funding for hazard mitigation projects identified in the Borough HMP? Budgets and/or capital funding as permissible within statutory and economical limits.</p>	

9.31.3.5 Education and Outreach Capability

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

Table 9.31-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/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.
Public information officer or communications office	Yes	Borough Clerk Joyce Pinto
Personnel skilled or trained in website development	Yes	Joycemedial, LLC
Hazard mitigation information available on your website	Yes	www.runnemedenj.org
Social media for hazard mitigation education and outreach	Yes	Eblast and Facebook Site
Citizen boards or commissions that address issues related to hazard mitigation	No	
Other programs already in place that could be used to communicate hazard-related information	Yes	Borough Newsletter
Warning systems for hazard events	Yes	Municipal Fire Siren
Natural disaster/safety programs in place for schools	Yes	
Other	No	

9.31.3.6 Community Classifications

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

Table 9.31-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	N/A	N/A
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	3-RES 3-COMM	2016
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	ISO 4	2017
Sustainable Jersey	Yes	Bronze	Dec 19
StormReady Certification	No	N/A	N/A
Firewise Communities classification	No	N/A	N/A

Note:

N/A Not applicable

NP Not participating

- Unavailable

9.31.3.7 Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.31-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion/Sea Level Rise	Moderate
Dam Failure/Levee Failure	Moderate
Disease Outbreak/Pandemic	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temperatures	Moderate
Flood	Moderate
Geological Hazards	Moderate
High Wind	Moderate
Invasive Species/Harmful Algal Bloom	Moderate
Severe Summer Weather	Moderate
Severe Winter Weather	Strong
Wildfire	Moderate

*Strong = Capacity exists and is in use, Moderate = Capacity may exist; but is not used or could use some improvement, Weak = Capacity does not exist or could use substantial improvement.

9.31.4 National Flood Insurance Program (NFIP) Compliance

The table below provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

Table 9.31-9. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
<ul style="list-style-type: none"> # NFIP Policies: 6 # RL properties: 1 # SRL properties: 0 # RL/SRL mitigated: 0 	<ul style="list-style-type: none"> Total premium in force: \$4,276 # claims filed: 5 Total loss payments: \$30,246
Describe areas prone to flooding in your jurisdiction.	Zone A on the DFIRM map along Otter Branch, Zone A and AE along Big Timber Creek and Beaver Branch
Do you maintain a list of properties that have been damaged by flooding?	Yes
Do you maintain a list of property owners interested in flood mitigation, and if so, how many are interested in (elevation or acquisition)?	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? 	OEM Coordinator and/ or Construction Official and/or Borough Engineer as Appropriate; None
Detail any RiskMAP projects currently underway in your jurisdiction.	Unsure
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	No; maps not developed yet
NFIP Administration	
What local department is responsible for floodplain management?	OEM and/or Public Works and/or Construction as appropriate
Are any staff certified floodplain managers (CFMs) or is a consultant retained?	Consultant retained
Provide an explanation of who in your municipality provides NFIP administration services (permit review, GIS, education/outreach, inspections, engineering capability).	OEM, Construction Official, Borough Engineer
What specific training or support does your floodplain management staff need to support its floodplain management program?	Unsure
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Construction Official or Borough Engineer as appropriate
Do you have access to resources to determine possible future flooding conditions from climate change?	No
NFIP Compliance	
List any outstanding NFIP compliance violations.	Unsure
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	2013
What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended?	N/A

NFIP Topic	Comments
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	No
Are there other local ordinances, plans, or programs (site plan review, consideration of flood risk reduction when granting height variances) that support floodplain management and meeting the NFIP requirements?	Site Plan Review
Does your jurisdiction participate in CRS? • If yes, is your jurisdiction interested in improving its CRS Classification? • If no, is your jurisdiction interested in joining the CRS program?	No; unsure

Source:

Notes:

RL—Repetitive Loss; SRL—Severe Repetitive Loss; NA—Not applicable

9.31.5 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 understanding 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 9.31-10. Recent and Expected Future Development

Type of Development	2016		2017		2018		2019		2020		2021	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	1	0	3	0	3	0	5	0	1	0	0	-
Multi-Family	0	-	0	-	0	-	0	-	0	-	0	-
Other	0	-	1	0	0	-	0	-	0	-	1	0
Total Permits Issued	1	0	4	0	3	0	5	0	1	0	1	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												

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

* Only location-specific hazard zones or vulnerabilities identified.

9.31.6 Jurisdictional Risk Assessment

The hazard profiles in Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.2 (Methodology and Tools), Section 4.3 (Hazards of Concern), and Section 4.4 (Hazard Ranking) provide a detailed summary for the Borough of Runnemede's risk assessment results, and data used to determine the hazard ranking are discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. 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 were only generated for those hazards that can be clearly identified using mapping techniques and technologies and for which the Borough of Runnemede has significant exposure. The maps also show the location of potential new development, where available.

