



SOMERSET COUNTY

HAZARD MITIGATION PLAN

SOMERSET COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

FINAL PLAN UPDATE
JULY 2019

www.co.somerset.nj.us/hmp

Section 9.17: Borough of Raritan Annex

*Prepared by the Somerset County
Mitigation Planning Committee*



9.17 Borough of Raritan

This section presents the jurisdictional annex for the Borough of Raritan (hereinafter referred to as Raritan or Raritan Borough).

9.17.1 HAZARD MITIGATION PLAN POINTS OF CONTACT

Hazard Mitigation Plan Points of Contact					
Primary Point of Contact			Alternate Points of Contact		
Name: Robert Lisa, Deputy OEM Coordinator Address: 22 First Street Raritan, New Jersey 08869 Phone Number: 908-507-4664 Fax Number: 908-231-0810 E-mail Address: rlisa24@aol.com			Name: Lt. David Malina Address: 22 First Street Raritan, New Jersey 08869 Phone Number: 908-655-7298 Fax Number: 908-231-0810 E-mail Address: malindad@raritanpd.org Name: Ernest Hall, OEM Coordinator Address: 22 First Street Raritan, New Jersey 08869 Phone Number: 908-655-7298 Fax Number: 908-231-0810 E-mail Address: uscgau23@yahoo.com		
Municipal HMP Committee Members					
Local Jurisdiction Role/Position	Name	Email	Phone	Date Notified About Mitigation Plan Development	Agreed to participate? (Yes/No)
Land Use/Community Planner	Angela Knowles	aknowles@vcea.org	908-454-3080	11/3/2017	Yes
Emergency Manager	Ernie Hall	uscgau23@yahoo.com	(908)6557298	11/3/2017	Yes
Floodplain Manager/ Floodplain Administrator	Stan Shrek	sschrek@vcea.org	908-454-3080	11/3/2017	Yes
Public Works Director / City Engineer	Robert Fulemente	publicworks@raritan-nj.org	908-725-1715	11/3/2017	Yes
Building Code Official	Lou Gara	lgara@raritan-nj.org	908-231-1300 ext. 25	11/3/2017	
Fiscal/Budget Officer	Karen Kneafsy	KKneafsey@raritan-nj.org	908-231-1300 ext. 16	11/3/2017	Yes
Manager/Administrator	Dan Jaxel	djaxel@raritan-nj.org	908-231-1300 ext. 15	11/3/2017	Yes
Elected Officials	Mayor Chuck McMullin	cmmcullin@raritan-nj.org	908-693-3580	11/3/2017	Yes
Other 1:	Robert Lisa	rlisa24@aol.com	908-507-4664	11/3/2017	Yes
Other 2:	Ray Nolte	NolteR@raritanpd.org	732-330-5630	11/3/2107	Yes
Other 3:	Brian Kredatus	raritanfire@gmail.com	908-963-5973	11/3/2017	Yes

9.17.2 PROFILE

9.17.2.1 Population

The population of Raritan Borough is estimated to be 6,881, based on information gathered during the 2010 U.S. Census. Census population estimates of July 2017 indicated a total population of 8,011.

9.17.2.2 Location

Raritan Borough is located in the western portion of Somerset County. The Borough has an average elevation of 70 feet above sea level. United States Routes 202 and 206 run through the Borough as well as the Raritan River. The Borough is bordered by Somerville to the east, Hillsborough to the south and Bridgewater to the west and north.

9.17.2.3 Brief History

Raritan Borough was officially incorporated on May 12, 1948. Prior to this the Town of Raritan had been a part of Bridgewater Township. This change was brought on by the Town of Raritan being taxed by Bridgewater and receiving no services in return. The residents of the Town of Raritan hence voted to separate from the Township of Bridgewater and form their own Borough.

9.17.2.4 Governing Body Format

Raritan is governed by the Borough form of Government with a weak mayor and strong council form of government. There is a mayor and six council members. Day to day operations, are run by a Borough Administrator.

9.17.2.5 Growth/Development Trends

Officials from the Borough noted that there is no major residential/commercial development or major infrastructure development that has been identified for the next five (5) years in the municipality (updated in 2018).

New Development/Potential Development in Municipality						
Property Name	Type (Residential or Commercial)	No. of Structures	Address	Block and Lot	Known Hazard Zone	Description /Status
N/A	N/A	N/A	N/A	N/A	N/A	N/A

Jurisdictional regulations/codes/ordinances in place in Raritan that will work to protect new development from the effects of natural hazards include, but are not limited to: Chapter 175 of the Raritan Borough Code entitled Flood Damage Prevention, Ordinance #07-15 adopted September 11, 2007.

9.17.3 NATURAL HAZARD EVENT HISTORY SINCE 2014

Somerset County has a history of natural hazard events as detailed in Section 5.0 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 County and its municipalities. The table below presents a summary of events that have occurred since the 2014 HMP to indicate the range and impact of natural hazard events in the community. Information regarding specific damages is included if available based on reference material or local sources. For details of events prior to 2014, refer to Section 5.0 of this plan.

Natural Hazard Event History				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Cold/Wind Chill	N/A	N/A	January 4, 2014	No local damage reported
Strong Wind	N/A	N/A	January 6, 2014	No local damage reported
Flood	N/A	N/A	January 6, 2014	No local damage reported
Cold/Wind Chill	N/A	N/A	January 7, 2014	No local damage reported
Cold/Wind Chill	N/A	N/A	January 22, 2014	No local damage reported
Winter Storm	N/A	N/A	February 12, 2014	Snow, sleet and freezing rain across most of NJ, with storm totals of 10 to 20 inches across most of the I-95 corridor. The weight of the snow started to cause structural damage. In Raritan Borough, strip mall roofing collapsed on U.S. Route 202. No injuries occurred.
Flood	N/A	N/A	February 22, 2014	No local damage reported
Strong Wind	N/A	N/A	March 12, 2014	No local damage reported
Flood	N/A	N/A	March 30, 2014	No local damage reported
Flood	N/A	N/A	April 1, 2014	No local damage reported
Thunderstorm Wind	N/A	N/A	April 15, 2014	No local damage reported
Flood	N/A	N/A	April 15, 2014	No local damage reported
Flood	N/A	N/A	April 30, 2014 to May 1, 2014	No local damage reported
Thunderstorm Wind	N/A	N/A	May 10, 2014	No local damage reported
Earthquake, Magnitude 1.9, 6 km N of Boonton (Montville Twp.)	N/A	N/A	May 31, 2014	No local damage reported
Earthquake, Magnitude 1.0, 13 km SW of Ramblewood, NJ (Laurel Springs Boro.)	N/A	N/A	June 19, 2014	No local damage reported
Thunderstorm Wind	N/A	N/A	July 2, 2014	No local damage reported
Heat	N/A	N/A	July 2, 2014	No local damage reported
Thunderstorm Wind	N/A	N/A	July 3, 2014	A severe thunderstorm knocked down a couple of trees and wires in Raritan Borough