DRAFT

Figure 9.31-1. Borough of Runnemede Hazard Area Extent and Location Map 1

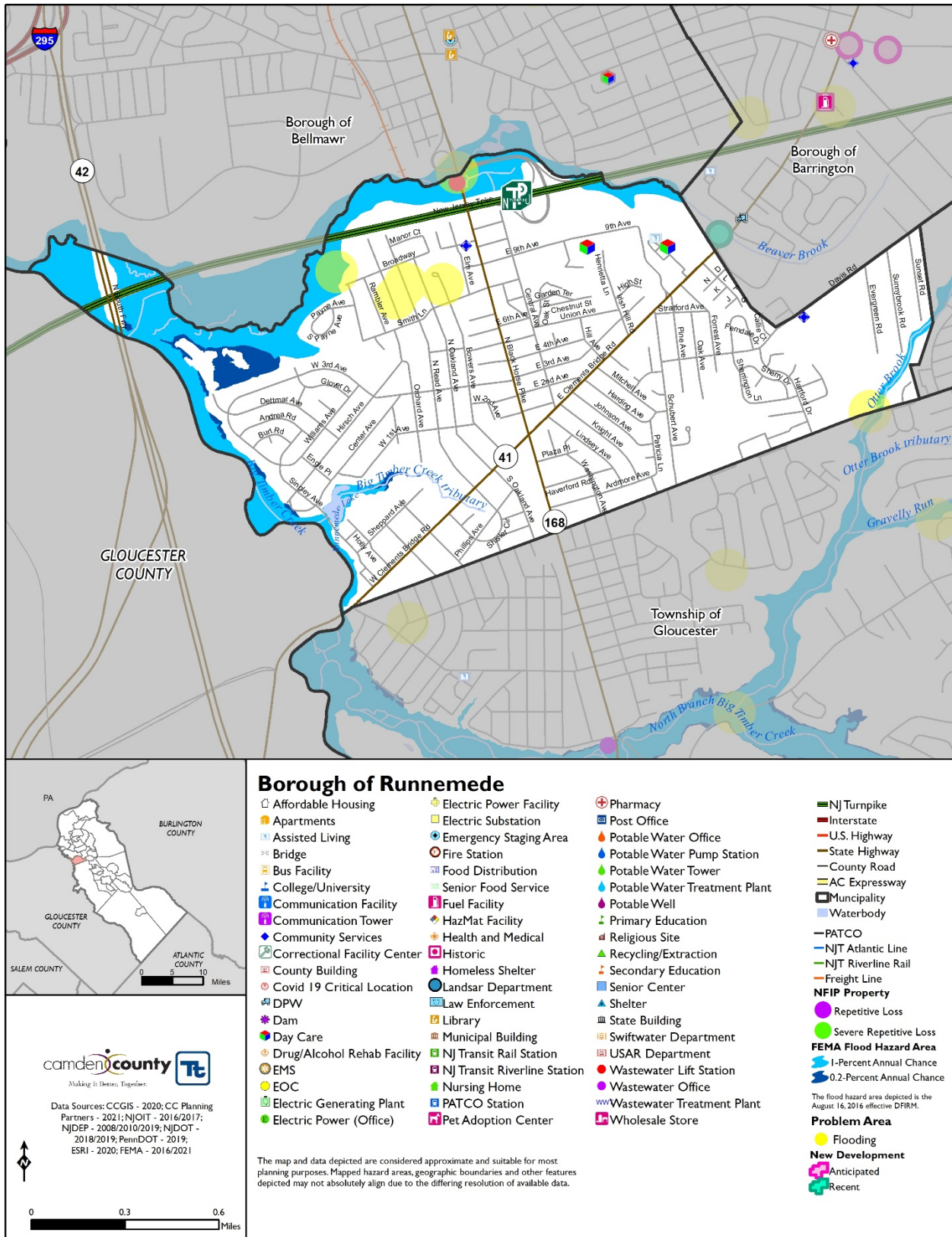