Natural Hazard Event History				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Flash Flood	N/A	N/A	July 3, 2014	No local damage reported
Thunderstorm Wind	N/A	N/A	July 8, 2014	No local damage reported
Earthquake, Magnitude 1.6, 3 km W of Jersey City, NJ (Kearny Town)	N/A	N/A	July 8, 2014	No local damage reported
Flood	N/A	N/A	July 16, 2014	No local damage reported
Earthquake, Magnitude 1.2, 4 km SW of Ringwood, NJ (Ringwood Boro.)	N/A	N/A	July 28, 2014	No local damage reported
Flash Flood	N/A	N/A	August 21, 2014	No local damage reported
Earthquake, Magnitude 1.3, 2 km S of Park Ridge, NJ (Woodcliff Lake Boro.)	N/A	N/A	September 3, 2014	No local damage reported
Flood	N/A	N/A	December 9, 2014	No local damage reported
Earthquake, Magnitude 1.9, 13 km SE of Twin Rivers, NJ (Millstone Twp.)	N/A	N/A	December 13, 2014	No local damage reported
Earthquake, Magnitude 1.5, 2 km SW of Clifton, NJ (Bloomfield Twp.)	N/A	N/A	December 28, 2014	No local damage reported
Cold/Wind Chill	N/A	N/A	January 7, 2015	No local damage reported
Flood	N/A	N/A	January 18, 2015	Event precipitation totals included 1.88 inches in Raritan.
Strong Wind	N/A	N/A	February 2, 2015	No local damage reported
Cold/Wind Chill	N/A	N/A	February 13, 2015	No local damage reported
Strong Wind	N/A	N/A	February 15, 2015	No local damage reported
Cold/Wind Chill	N/A	N/A	February 15, 2015	No local damage reported
Cold/Wind Chill	N/A	N/A	February 16, 2015	No local damage reported
Cold/Wind Chill	N/A	N/A	February 20, 2015	No local damage reported
Cold/Wind Chill	N/A	N/A	February 24, 2015	No local damage reported
Flood	N/A	N/A	March 11, 2015	No local damage reported
Flood	N/A	N/A	March 14, 2015	No local damage reported
Earthquake, Magnitude 1.2, 2 km SW of Clifton, NJ (Bloomfield Twp.)	N/A	N/A	March 27, 2015	No local damage reported
Strong Wind	N/A	N/A	April 4, 2015	No local damage reported
Flash Flood	N/A	N/A	May 31, 2015	No local damage reported

Natural Hazard Event History				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Earthquake, Magnitude 1.2, 2 km N of Wanaque, NJ (Ringwood Boro.)	N/A	N/A	July 12, 2015	No local damage reported
Heat	N/A	N/A	July 19, 2015	No local damage reported
Earthquake, Magnitude 2.7, 3.5 km N of Bernardsville, NJ (Bernardsville Boro.)	N/A	N/A	August 14, 2015	No local damage reported
Flash Flood	N/A	N/A	August 19, 2015	No local damage reported
Flood	N/A	N/A	August 19, 2015	No local damage reported
Earthquake, Magnitude 1.4, 5 km WNW of Fairfield, NJ (Fairfield Twp.)	N/A	N/A	August 22, 2015	No local damage reported
Drought and Excessive Heat	N/A	N/A	April 2015 – September 2015	No local damage reported
Combined effects of freeze, excessive heat, and drought	N/A	N/A	April 2016 – September 2016	No local damage reported
Earthquake, Magnitude 2.1, 2.4 km NW of Ringwood, NJ (Ringwood Boro.)	N/A	N/A	January 2, 2016	No local damage reported
Severe Winter Storm and Snowstorm (Blizzard)	DR-4264	Yes	January 22-24, 2016	No local damage reported
Earthquake, Magnitude 1.1, 1.1 km NW of Butler, NJ (Bloomingdale Boro.)	N/A	N/A	February 19, 2016	No local damage reported
Flash Flood	N/A	N/A	February 24, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	April 2, 2016	A microburst produced wind gusts up to 65 MPH, causing sporadic damage along a line from Raritan southeast through southern Manville, ending in Franklin Township northeast of Blackwells Mills. Saint Ann School in Raritan experienced some roof damage, and two commercial dumpsters were blown over.
Earthquake, Magnitude 0.8, 4.4 km N of Butler, NJ (Bloomingdale Boro.)	N/A	N/A	May 27, 2016	No local damage reported
Lightning	N/A	N/A	June 8, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	June 8, 2016	No local damage reported

Natural Hazard Event History				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Lightning	N/A	N/A	June 28, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	June 28, 2016	No local damage reported
Earthquake, Magnitude 1.1, 1 km NW of Butler, NJ (Butler Boro.)	N/A	N/A	July 4, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 8, 2016	No local damage reported
Flood	N/A	N/A	July 8, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	July 18, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	July 25, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	July 25, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	July 25, 2016	No local damage reported
Flood	N/A	N/A	July 25, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 30, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Flash Flood	N/A	N/A	July 31, 2016	No local damage reported
Earthquake, Magnitude 0.8, 2.2 km SW of Clifton, NJ (Bloomfield Twp.)	N/A	N/A	July 31, 2016	No local damage reported
Earthquake, Magnitude 1.0, 2 km N of Wanaque, NJ (Wanaque Boro.)	N/A	N/A	August 9, 2016	No local damage reported
Earthquake, Magnitude 0.5, 1 km N of Butler, NJ (Bloomingdale Boro.)	N/A	N/A	August 9, 2016	No local damage reported
Earthquake, Magnitude 0.6, 5 km NE of Wanaque, NJ (Ringwood Boro.)	N/A	N/A	September 20, 2016	No local damage reported
Earthquake, Magnitude 1.5, 2.6 km W of Bellmar, NJ (Westville Boro.)	N/A	N/A	November 6, 2016	No local damage reported
Earthquake, Magnitude 2.0, 16.3 km E of Highlands, NJ (Middletown Twp.)	N/A	N/A	November 6, 2016	No local damage reported