Figure 9.31-2. Borough of Runnemede Hazard Area Extent and Location Map 2

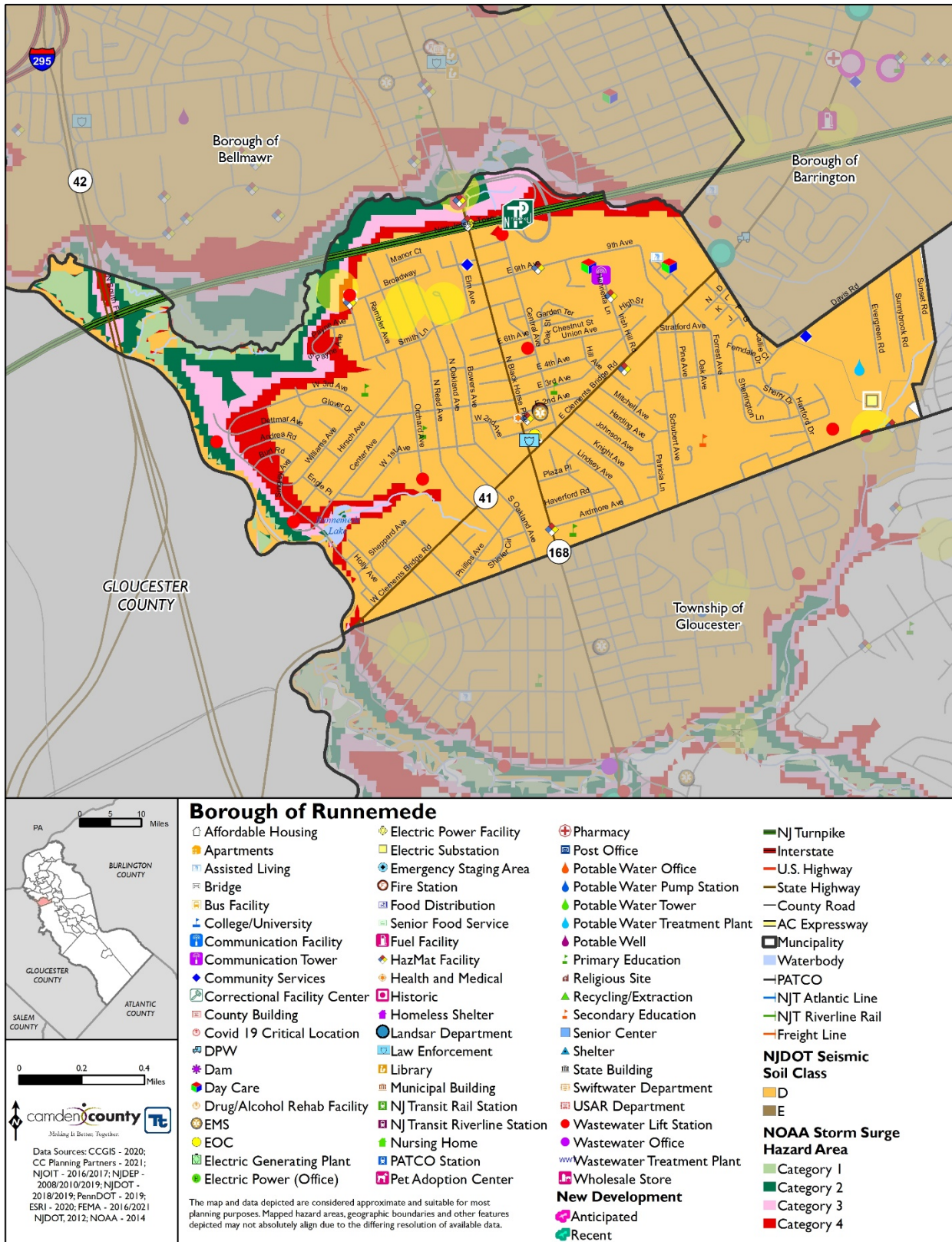
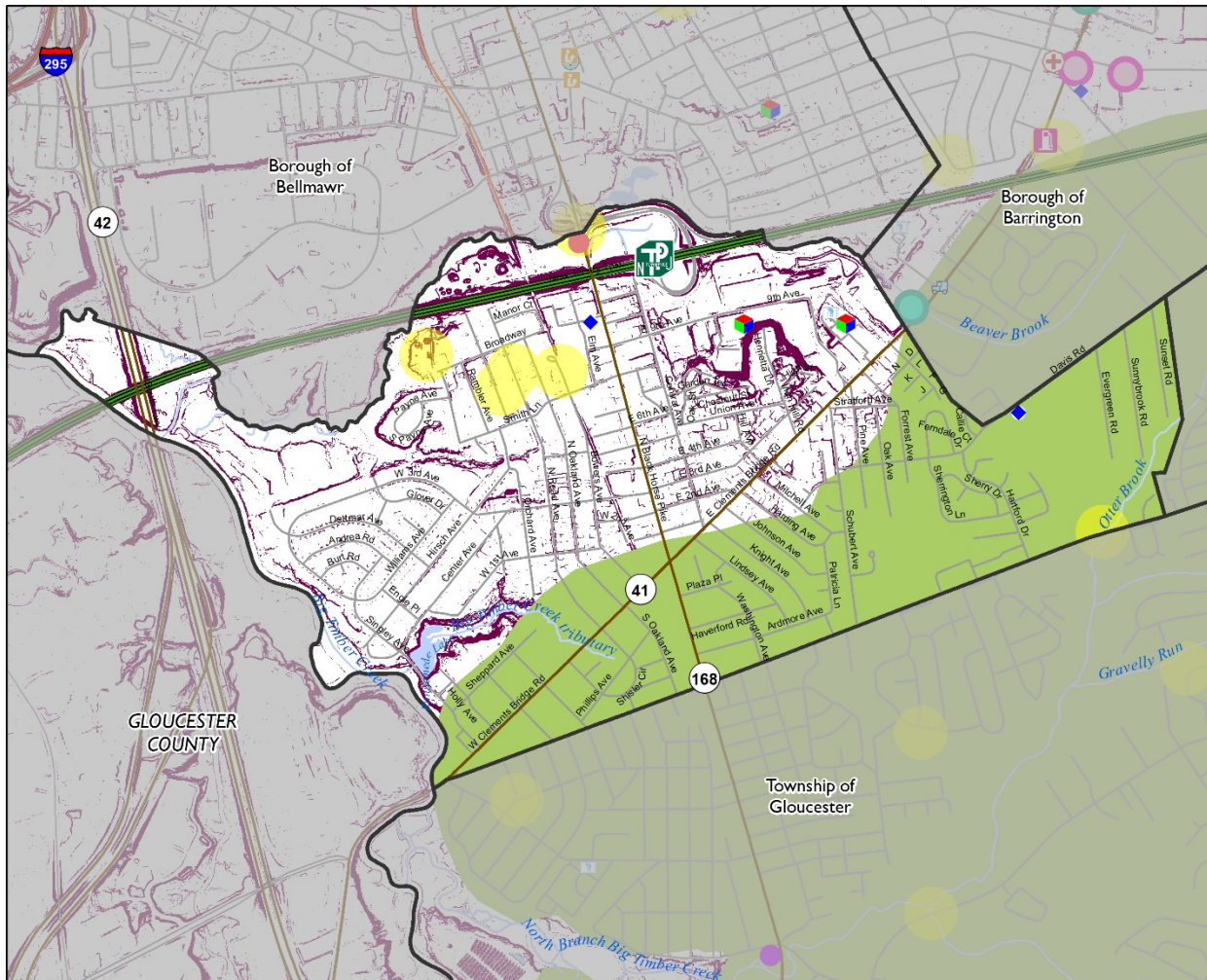


Figure 9.31-3. Borough of Runnemede Hazard Area Extent and Location Map 3



PA
BURLINGTON COUNTY
GLoucester COUNTY
SALEM COUNTY
ATLANTIC COUNTY

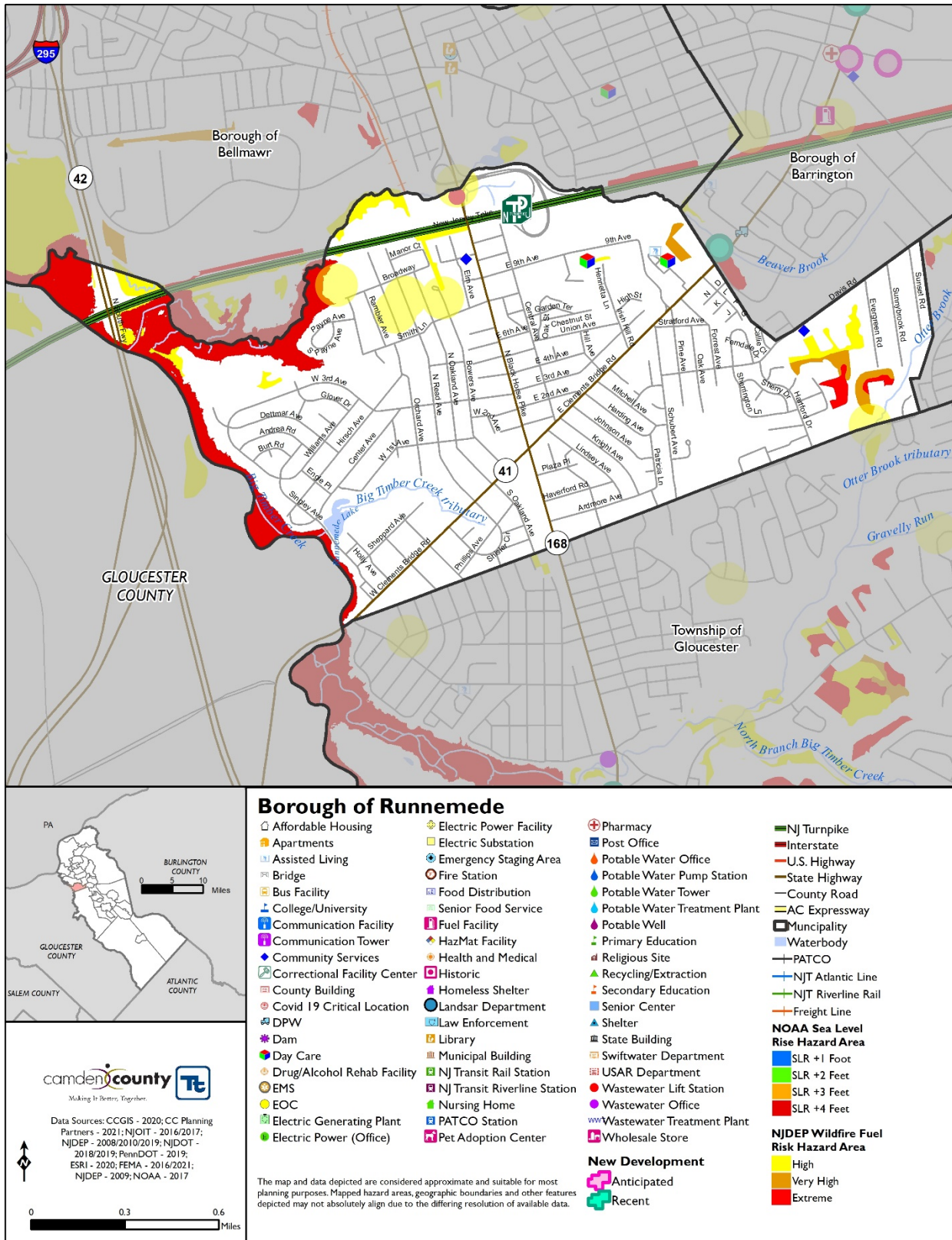
0 10 Miles

Borough of Runnemede

<ul style="list-style-type: none"> Affordable Housing Apartments Assisted Living Bridge Bus Facility College/University Communication Facility Communication Tower Community Services Correctional Facility Center County Building Covid 19 Critical Location DPW Dam Day Care Drug/Alcohol Rehab Facility EMS EOC Electric Generating Plant Electric Power (Office) 	<ul style="list-style-type: none"> Electric Power Facility Electric Substation Emergency Staging Area Fire Station Food Distribution Senior Food Service Fuel Facility HazMat Facility Health and Medical Historic Homeless Shelter Landsar Department Law Enforcement Library Municipal Building NJ Transit Rail Station NJ Transit Riverline Station Nursing Home PATCO Station Pet Adoption Center 	<ul style="list-style-type: none"> Pharmacy Post Office Potable Water Office Potable Water Pump Station Potable Water Tower Potable Water Treatment Plant Potable Well Primary Education Religious Site Recycling/Extraction Secondary Education Senior Center Shelter State Building Swiftwater Department USAR Department Wastewater Lift Station Wastewater Office Wastewater Treatment Plant Wholesale Store 	<ul style="list-style-type: none"> NJ Turnpike Interstate U.S. Highway State Highway County Road AC Expressway Municipality Waterbody PATCO NJT Atlantic Line NJT Riverline Rail Freight Line <p>USGS/NJDEP Geologic Hazard Area</p> <ul style="list-style-type: none"> Steep Slope (>15% Grade) Carbonate Rock <p>Coastal Erosion Hazard Area</p> <ul style="list-style-type: none"> CEHA Buffer <p>New Development</p> <ul style="list-style-type: none"> Anticipated Recent
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The map and data depicted are considered approximate and suitable for most planning purposes. Mapped hazard areas, geographic boundaries and other features depicted may not absolutely align due to the differing resolution of available data.

Figure 9.31-4. Borough of Runnemede Hazard Area Extent and Location Map 4



9.31.6.1 Hazard Event History

Camden County has a history of natural hazard events as detailed in Section 4 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the Borough and its municipalities.

The Borough of Runnemede’s history of federal declarations (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Camden County. The table below provides details regarding municipal-specific loss and damages the Borough 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 9.31-11. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
February 15, 2015	Cold/Wind Chill	No	The center of an arctic air mass brought some of the lowest wind chills and temperatures of the winter season to New Jersey. Wind chill factors were recorded as low as 22 degrees below zero, with actual temperatures reaching -2°F.	The extreme cold weather caused pipes to freeze and burst, displacing 16 residents from the Gloucester Borough Senior Campus. Property damages in Camden County were estimated at \$150,000.
June 23, 2015	Severe Storm (DR-4231-NJ)	Yes	Hot and humid air combined with an approaching cold mass, resulting in a squall line of severe thunderstorms to move through southern new Jersey on the afternoon of June 23. Estimated wind gusts reached 85 mph and knocked down thousands of trees and caused extensive damages and power losses to over 410,000 homes throughout the area.	The Borough of Runnemede Public Safety Office fielded over 3,500 calls for assistance during the event. Damages included crop losses, and structural damages to buildings and facilities throughout the County, an estimated total over \$3.35 million.
January 22 – 24, 2016	Severe Winter Storm and Snowstorm (DR-4264-NJ)	Yes	A low-pressure system moved up along the Carolina Coast intensifying into a major nor’easter, producing record snowfall in New Jersey on January 23. Wind gusts reached upwards of 60 mph and visibility was one-quarter mile or less throughout the region. Damages across the state were estimated at \$82.6 million.	Up to 22 inches of snow was reported in Camden County.
March 6, 2018	Winter Storm	No	A low pressure system moved northeast across Delaware and New Jersey bringing a wintry snow/rain mix overnight on March 6. Across	Snowfall totals in Camden County reached 9 inches in some areas near the Delaware River.

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			the state, snowfall totals ranged from 6 to 24 inches. Heavy, wet snow downed trees and limbs leaving 350,000 customers state-wide without power.	
January 20, 2020 – Present	Covid-19 Pandemic (EM-3451-NJ) (DR-4488-NJ)	Yes	Beginning on January 20, 2020, the pandemic resulting from the Coronavirus Disease (COVID-19) created conditions of sufficient severity and magnitude to warrant a disaster declaration in the State of New Jersey.	Between March 1, 2020 and February 18, 2021, Camden County reported 38,352 confirmed cases of COVID-19, and 1,023 total fatalities.

Source: NOAA NCEI 2021

9.31.6.2 Hazard Ranking and Vulnerabilities

The hazard profiles in Section 4.3 (Hazards of Concern) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Borough of Runnemede’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 Section 4 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 4.4 (Hazard Ranking), each participating jurisdiction can have differing degrees of risk exposure and vulnerability compared with Borough of Runnemede as a whole. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Borough of Runnemede. The Borough of Runnemede reviewed the Borough hazard risk/vulnerability risk ranking table, including municipal-specific results, to reflect the relative risk of the hazards of concern to the community.

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

- The Borough agreed that the calculated rankings accurately reflected the risk posed to the community

Table 9.31-12. Hazard Ranking Input

Coastal Erosion/ Sea Level Rise	Dam Failure/ Levee Failure	Disease Outbreak/ Pandemic	Drought	Earthquake	Extreme Temperatures	Flood
High	High	High	Medium	Low	Medium	Medium
Geological Hazards	High Wind	Invasive Species/ Harmful Algal Bloom	Severe Summer Weather	Severe Winter Weather	Wildfire	
Low	High	Medium	Medium	High	Low	

Note: The scale is based on the hazard rankings established in Section 4.4 (Hazard Ranking) and modified as appropriate during review by the jurisdiction.