Natural Hazard Event History				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Earthquake, Magnitude 1.31, 1.4 km S Morris Plains, NJ (Morris Plains Boro.)	N/A	N/A	March 25, 2017	No local damage reported
Flood	N/A	N/A	March 31, 2017	No local damage reported
Hail	N/A	N/A	May 14, 2017	No local damage reported
Hail	N/A	N/A	May 31, 2017	No local damage reported
Flood	N/A	N/A	June 24, 2017	No local damage reported
Flood	N/A	N/A	July 22, 2017	No local damage reported
Flood	N/A	N/A	August 22, 2017	No local damage reported
Flood	N/A	N/A	August 22, 2017	No local damage reported
Heavy Rain	N/A	N/A	August 23, 2017	No local damage reported
Earthquake, Magnitude 1.71, 3.7 km SW of Morris Plains, NJ (Morris Twp.)	N/A	N/A	September 25, 2017	No local damage reported
Earthquake, Magnitude 0.98, 2.7 km SW of Morris Plains, NJ (Morris Twp.)	N/A	N/A	September 30, 2017	No local damage reported
Flood	N/A	N/A	October 29, 2017	No local damage reported
Earthquake, Magnitude 1.38, 3.5 km NW of Keansburg, NJ (Keansburg Boro.)	N/A	N/A	November 8, 2017	No local damage reported
Severe Winter Storm and Snowstorm (Blizzard)	DR-4368	Yes	March 6, 2018	Although all portions of the county experienced significant snowfall from this event, the higher amounts (around one and one half feet) occurred in the eastern sections of the county closer to the off shore low pressure system. Thundersnow also occurred in a few locations.

Note:

DR = Major Disaster Declaration

EM = Emergency Declaration

N/A = Not applicable

9.17.4 NATURAL HAZARD RISK/VULNERABILITY RISK RANKING

The table below summarizes the vulnerability risk rankings of potential hazards of Raritan (updated in 2018).

Natural Hazard Risk/Vulnerability Risk Ranking				
Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{a, c}	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking ^b
Flood	1% Annual Chance: \$38,200,000 0.2% Annual Chance: \$55,200,000	Frequent	18	Medium
Severe Storm	100-Year MRP: \$457,084 500-Year MRP: \$2,098,769 Annualized Loss: \$21,950	Frequent	30	Medium
Severe Winter Storm	1% of GBS: \$10,290,250 5% of GBS: \$51,451,250	Frequent	27	Medium
Earthquake	500-Year MRP: \$2,006,880 2,500-Year MRP: \$29,680,818 Annualized Loss: \$31,195	Occasional	12	Low
Drought	Not available	Occasional	12	Low
Extreme Temperature	Not available	Frequent	27	Medium
Wildfire	Not available	Occasional	12	Low

Note

- Building damage ratio estimates based on FEMA 386-2 (August 2001)
- The valuation of general building stock and loss estimates was based on custom inventory for Somerset County.
- High = Total hazard priority risk ranking score of 31 and above
Medium = Total hazard priority risk ranking of 15-30
Low = Total hazard risk ranking below 15
- Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the value of contents.
- Loss estimates for the flood and earthquake hazards represent both structure and contents.
- The HAZUS-MH earthquake model results are reported by Census Tract.

9.17.5 CAPABILITY ASSESSMENT

This section describes the following capabilities of the local jurisdiction:

- Legal and regulatory capability;
- Administrative and technical capability;
- Fiscal capability;
- Community resiliency;
- Community political capability; and
- Community classification.

9.17.5.1 Legal and Regulatory Capability

The table below summarizes the regulatory tools that are available Raritan Borough. The Borough reviewed its responses from the 2014 HMP and has indicated that all prior feedback is still applicable.

Legal and Regulatory Capability			
Regulatory Tools (Codes, Ordinances, Plans)	Do you have this? (Y or N)	Enforcement Authority	Code Citation (Section, Paragraph, Page Number, Date of Adoption)
1) Building Code	Y	Construction Officer	Chapter 207 of the Raritan Borough Code
2) Zoning Ordinance	Y	Zoning Officer	Chapter 207 of the Raritan Borough Code
3) Subdivision Ordinance	Y	Zoning Officer	Chapter 207 of the Raritan Borough Code
4) NFIP Flood Damage Prevention Ordinance	Y	Borough Engineer	Chapter 175 of the Raritan Borough Code
4a) Cumulative Substantial Damages	N	-	-
4b) Freeboard	N	-	-
5) Growth Management	N	-	-
6) Floodplain Management / Basin Plan	N	-	-
7) Stormwater Management Plan/Ordinance	Y	Borough Engineer	Chapter 315 of the Raritan Borough Code
8) Comprehensive Plan / Master Plan/ General Plan	Y	Land Use Board	Master Plan
9) Capital Improvements Plan	Y		Various annual capital budgets
10) Site Plan Review Requirements	Y	Borough Engineer	Open Space Plan

Legal and Regulatory Capability			
Regulatory Tools (Codes, Ordinances, Plans)	Do you have this? (Y or N)	Enforcement Authority	Code Citation (Section, Paragraph, Page Number, Date of Adoption)
11) Open Space Plan	Y	-	-
12) Stream Corridor Management Plan	N	-	-
13) Watershed Management or Protection Plan	N	-	-
14) Economic Development Plan	N	-	-
15) Comprehensive Emergency Management Plan	Y	Emergency Management Coordinator	Official Emergency Operations Plan
16) Emergency Response Plan	Y	Emergency Management Coordinator	Official Emergency Operations Plan
17) Post-Disaster Recovery Plan	Y	Emergency Management Coordinator	Official Emergency Operations Plan
18) Post-Disaster Recovery Ordinance	N	-	-
19) Real Estate Disclosure Requirement	-	-	-
20) Other (Special Purpose Ordinances such as critical or sensitive areas)	-	-	-

9.17.5.2 Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Borough of Raritan. The Borough reviewed its responses from the 2014 HMP and has indicated that all prior feedback is still applicable.