Critical Facilities

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

Table 9.31-13. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Beaverbrook Motors Auto & Truck Collision	Hazardous Material Facility	A	-	
Public Works Complex	DPW	A	-	2021-B. Runnemede-001
Sewage Pumping Station	Wastewater Lift Station	-	X	

Source: FEMA DFIRM – 2016

9.31.6.3 Identified Issues

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

- Coastal Erosion – lack of education for residents
- Flood – Education of flood risk for Borough residents is weak. Public Alerting is weak to notify residents on local effect
- Flood Prone areas:
 - North Orchard Ave. Between Smith Lane & Broadway
 - 800 Block of Bowers Ave. between Smith Lane & Broadway
 - 800 Block Oakland Ave. Between Smith Lane & Broadway
 - 900 Evesham Rd. Block Between Hartford Rd. & Kimberly Dr.
 - Broadway Between Corner of Broadway & Crescent Ave.

- Summer Weather – No lightning rods on buildings including lift stations. Lack of surge protection on electric panels and workstations for electronics. No back-up generator for Public Works complex or Community Center
- Winter Weather – No emergency snow routes labeled

Specific areas of concern based on resident response to the citizen survey include:

- "Being within 1 block of BHP backup is sufficient under normal conditions-during hurricane Sandy- half our block-10 homes were without electric for nine days and then only received help when one of the neighbors approached the PSE&G team at WAWA's-not a priority to PSE&G- this was not acceptable- my husband was on oxygen- there were toddlers and other children/elderly affected by this. We were fortunate enough to have a large gas generator, but many did not- we later installed a natural gas generator to avoid this problem in the future. Too many are left with no one to turn to during a crisis for answers- local outreach within communities has to be made better."
- Work on improving the damage resistance of utilities (electricity, communications, water/wastewater facilities etc.)
- Replace inadequate or vulnerable bridges and causeways

9.31.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

9.31.7.1 Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2017 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and are discussed in the 'Capability Assessment' presented previously in this annex.

Table 9.31-14. Status of Previous Mitigation Actions

#	2017 Action Description	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 2022 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.
M-1	Identify and pursue outreach and education opportunities.	Municipal OEM	Ongoing	Yes		OEM
M-2	Prioritize critical facilities and complete site and facility surveys to identify vulnerabilities and potential mitigation measures.	Municipal OEM and Facility Managers	Ongoing	Yes		OEM
M-3	Conduct regular Municipal Working Group meetings.	Municipal OEM and Municipal Working Group	Ongoing	Ongoing	-	OEM
M-4	Installation of a retaining wall between West 4th and West 7th Streets.	Public Works Department	No Progress	No	-	-
M-5	Storm-water management system upgrade and improvement along 800th block of Bowers, Oakland, Read, and Orchard Avenue.	Public Works Department	In Progress Self-Funding DPW	Yes		OEM/DPW
M-6	Install permanent back up emergency power generator at Harry Williams Senior Community Center.	Municipal OEM	No Progress	Yes		OEM Finance/Engineer
M-7	Install permanent backup emergency power generator at shelter.	Municipal OEM	Completed/Self-Funded	No	-	-
M-8	Raise sewer department storage facility.	Public Works Department	Completed/Self-Funded	No	-	-
M-9	Renovate the current EOC electrical and plumbing. (CF-2)	Municipal OEM	Completed/Self-Funded	No	-	-

#	2017 Action Description	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 2022 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.
M-10	Address identified Repetitive Flood Loss Properties.	Floodplain Administrator	No Progress	Yes		OEM/Engineering
MJ-1	Alleviate flooding along South Oakland Avenue and State Highway 41.	Municipal OEM, Department of Public Works, Engineering Department, NJ DOT	Completed NJDOT	No	-	-
MJ-2	Upgrade storm-water management system at 900 Block East Evesham Road (County Route 544).	Municipal OEM, Department of Public Works, Engineering Department, Camden County DOT	In Progress Camden County DPW	No	-	-

9.31.7.2 Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Borough of Runnemede has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2017 HMP:

- None Identified

9.31.7.3 Proposed Hazard Mitigation Initiatives for the HMP Update

The Borough of Runnemede participated in a mitigation action workshop in May 2021 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 Floodprone 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.

Table 9.31-15. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion/Sea Level Rise		002		008			008			002
Dam Failure/Levee Failure		002, 005		008			008		005	002
Disease Outbreak/Pandemic		002		008			008			002
Drought		002		008			008			002
Earthquake		002		008			008			002
Extreme Temperatures		002		008			008			002
Flood	010	001, 002, 003, 005, 006, 007		008	010	001	008		001, 003, 005, 006, 007	001, 002
Geological Hazards		002		008			008			002
High Wind	009	002, 003		008	009		008		003	002, 009
Invasive Species/Harmful Algal Bloom		002		008			008			002
Severe Summer Weather	009	002, 003		008	009		008		003	002, 009
Severe Winter Weather	009	002, 003, 004		008	009		008		003, 004	002, 004, 009
Wildfire		002		008			008			002

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

The table below summarizes the comprehensive range of specific mitigation initiatives the Borough of Runnemede would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based

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on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used 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 your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.31-17 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

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Table 9.31-16. Proposed Hazard Mitigation Initiatives and Associated Priority

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
2022-B. Runnemede-001	Public Works Complex Flood Protections	<p>Problem: The Runnemede Public Works Complex is a critical facility and is located within the 1% SFHA (100-year floodplain).</p> <p>Solution: The Borough will seek funding to elevate and/or rebuild the Public Works Complex to eliminate flood risk and ensure the continuity of operations of the facility and response time during hazard events. Depending on a thorough flood vulnerability of the study by an engineer, the Borough will determine the best course of action, including elevation, or other structural flood</p>	Existing	Flood	1, 2, 6	DPW, Engineering	FEMA BRIC, HMA	High, ensures continuity of operations and eliminates flood risk	High	Within Scope of HMP, Dependent on funding	High 	SIP	SP, PP, ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
		protection measures in accordance with the FEMA design guide for protection critical facilities. The Borough will ensure that all protections ensure that the facility and all equipment stored within are protected to the 500-year event and that all construction meets state standards and does not threaten the existing environment or natural areas surrounding the facility.											
2022-B. Runnemede-002	Generators for Critical Facilities	Problem: The Community Complex (HWB) and Public Works Complex do not have emergency backup generators. Solution: The Borough will seek funding to install	Existing	All Hazards	1, 5, 6	OEM, DPW	FEMA HMA, BRIC, HMGP	High, ensures continuity of government and essential services	High, estimated \$150,000 for Community Center and \$45,000 for Public Works	As soon as possible, dependent on funding	High	SIP	ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
		automatic, permanent generators at these critical facilities to ensure the function of government and essential services before, during, and after hazard events. The Borough will also ensure that generators are protected to withstand additional hazards (i.e. raised to reduce flood impacts, and placed in secure location to reduce damages from high winds, ice, etc.). The Community Center will need a 120 KVV capacity generator, while the DPW will need a 40 KVV capacity generator.											
2022-B. Runnemede-003	Storm and sanitary	Problem: The Existing stormwater	Existing	Flood, Severe Storm,		OEM, DPW	FEMA BRIC	High, reduces flooding and	High	As soon as possible,	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
	sewer upgrades	<p>management system and sanitary sewer system does not have the capacity to handle current flow and overflow capacity and there have been documented damages to the system from floods and storms and the system is deteriorating.</p> <p>Solution: The Borough will seek funding to implement upgrades to the stormwater system along the 800-block of Bowers, Oakland, Read, and Orchard Avenue. The Borough will work with engineering to monitor storm and flood events to gather data to evaluate the needed upgraded pipe size and to determine</p>		Severe Winter Weather, High Wind				stormwater backup and intrusion of contaminants into water supply		depending on funding			

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
		complete design specifications for future events. The Borough will replace slip line pipes throughout the system to prevent catastrophic failures as well as replace, rebuild, or seal catch basin boxes to prevent additional failures. The Borough will make improvements to sanitary lines by replacing to prevent inflow and infiltration during storm events that can lead to system failures. The borough will also make upgrades to the sanitary manholes through adding protective seals to protect from I&I, or replacement of damaged manholes to eliminate I&I. The											

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
		Borough will consider green infrastructure solutions for any roadway upgrades or improvements to the stormwater management systems including rainwater collection and vegetative swales, and permeable surfaces.											
2022-B. Runnemede-004	Winter Weather Protections	<p>Problem: The Borough does not have emergency snow routes labeled and has limited capacity to handle large snow events.</p> <p>Solution: The Borough will seek funding to make the following improvements to increase capacity and response during winter storm events:</p> <ul style="list-style-type: none"> The Borough will identify and clearly label 	Existing	Severe Winter Storm	1, 3, 5	Borough of Runnemede, OEM, DPW	FEMA HMGP, HMA	High, ensures safety of residents during frequent winter storms	High to complete all parts of project	2-3 years	High	SIP	SP, ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
		emergency evacuation routes <ul style="list-style-type: none"> • The Borough will increase the salt storage capacity • The Borough will increase the large truck fleet to handle response to 12" and greater storm events • The Borough will install bus stop shelters to protect residents from harsh weather. The Borough is conducting a "Bus Shelter" survey throughout Summer 2021 to identify where and how residents use bus stops throughout the Borough and will use the results to identify best 											

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
		locations for stop protections and shelters.											
2022-B. Runnemede-005	Runnemede Lake Park Dam -Singley Avenue	<p>Problem: The Dam at Runnemede Lake Park and Singley Avenue is in poor condition and the Dam is in need of constant repairs due to flooding runoff from state highways Route 41 and Route 168 and the age of the facility.</p> <p>Solution: The Borough will seek funding to conduct a flood vulnerability analysis of the area and an inspection of the dam, with support from NJ Dam Safety as needed. Results from the survey and inspection will be used to inform the Borough of necessary protections that</p>	Existing	Dam/Levee Failure, Flood	1, 2, 7	Engineering, DPW, support from NJ Dam Safety	FEMA HHPD	High, eliminates risk from High Hazard Dams	High	Dependent on Funding	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
		need to be completed, including extending and expanding the bulkhead along the lake, reconstruction of the dam, or protections to the waterway to reduce flooding and further deterioration of the dam.											
2022-B. Runnemede-006	Black Horse Pike (Route 168) storm discharge	Problem: The Black Horse Pike and Turnpike Interchange experience frequent flooding and road closures due to stormwater discharge. Solution: The Borough will work with NJDOT to improve stormwater discharge in the area to handle upgraded flow and overflow capacities. The Borough will work	Existing	Flood	1, 2, 5	NJDOT, support from Borough DPW	NJDOT	High, eliminates road closures	High	1 year	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
		with NJDOT representatives after storm events to identify flood concerns and support DOT workorders and updates of the roadways to eliminate extended closures and flood concerns. The Borough will encourage green infrastructure solutions for any roadway upgrades or improvements to the stormwater management systems including rainwater collection and vegetative swales, and permeable surfaces.											
2022-B. Runnemede-007	Clements Bridge Road (Route 41) stormwater discharge	Problem: Clements Bridge Road (Route 41) experiences flooding and road closures due to stormwater discharge.	Existing	Flood	1, 2, 5	NJDOT, support from Borough DPW	NJDOT	High, eliminates road closures	High	1 year	High	SIP	SP

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
		<p>Solution: The Borough will work with NJDOT to improve stormwater discharge in the area to handle upgraded flow and overflow capacities. The Borough will work with NJDOT representatives after storm events to identify flood concerns and support DOT workorders and updates of the roadways to eliminate extended closures and flood concerns. The Borough will encourage green infrastructure solutions for any roadway upgrades or improvements to the stormwater management systems including rainwater collection and vegetative swales,</p>											

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
		and permeable surfaces.											
2022-B. Runnemede-008	Hazard Education/ Resident Preparedness	<p>Problem: The Borough OEM Webpage does not have regular hazard updates and information.</p> <p>Solution: The Borough will develop and implement an all-hazards awareness and information campaign across the website and social media pages, including installation of message/alert boards outside of Borough Hall to advise residents of impending conditions or concerns. The Borough will conduct educational campaigns related to personal preparedness and steps to take before, during, and</p>	Both	All Hazards	3, 4, 5	Borough OEM	Municipal Budget	High, increase awareness and personal preparedness	Low	6 months – 1 year	High	EAP	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
		after hazard events, Borough resources including shelters and heating/cooling centers, and resources from NJOEM, FEMA, American Red Cross, and others.											
2022-B. Runnemede-009	Storm Ready Certification	<p>Problem: High Wind and Severe Storm events occur frequently within the Borough and cause damages to property throughout.</p> <p>Solution: The Borough will seek a certification within the NOAA National Weather Service StormReady program to increase capacity and resiliency to severe storm events. The Borough will work to complete the certification</p>	N/A	High Wind, Severe Summer Weather, Severe Winter Weather	1, 2, 3, 4, 5, 6	Borough of Runnemede, OEM	Municipal Budget	High, increase awareness and capabilities	Low-Medium	2 years	High	LPR	PR, ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
		<p>requirements within 2 years, by completing the following:</p> <ul style="list-style-type: none"> • Establish a 24-hour warning point and emergency operations center • Have more than one way to receive severe weather warnings and forecasts and to alert the public • Create a system that monitors weather conditions locally • Promote the importance of public readiness through community seminars • Develop a formal hazardous weather plan, 											

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
		which includes training severe weather spotters and holding emergency exercises.											
2022-B. Runnemede-010	Flood Damage Prevention Ordinance	<p>Problem: The current flood damage prevention chapter of the Borough code does not meet the state's recommendation for a code-coordinated flood damage prevention ordinance.</p> <p>Solution: The Borough will update the flood damage prevention chapter using the NJ DEP's model code coordinated ordinance to create better coordination between NFIP implementation by the floodplain administrator, the</p>	New	Flood	1, 2, 4, 5	Floodplain Administrator, Administration	Municipal Budget	High, Meet state and FEMA standards for flood damage prevention, reduce flood risk on new development	Low	6 months	Medium	LPR	PR

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
		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 Construction Official.											