Administrative and Technical Capability		
Staff / Personnel Resources	Available (Y or N)	Department / Agency / Position
1) Planner(s) or Engineer(s) with knowledge of land development and land management practices	Y	-
2) Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y	-
3) Planners or engineers with an understanding of natural hazards	Y	-
4) NFIP Floodplain Administrator	Y	Stan Schrek, Borough Engineer
5) Surveyor(s)	Y	Carl Herman
6) Personnel skilled or trained in GIS applications	N	-
7) Scientist familiar with natural hazards		-
8) Emergency Manager	N	-
9) Grant Writer(s)	N	-
10) Staff with expertise or training in benefit/cost analysis	-	-

9.17.5.3 Fiscal Capability

The table below summarizes financial resources available to the Borough of Raritan. The Borough reviewed its responses from the 2014 HMP and has indicated that all prior feedback is still applicable.

Fiscal Capability	
Financial Resources	Accessible or Eligible to use (Yes/No/Don't know)
1) Community Development Block Grants (CDBG)	Y
2) Capital Improvements Project Funding	Y
3) Authority to levy taxes for specific purposes	Y
4) User fees for water, sewer, gas or electric service	Y
5) Impact fees for homebuyers or developers of new development/homes	-
6) Incur debt through general obligation bonds	Y
7) Incur debt through special tax bonds	Y
8) Incur debt through private activity bonds	-
9) Withhold public expenditures in hazard-prone areas	-
10) State mitigation grant programs	Y
11) Other	-

9.17.5.4 Overall Capabilities

The Borough of Raritan's 2018 assessment of its overall capabilities to implement hazard mitigation strategies in each of the above categories, in addition to their local assessment of how these capabilities could be expanded and/or improved to reduce risk, is presented in the table below.

Overall legal and regulatory capability to implement hazard mitigation strategies	Overall technical capability to implement hazard mitigation strategies	Overall fiscal capability to implement hazard mitigation strategies	Overall administrative capability to implement hazard mitigation strategies	Community's willingness to enact policies and programs that reduce hazard vulnerabilities
High	High	Low	Moderate	High
How these capabilities can be expand and/or improved to reduce risk				
<p>The Borough has a limited number of staff members. Many are volunteers. The Borough's mitigation goals and objectives would be better served if more people were available to work on implementation of our mitigation initiatives.</p> <p>The Borough also has funding constraints which inhibit hazard mitigation project implementation. Additional funding set aside in the local budget, and/or additional grant funding from outside sources, would foster mitigation project implementation in our community.</p>				

9.17.5.5 Community Classifications

The table below summarizes classifications for community program available to Raritan Borough. The Borough reviewed its responses from the 2014 HMP and has indicated that all prior feedback is still applicable.

Community Classifications		
Program	Classification	Date Classified
Community Rating System (CRS)	NP	-
Building Code Effectiveness Grading Schedule (BCEGS)	NP	-
Public Protection	NP	-
Storm Ready	NP	-
Firewise	NP	-

Notes:

- = Unavailable

N/A = Not applicable

NP = Not participating.

* CRS Ranking as of October 2017

The classifications listed above relate to the Borough's ability to provide effective services to lessen its vulnerability to the natural hazards identified. These classifications can be viewed as a gauge of the community's capabilities in all phases of emergency management (preparedness, response, recovery and mitigation) and are used as an underwriting parameter for determining the costs of various forms of

insurance. The CRS Class applies to flood insurance, while the BCEGS and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with Class 1 being the best possible classification, and Class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1,000 feet of a creditable fire hydrant and is within 5 road miles of a recognized fire station.

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule
- The ISO Mitigation online ISO's Public Protection website at <http://www.isomitigation.com/ppc/0000/ppc0001.html>
- The National Weather Service Storm Ready website at <http://www.weather.gov/stormready/howto.htm>
- The National Firewise Communities website at <http://firewise.org/>

9.17.6 MITIGATION STRATEGY

This section discusses past mitigations actions and status, identifies hazard vulnerabilities, and describes proposed hazard mitigation initiatives.

9.17.6.1 Past Mitigation Actions/Status

The status of all 2014 HMP initiatives was evaluated by the Borough of Raritan in 2018 and is presented in the following table. The community has indicated that local priorities have not changed since the last version of the plan.

2014 HMP Initiative #	Mitigation Initiative Description	2014 HMP Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
RT1	In accordance with the Twp. Master Plan, retain flood plains and other open lands to perform their natural functions and to advance the State's Wildlife Action Plan by retaining a diversity of wildlife habitat to the greatest extent practicable.	High	Flood	Borough Engineer	X				Completed		X	Completed
RT2	Minimize environmental impacts and flooding impacts in accordance with the Twp. Master Plan. Create a transition zone between the sensitive environmental areas in the Raritan River corridor and the residential zone.	High	Flood	Borough Engineer	X				Completed		X	Completed
RT3	Sanitary Backflow Preventer – During periods of heavy rains, the basement of the Municipal Building floods and raw sewage backs up into the basement area. This prohibits us from utilizing this designated area as a shelter and or warming center for residents.	High	Flood	Raritan Engineering; Raritan DPW; Raritan OEM				X	Not completed due to lack of funding.	X		This is still a priority and we hope to complete this project in the near future.

2014 HMP Initiative #	Mitigation Initiative Description	2014 HMP Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
RT4	Emergency Generator for North Thompson St Firehouse – Obtain and install backup power sources at critical facilities, including at the North Thomson Fire House. Because of loss of power to this building the fire department could not utilize this facility. This greatly hampered their ability to provide the services that were needed to protect the residents of Raritan Borough. The generator would also allow the Office of Emergency Management to utilize this facility as a Secondary Emergency Operations Center.	High	All	Raritan Engineering; Raritan DPW; Raritan OEM	X				Completed		X	A generator was installed at this location.
RT5 (RT1)	Retrofit Department of Public Works Building Mezzanine – This facility is located within the Flood Hazard area of the Raritan River, and identified in this plan as a vulnerable critical facility. Because of its location, the building severely floods during heavy rains when the river rises. It is proposed that a mezzanine platform be installed along the perimeter walls of the building. This will allow valuable equipment to be stored at an elevated safe height. Other upgrades to DPW building could include installing raised linear platform, new garage doors, electrical improvements, interior door relocation, exterior/interior sealing, and engineering/ construction admin.	Medium	Flood	Borough Engineering; Raritan DPW; Raritan OEM				X	The Borough may be moving this facility to a different location.		X	The Borough may be moving this facility to a different location.

2014 HMP Initiative #	Mitigation Initiative Description	2014 HMP Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
RT6 (RT3)	Obtain and install backup power sources at critical facilities, including at the Somerville Rescue Squad, Station 2 Raritan, NJ for use as an alternate EOC or shelter.	Medium	All	O.E.M. with support from County, NJOEM and FEMA		X			This initiative has been completed at the Fire Station but it has not been initiated at the Somerville Rescue Squad due to lack of funding.	X		This initiative has been completed at the Fire Station but it has not been initiated at the Somerville Rescue Squad due to lack of funding.
RT7 (RT5)	Strive to maintain compliance with and good-standing in the National Flood Insurance program.	Medium	Flood	Borough Engineer	X				Completed		X	Completed

2014 HMP Initiative #	Mitigation Initiative Description	2014 HMP Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
RT8	Conduct and facilitate community and public education and outreach for residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction. Provide and maintain links to the HMP website, and regularly post notices on the County/municipal homepage(s) referencing the HMP webpages. Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation. Use email notification systems and newsletters to better educate the public on flood insurance, the availability of mitigation grant funding, and personal natural hazard risk reduction measures. Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding.	High	All Hazards	Municipality with support from Planning Partners, County Planning, NJOEM, FEMA		X			Not completed due to lack of staff availability.	X		The Borough hopes to complete this initiative via the Borough Website.
RT9	Incorporate ordinances and/or zoning restrictions to control and mitigate future development in hazard areas, specifically as identified in Section 9.17.11.	Medium	All Hazards	Municipality with support from County, NJOEM and FEMA	X				Completed		X	Completed

2014 HMP Initiative #	Mitigation Initiative Description	2014 HMP Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
RT10	Improve communication systems.	Medium	All Hazards	Municipality with support from County, NJOEM and FEMA	X				Completed		X	Completed
RT11	Develop programs/procedures to capture and archive loss data from events. Examples include: Record location and length of roadway closures; Develop a database of residential and commercial property damage, including permit history for such repairs; High water marks, perhaps painting phone poles with high water marks and or regulatory Base Flood Elevations (BFEs).	Medium	All Hazards	Municipality with support from County, NJOEM and FEMA				X	There is a limited area of property that is located in flood zone.		X	There is a limited area of property that is located in flood zone.

2014 HMP Initiative #	Mitigation Initiative Description	2014 HMP Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
RT12	Participate in local, county and/or state level projects and programs to develop improved structure and facility inventories and hazard datasets to support enhanced risk assessment efforts. Such programs may include developing a detailed inventory of critical facilities based upon FEMA's Comprehensive Data Management System (CDMS) which could be used for various planning and emergency management purposes including: Support the performance of enhanced risk and vulnerability assessments for hazards of concern. Support state, county and local planning efforts including mitigation (including updates to the State HMP), comprehensive emergency management, debris management, and land use. Improved structural and facility inventories could incorporate flood, wind and seismic-specific parameters (e.g. first floor elevations, roof types, structure types based on FEMA-154 "Rapid Visual Screening of Buildings for Potential Seismic Hazards" methodologies). It is recognized that these programs will need to be initiated and supported at the County and/or State level, and will require training, tools and funding provided at the county, state and/or federal level.	Medium	All Hazards	Hazard Mitigation Plan Coordinator					X	We have not been invited to participate in any county projects at this time and we have not initiated any projects on our own.	X	The Borough's existing capabilities would be sufficient to support projects of this nature in the future.

2014 HMP Initiative #	Mitigation Initiative Description	2014 HMP Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
RT13	Support ongoing updates of Comprehensive Emergency Management Plans.	High	All Hazards	Municipality with support from County Emergency Management			X		This initiative is ongoing.	X	Existing Capability	
RT14	Create/Enhance/Maintain Mutual Aid agreements with neighboring communities for continuity of operations.	High	All Hazards	Municipality with support from County, NJOEM, FEMA and surrounding communities	X				The Borough of Raritan has Mutual Aid Agreements.	X	Completed	
RT15	Identify and develop agreements with entities that can provide support with FEMA/NJOEM paperwork after disasters; qualified damage assessment personnel – Improve post-disaster capabilities – damage assessment; FEMA/NJOEM paperwork compilation, submissions, record-keeping.	Medium	All Hazards	Municipality with support from County, NJOEM and FEMA	X				Completed	X	Completed	
RT16	Work with regional agencies (i.e. County and NJOEM) to help develop damage assessment capabilities at the local level through such things as training programs, certification of qualified individuals (e.g. code officials, floodplain managers, engineers).	Medium	All Hazards		X				Raritan code official, Lou Gara has attended floodplain management classes and FEMA seminars.	X	Completed	

2014 HMP Initiative #	Mitigation Initiative Description	2014 HMP Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
RT17	Continue to support the implementation, monitoring, maintenance, and updating of this Plan (through participating in the 5 year Plan Update), as defined in Section 7.0.	High	All Hazards	Municipality with support from Planning Partners, County Planning, NJOEM, FEMA			X		Ongoing Activity		X	The Borough's existing capabilities would be sufficient to support projects of this nature in the future
RT18	Purchase, relocate, or elevate structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss property as priority. Phase 1: Identify appropriate candidates based on cost-effectiveness. Phase 2: Where determined to be a viable option, work with property owners toward implementation of the determined action based on available funding from FEMA and local match availability	Medium	Flood, Severe Storm	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from County Planning, NJOEM, FEMA				X	Not a problem. Limited property located in flood zone.		X	Not a problem. Limited property located in flood zone.
RT19	Obtain and archive elevation certificates.	High	Flood, Severe Storm	NFIP Floodplain Administrator	X				Very limited area of regulated flood area.		X	Completed

2014 HMP Initiative #	Mitigation Initiative Description	2014 HMP Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
RT20	Promote the participation of Floodplain Administrators within the planning process and other activities.	Medium	Flood	Municipality with support from County, NJOEM and FEMA	X				Completed		X	Completed
RT21	Enhance the County/ community resilience to severe storms (including severe winter storms) by joining the NOAA "Storm Ready" program and supporting communities in joining the program.	Medium	Severe Storm	Municipality with support from County, NJOEM and FEMA				X	After further review, the borough has decided not to participate in NOAA at this time.		X	After further review, the borough has decided not to participate in NOAA at this time.
RT22	Adopt regulations for undergrounding utilities in new developments.	High	Severe Storm	Municipal Council				X	This not required. Some developments have it some do not.		X	This not required. Some developments have it some do not.
RT23	Implement permit fee waivers for installation of backup power for private property.	High	Severe Storm	Municipal Council				X	No longer at this time.		X	No longer at this time.
RT24	Provide public education and outreach on proper installation and/or use of backup power.	High	Severe Storm	Municipal Clerk				X	The Borough plans to utilize the website to complete this initiative.	X		The Borough plans to utilize the website to complete this initiative.