Notes:

Not all acronyms and abbreviations defined below are included in the table.



This action has been identified as being of greatest importance to the municipality and an action that the municipality would like to complete as soon as funding is received.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

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

- *Structure and Infrastructure Project (SIP)* - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)* – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)* – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)* - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)* - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)* - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)* - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)* - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)* - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Table 9.31-17. Summary Evaluation and Action Priority

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-B. Runnemede-001	Public Works Complex Flood Protections	1	1	1	1	1	1	-1	1	1	1	0	1	1	0	10	High
2022-B. Runnemede-002	Generators for Critical Facilities	1	0	1	1	1	1	-1	1	1	1	1	1	1	1	11	High
2022-B. Runnemede-003	Storm and sanitary sewer upgrades	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	13	High
2022-B. Runnemede-004	Winter Weather Protections	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022-B. Runnemede-005	Runnemede Lake Park Dam -Singley Avenue	1	1	1	1	1	1	-1	1	1	1	1	1	0	0	11	High
2022-B. Runnemede-006	Black Horse Pike (Route 168) storm discharge	1	1	1	1	0	0	0	1	1	1	1	1	0	0	9	High
2022-B. Runnemede-007	Clements Bridge Road (Route 41) stormwater discharge	1	1	1	1	0	0	0	1	1	1	1	1	0	0	9	High
2022-B. Runnemede-008	Hazard Education/ Resident Preparedness	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-B. Runnemede-009	Storm Ready Certification	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-B. Runnemede-010	Flood Damage Prevention Ordinance	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Section 6 (Mitigation Strategy), which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

9.31.8 Action Worksheets

The following action worksheets have been developed by the Borough of Runnemede to aid in the submittal of grant applications to support the funding of high priority proposed actions. The State of New Jersey requires at least two projects be developed with action worksheets.

DRAFT

Action Worksheet			
Project Name:	Public Works Complex Flood Protections		
Project Number:	2022-B. Runnemede-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Runnemede Public Works Complex is a critical facility and is located within the 1% SFHA (100-year floodplain).		
Action or Project Intended for Implementation			
Description of the Solution:	The Borough will seek funding to elevate and/or rebuild the Public Works Complex to eliminate flood risk and ensure the continuity of operations of the facility and response time during hazard events. Depending on a thorough flood vulnerability of the study by an engineer, the Borough will determine the best course of action, including elevation, or other structural flood protection measures in accordance with the FEMA design guide for protection critical facilities. The Borough will ensure that all protections ensure that the facility and all equipment stored within are protected to the 500-year event and that all construction meets state standards and does not threaten the existing environment or natural areas surrounding the facility.		
Is this project related to a Critical Facility?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Level of Protection:	Up to 500-year flood	Estimated Benefits (losses avoided):	High, ensures continuity of operations and eliminates flood risk
Useful Life:	50 years	Goals Met:	1, 2, 6
Estimated Cost:	High	Mitigation Action Type:	SIP
Plan for Implementation			
Prioritization:	Highest Priority	Desired Timeframe for Implementation:	Within Scope of HMP, Dependent on funding
Estimated Time Required for Project Implementation:	2-3 years	Potential Funding Sources:	FEMA BRIC, HMA
Responsible Organization:	DPW, Engineering	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Relocate DPW Complex	\$3 million	Not cost effective, no available land within the Borough to relocate
	Relocate/fill in portion of Big Timber Creek that causes flooding to the Complex	N/A	Not environmentally sound, not feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Action Worksheet		
Project Name:	Public Works Complex Flood Protections	
Project Number:	2022-B. Runnemede-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Ensures availability of DPW during hazards
Property Protection	1	Protects DPW facility
Cost-Effectiveness	1	
Technical	1	Borough has capability to complete project
Political	1	
Legal	1	
Fiscal	-1	Borough will need to seek funding
Environmental	1	No anticipated concerns
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	
Agency Champion	1	DPW/Borough Council/OEM
Other Community Objectives	0	
Total	10	
Priority (High/Med/Low)	High	

Action Worksheet			
Project Name:	Generators for Critical Facilities		
Project Number:	2022-B. Runnemede-002		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	The Community Complex (HWB) and Public Works Complex do not have emergency backup generators.		
Action or Project Intended for Implementation			
Description of the Solution:	The Borough will seek funding to install automatic, permanent generators at these critical facilities to ensure the function of government and essential services before, during, and after hazard events. The Borough will also ensure that generators are protected to withstand additional hazards (i.e. raised to reduce flood impacts, and placed in secure location to reduce damages from high winds, ice, etc.). The Community Center will need a 120 KVW capacity generator, while the DPW will need a 40 KVW capacity generator.		
Is this project related to a Critical Facility?			Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Level of Protection:	N/A	Estimated Benefits (losses avoided):	High, ensures continuity of government and essential services
Useful Life:	30 years	Goals Met:	1, 5, 6
Estimated Cost:	High, estimated \$150,000 for Community Center and \$45,000 for Public Works	Mitigation Action Type:	SIP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	As soon as possible, dependent on funding
Estimated Time Required for Project Implementation:	1-2 years	Potential Funding Sources:	FEMA HMA, BRIC, HMGP
Responsible Organization:	OEM, DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Install solar panels	\$500,000	Does not ensure power supply 24/7, not cost effective
	Install wind turbine	\$1 million+	Wind power source potential is "marginal" in Camden County, not cost effective
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Action Worksheet		
Project Name:	Generators for Critical Facilities	
Project Number:	2022-B. Runnemede-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Ensures continuity of operations and use of Community Center as shelter/ heating and cooling center
Property Protection	0	
Cost-Effectiveness	1	
Technical	1	
Political	1	Borough supports project
Legal	1	
Fiscal	-1	Borough will seek funding
Environmental	1	No anticipated concerns
Social	1	Community supports project
Administrative	1	
Multi-Hazard	1	All Hazards
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	