2014 HMP Initiative #	Mitigation Initiative Description	2014 HMP Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
RT25	Implement, review, and enforce municipal policies and programs to prevent trees from threatening lives and impacting power availability/interruption.	High	Severe Storm	Municipal Code Enforcement	X				Local utility companies perform this task.		X	Completed



9.17.6.2 Hazard Vulnerabilities Identified

The Borough identifies the municipal building, which housed the Police Headquarters and North Thompson Street Fire House, and the Department of Public Works Building to be vulnerable to flooding. The Borough also identifies high wind events and severe storms often cause widespread power outages.

It is estimated that in Raritan Borough, 3 residents live within the 1% annual chance flood area (NFIP Special Flood Hazard Area). \$163,092,000 (8.6%) of the municipality's general building stock replacement cost value (structure and contents) is located within the 1% annual chance flood area.

There are 13 NFIP policies in the community and there is 1 policy located within the 1% annual chance flood area. FEMA has identified 1 Repetitive Loss (RL) properties including 0 Severe Repetitive Loss (SRL) properties in the municipality.

HAZUS-MH 4.0 estimates that for a 1% annual chance flood, \$38,200,000 (2.02%) of the municipality's general building stock replacement cost value (structure and contents) will be damaged, 235 households may be displaced, 195 people may seek short-term sheltering, and an estimated 579 tons of debris could be generated.

Further information regarding the summary of the community's participation in the NFIP is provided in the table below.

NFIP Summary								
Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 1% Boundary (3)	# Policies in 0.2% - Boundary (3)	# Policies Outside the 0.2% Flood Hazard (3)
Raritan (B)	13	14	\$3,003,720	1	-	1	4	8

Source:

- (1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 2 via NJDEP in August 2017 and are current as of March 31, 2017. Please note the total number of repetitive loss properties includes the severe repetitive loss properties.
- (2) Information regarding total building and content losses was gathered from the claims file provided by FEMA Region 2 (current as of Borough of Raritan).
- (3) The policy locations used are based on the latitude and longitude provided by FEMA Region 2.

HAZUS-MH critical facility damage estimates for Raritan Borough are provided below.

Critical Facility Damage Estimate										
Name	Municipality	Type	Exposure		Potential Loss from 1% Flood Event			Potential Loss from 0.2% Flood Event		
			1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	Days to 100-Percent ⁽¹⁾	Percent Structure Damage	Percent Content Damage	Days to 100-Percent ⁽¹⁾
DPW	Raritan (B)	DPW	x	x	23.6	22.6	NP	41.5	53.7	NP

Source: HAZUS-MH 4.0

Notes:

- = No loss (calculated by HAZUS-MH 4.0)
- X = Facility located within the DFIRM boundary.
- DFIRM = Digital Flood Insurance Rate Map
- NA = Not applicable
- NP = Not provided by HAZUS
- B = Borough
- DPW = Department of Public Works

- (1) HAZUS-MH 4.0 provides a general indication of the maximum restoration time for 100% operations. Clearly, a great deal of effort is needed to quickly restore essential facilities to full functionality; therefore, this will be an indication of the maximum downtime (HAZUS-MH 4.0 User Manual).
- (2) Please note in some cases, a facility may be located in the DFIRM flood hazard boundary; however HAZUS did not calculate potential loss. This may be because the depth of flooding does not amount to any damages to the structure according to the depth damage function used in HAZUS for that facility type.

Please refer to the Hazard Profiles in Section 5 of this plan for additional vulnerability information relevant to this jurisdiction.

9.17.7 PROPOSED HAZARD MITIGATION INITIATIVES

The list below represents a summary of community mitigation initiatives developed in 2018 as part of the most recent plan update. The Borough of Raritan has identified no changes in local priorities since the last version of the plan in 2014. Detailed Action Worksheets are included only for NEW Mitigation Actions/Projects. Some of the identified mitigation initiatives in the table below are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Please note that the Borough has opted to carry forward legacy initiative numbers from the 2014 and 2009 plans, respectively, for internal municipal tracking purposes, formatted as: “2019# [2014# (2009#)]”.

Proposed Hazard Mitigation Initiatives														
2019 Initiative Number	Initiative Name	Initiative Description	New Initiative Or Carried Forward	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	2018 Action Status
RT1 [(RT3)]	Sanitary Backflow Preventer	During periods of heavy rains, the basement of the Municipal Building floods and raw sewage backs up into the basement area. This prohibits us from utilizing this designated area as a shelter and or warming center for residents.	Carried Forward	Existing	Flood	4,6,7	Raritan Engineering; Raritan DPW; Raritan OEM	High	\$8,000.00	Grant Funding; Municipal Budget	DOF	High	PP	Not initiated due to lack of funding.
RT2 [RT6 (RT3)]	Backup Power at Critical Facilities	Obtain and install backup power sources at critical facilities, including at the Somerville Rescue Squad, Station 2 Raritan, NJ for use as an alternate EOC or shelter.	Carried Forward	Existing	All	4,6,7	OEM with support from County, NJOEM and FEMA	Medium	Low	Grants/Borough Budget	Short	Medium	PP ES	Initiated but not completed. This initiative has been completed at the Fire Station but it has not been initiated at the Somerville Rescue Squad due to lack of funding.

Proposed Hazard Mitigation Initiatives														
2019 Initiative Number	Initiative Name	Initiative Description	New Initiative Or Carried Forward	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	2018 Action Status
RT3 [(RT8)]	Community and Public Education and Outreach	Conduct and facilitate community and public education and outreach for residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction: Provide and maintain links to the HMP website, and regularly post notices on the County/municipal homepage(s) referencing the HMP webpages. Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation. Use email notification systems and newsletters to better educate the public on flood insurance, the availability of mitigation grant funding, and personal natural hazard risk reduction measures. Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding.	Carried Forward	N/A	All Hazards	5,13	Municipality with support from Planning Partners, County Planning, NJOEM, FEMA	Medium	Medium	Municipal Budget, HMA programs with local or county match	Short Term	High	PE	Initiated but not completed due to staff availability.
RT4 [(RT24)]	Community and Public Education and Outreach	Provide public education and outreach on proper installation and/or use of backup power	Carried Forward	N/A	Severe Storm	5,13	Municipal Clerk	Medium	Low	Municipal Budget	Short	H	PR	Not initiated; the Borough plans to utilize the website to complete this initiative.