Action Worksheet			
Project Name:	Storm and sanitary sewer upgrades		
Project Number:	2022-B. Runnemede-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Summer Weather, Severe Winter Weather, High Wind		
Description of the Problem:	The Existing stormwater management system and sanitary sewer system does not have the capacity to handle current flow and overflow capacity and there have been documented damages to the system from floods and storms and the system is deteriorating.		
Action or Project Intended for Implementation			
Description of the Solution:	The Borough will seek funding to implement upgrades to the stormwater system along the 800-block of Bowers, Oakland, Read, and Orchard Avenue. The Borough will work with engineering to monitor storm and flood events to gather data to evaluate the needed upgraded pipe size and to determine complete design specifications for future events. The Borough will replace slip line pipes throughout the system to prevent catastrophic failures as well as replace, rebuild, or seal catch basin boxes to prevent additional failures. The Borough will make improvements to sanitary lines by replacing to prevent inflow and infiltration during storm events that can lead to system failures. The borough will also make upgrades to the sanitary manholes through adding protective seals to protect from I&I, or replacement of damaged manholes to eliminate I&I. The Borough will consider green infrastructure solutions for any roadway upgrades or improvements to the stormwater management systems including rainwater collection and vegetative swales, and permeable surfaces.		
Is this project related to a Critical Facility?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Level of Protection:	N/A	Estimated Benefits (losses avoided):	High, reduces flooding and stormwater backup and intrusion of contaminants into water supply
Useful Life:	30 years	Goals Met:	1, 2, 5, 6
Estimated Cost:	High	Mitigation Action Type:	SIP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	As soon as possible, depending on funding
Estimated Time Required for Project Implementation:	2-3 years	Potential Funding Sources:	FEMA BRIC
Responsible Organization:		Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning, Capital Improvements
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Replace entire sewer system	Millions	Only a portion needs to be upgraded, not cost effective or necessary
	Develop shared services agreement to utilize neighboring sewer systems	N/A	Not feasible, does not solve entire problem, would still lack capacity for Runnemede
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Action Worksheet		
Project Name:	Storm and sanitary sewer upgrades	
Project Number:	2022-B. Runnemede-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Ensures safe water supply
Property Protection	1	Reduces stormwater runoff onto private properties
Cost-Effectiveness	1	
Technical	1	Runnemede DPW has capabilities
Political	1	Borough supports project
Legal	1	Borough roadways/system
Fiscal	-1	Borough will seek funding
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Summer Weather, Severe Winter Weather, High Wind
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	Capital Improvements
Total	13	
Priority (High/Med/Low)	High	

Action Worksheet			
Project Name:	Winter Weather Protections		
Project Number:	2022-B. Runnemede-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Winter Storm		
Description of the Problem:	The Borough does not have emergency snow routes labeled and has limited capacity to handle large snow events.		
Action or Project Intended for Implementation			
Description of the Solution:	<p>The Borough will seek funding to make the following improvements to increase capacity and response during winter storm events:</p> <ul style="list-style-type: none"> The Borough will identify and clearly label emergency evacuation routes The Borough will increase the salt storage capacity The Borough will increase the large truck fleet to handle response to 12" and greater storm events The Borough will install bus stop shelters to protect residents from harsh weather. The Borough is conducting a "Bus Shelter" survey throughout Summer 2021 to identify where and how residents use bus stops throughout the Borough and will use the results to identify best locations for stop protections and shelters. 		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Level of Protection:	N/A	Estimated Benefits (losses avoided):	High, ensures safety of residents during frequent winter storms
Useful Life:	20-30 years	Goals Met:	1, 3, 5
Estimated Cost:	High to complete all parts of project	Mitigation Action Type:	SIP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	As soon as possible, dependent on funding
Estimated Time Required for Project Implementation:	2-3 years	Potential Funding Sources:	FEMA HMGP, HMA
Responsible Organization:	Borough of Runnemede, OEM, DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning, Capital Improvements
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Utilize shared services for snow removal fleet trucks	N/A	Not feasible as winter storms affect large area, Borough should have dedicated fleet
Road Salt alternatives	N/A	Green alternatives are better for the environment, but more costly; to consider in the future but currently not feasible	
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Action Worksheet		
Project Name:	Winter Weather Protections	
Project Number:	2022-B. Runnemede-004	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	All aspects of project ensure life safety
Property Protection	1	
Cost-Effectiveness	1	Most cost effective at this time
Technical	1	Within capabilities of Borough
Political	1	
Legal	1	
Fiscal	0	
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	Capital improvements, community development
Total	12	
Priority (High/Med/Low)	High	

Action Worksheet			
Project Name:	Runnemede Lake Park Dam -Singley Avenue		
Project Number:	2022-B. Runnemede-005		
Risk / Vulnerability			
Hazard(s) of Concern:	Dam/Levee Failure, Flood		
Description of the Problem:	The Dam at Runnemede Lake Park and Singley Avenue is in poor condition and the Dam is in need of constant repairs due to flooding runoff from state highways Route 41 and Route 168 and the age of the facility.		
Action or Project Intended for Implementation			
Description of the Solution:	The Borough will seek funding to conduct a flood vulnerability analysis of the area and an inspection of the dam, with support from NJ Dam Safety as needed. Results from the survey and inspection will be used to inform the Borough of necessary protections that need to be completed, including extending and expanding the bulkhead along the lake, reconstruction of the dam, or protections to the waterway to reduce flooding and further deterioration of the dam.		
Is this project related to a Critical Facility?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Level of Protection:	100-year flood	Estimated Benefits (losses avoided):	High, eliminates risk from High Hazard Dams
Useful Life:	20 years	Goals Met:	1, 2, 7
Estimated Cost:	High	Mitigation Action Type:	SIP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Dependent on Funding
Estimated Time Required for Project Implementation:	2-3 years	Potential Funding Sources:	FEMA HHPD
Responsible Organization:	Engineering, DPW, support from NJ Dam Safety	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Continue with minor improvements	\$100,000/yearly	Only temporarily fixes the problems, not cost effective in long-term
	Decommission the Dam	N/A	Unfeasible, would cause detrimental flooding to neighborhoods in the area
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Action Worksheet		
Project Name:	Runnemede Lake Park Dam -Singley Avenue	
Project Number:	2022-B. Runnemede-005	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Protects residents near Dam
Property Protection	1	Protects properties near Dam
Cost-Effectiveness	1	
Technical	1	Engineering Dept can conduct dam inspections/analysis
Political	1	Borough supports project
Legal	1	
Fiscal	-1	
Environmental	1	No environmental concerns anticipated
Social	1	
Administrative	1	
Multi-Hazard	1	Dam/Levee Failure, Flood
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	