Notes:

- * Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure? Not applicable (N/A) is inserted if this does not apply.

Acronyms and Abbreviations:

ARC	American Red Cross
DPW	Department of Public Works
FEMA	Federal Emergency Management Agency
HMA	Hazard Mitigation Assistance
HMP	Hazard Mitigation Proposal

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
PDM	Pre-Disaster Mitigation Grant Program
RFC	Repetitive Flood Claims Grant Program
SRL	Severe Repetitive Loss Grant Program

N/A	Not applicable
NFIP	National Flood Insurance Program
NJOEM	New Jersey Office of Emergency Management
NOAA	National Oceanic and Atmospheric Administration
SCPD	Somerset County Planning Department
USACE	U.S. Army Corp of Engineers
USGS	U.S. Geological Survey

Costs:

Where actual project costs have been reasonably estimated:

Low = < \$10,000
 Medium = \$10,000 to \$100,000
 High = > \$100,000

Where actual project costs cannot reasonably be established at this time:

Low = Possible to fund under existing budget. Project is part of, or can be part of an existing on-going program.
 Medium = Could budget for under existing work plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
 High = Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.

Benefits:

Where possible, an estimate of project benefits (per FEMA's benefit calculation methodology) has been evaluated against the project costs, and is presented as:

Low = < \$10,000
 Medium = \$10,000 to \$100,000
 High = > \$100,000

Where numerical project benefits cannot reasonably be established at this time:

Low = Long-term benefits of the project are difficult to quantify in the short term.
 Medium = Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.
 High = Project will have an immediate impact on the reduction of risk exposure to life and property.

Timeline:

Short Term= 1 to 5 years
 Long Term = 5 years or greater
 OG = Ongoing program
 DOF = Depending on funding

Notes (for Mitigation Type):

1. PR = Prevention: 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.
2. PP = Property Protection: 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.
3. PE = Public Education and Awareness: 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.
4. NR = Natural Resource Protection: 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.
5. SP = Structural Projects: 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.
6. ES = Emergency Services: 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.
7. Initiative= Initiatives are comprised of EVERYTHING your community wants to do or is doing in order to meet its mitigation goals. Initiatives include Capabilities, Actions and Projects.
8. Capability= Regulatory, administrative, technical, and fiscal staffing, tools and/or resources. Capabilities can be existing, or in need of further development/expansion.
8. Action/Project= Specific activities or projects that your community plans to undertake or is currently completing in order to achieve its long term mitigation goals. Actions/Projects can include, but are not limited to: structural projects, infrastructure projects, natural systems protection projects, or education and awareness programs.

9.17.8 PRIORITIZATION OF MITIGATION INITIATIVES

The table below summarizes the priority levels for each mitigation initiative, listed by number. Please note that the Borough has opted to carry forward legacy initiative numbers from the 2014 plan, for internal municipal tracking purposes, formatted as: “2019# [2014#(2009#)]”.

Prioritization of Mitigation Initiatives							
Initiative #	# of Objectives Met	Benefits	Costs	Do benefits equal or exceed costs? (Yes or No)	Is project Grant eligible? (Yes or No)	Can project be funded under existing programs/budgets? (Yes or No)	Priority (High, Med., Low)
RT1 [(RT3)]	3	H	L	Y	Y	Y	H
RT2 [RT6 (RT3)]	3	M	L	Y	Y	N	M
RT3 [(RT8)]	2	M	M	Y	Y	Y	H
RT4 [(RT24)]	2	M	L	Y	N	Y	H

Notes:

H = High

L = Low

M = Medium

N = No

Y = Yes

9.17.8.1 Explanation of Priorities

Explanations of priority classifications used to assess the mitigation initiatives described in this annex are presented below:

High Priority = A project that meets multiple objectives (i.e., multiple hazards), where potential benefits exceed the costs. High-priority projects have funding secured or are on-going projects that meet eligibility requirements for the Hazard Mitigation Grant Program (HMGP) or Pre-Disaster Mitigation (PDM) Grant Program. High-priority projects can be completed in the short term (1 to 5 years).

Medium Priority = A project that meets goals and objectives, where the potential benefits outweigh the costs. Funding for medium-priority projects has not been secured but these projects are eligible for grants under HMGP, PDM, or other grant programs. These projects can be completed in the short term, once funding is completed. Medium-priority projects will become high-priority projects once funding is secured.

Low Priority = A project that will mitigate the risk of a hazard, where the potential benefits do not exceed the costs or have benefits that are difficult to quantify. Funding for low-priority projects has not been secured and these projects are not eligible for HMGP or PDM grant funding. The timeline for completion is considered long term (1 to 10 years). Low-priority projects may be eligible other sources of grant funding from other programs. A low-priority project could become a high-priority project once funding is secured as long as it could be completed in the short term.

Was prioritization of initiatives based on the above definitions? Yes

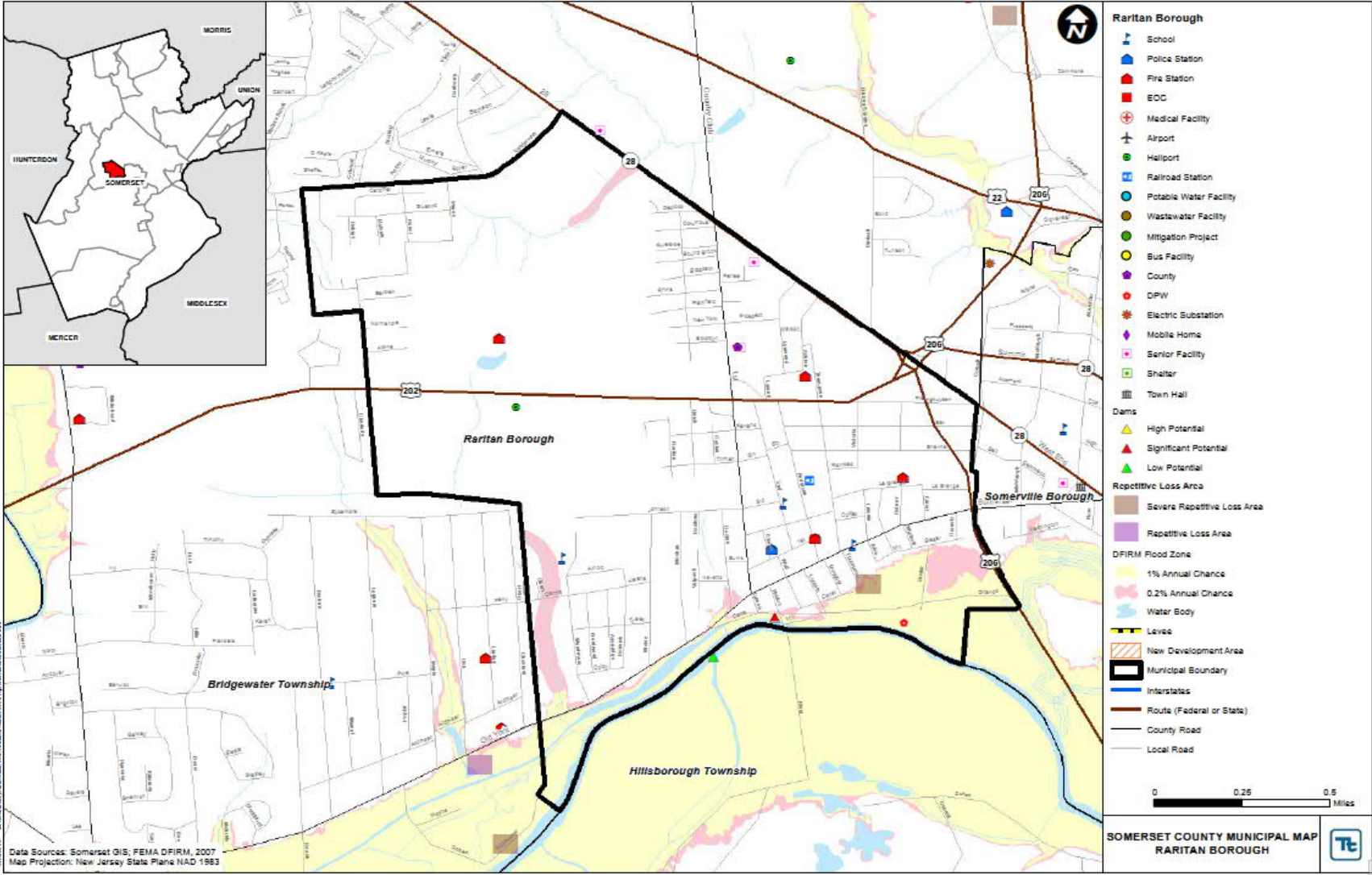
Was prioritization of initiatives based on parameters other than those stated above? Not applicable

9.17.9 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

Raritan Borough has no additional risk vulnerabilities that need to be addressed at this time.

9.17.10 HAZARD AREA EXTENT AND LOCATION

A hazard area extent and location map illustrating the probable areas impacted within Raritan Borough is provided on the following page. This map is based on the best data available at the time of the preparation of this plan, and is considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which Raritan Borough has significant exposure. The planning area maps are provided in the hazard profiles within Section 5.4 of this plan.



9.17.11 STATUS OF INCORPORATION OF MITIGATION PLANNING INTO EXISTING AND FUTURE PLANNING MECHANISMS

It is the intention Raritan Borough to incorporate mitigation planning as an integral component of daily municipal operations. The following table contains a list of planning mechanisms that have been utilized during prior plan maintenance cycles, and those that will be incorporated into municipal procedures during the upcoming plan maintenance cycle (2019-2024).

Status of Incorporation of Mitigation Planning into Existing and Future Planning Mechanisms				
Planning Mechanisms	Reported Utilization (2009-2014)	Planned Utilization (2014-2019)	Reported Utilization (2014-2019)	Planned Utilization (2019-2024)
Operating Budget 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 and objectives.	X	-	X	X
Capital Improvement Budget 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 and objectives.	-	X	X	X
Human Resource Manual Employee job descriptions may contain hazard mitigation actions.	-	-	-	-
Building and Zoning Ordinances Prior to land use, zoning changes, or development permitting, the municipality will review the hazard mitigation plan and other hazard analyses to ensure consistent and compatible land use.	-	X	X	X
Comprehensive Land Use Plan When applicable, the municipality will incorporate hazard mitigation actions in the development and extent of the regulations.	-	X	X	X
Grant Applications Data and maps will be used as supporting documentation in grant applications.	X	-	X	X
Municipal Ordinances When updating municipal ordinances, hazard mitigation will be a priority.	-	X	X	X
Fire Plan The Hazard Mitigation Plan will be used as a resource for the development of future Fire Plans.	-	-	-	-
Capital Improvement Planning The municipality will establish a protocol to review current and future projects for hazard vulnerability. The municipality will incorporate hazard-resistant construction standards into the design and location of projects.	-	X	X	X
Day-to-Day Operations The municipality will incorporate hazard mitigation actions in daily operations and all projects.	-	-	X	X

Status of Incorporation of Mitigation Planning into Existing and Future Planning Mechanisms				
Planning Mechanisms	Reported Utilization (2009-2014)	Planned Utilization (2014-2019)	Reported Utilization (2014-2019)	Planned Utilization (2019-2024)
Local School Service Projects The municipality will work closely with the local school district and assist with community service projects for the service organizations. Several of the municipality's hazard mitigation actions can be implemented as a joint project with the school district.	-	-	-	-
Municipal Budget Adopted annually, the municipality will look at mitigation actions when allocating funding.	X	-	X	X
Economic Development The local economic development group will take into account information regarding identified hazard areas when assisting new businesses in finding a location.	-	-	X	X

9.17.12 ADDITIONAL COMMENTS

There are no additional comments at this time.

9.17.12 NFIP ADMINISTRATOR INPUT

Adoption Date of your Current Floodplain Management Ordinance	Date of Entry into NFIP ¹	Position or Title of Your Jurisdiction's Designated Floodplain Manager/Administrator (may also be called NFIP Coordinator)		Is this person is a Certified Floodplain Manager?	Is floodplain management an auxiliary function?	Is your community in good standing with the NFIP?	
6/1/2012	12/15/81	BOROUGH ENGINEER		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Provide an explanation of NFIP administration services (i.e., permit review, GIS, education or outreach, inspections, engineering capability, etc.):							
LAND USE REVIEW - CONSTRUCTION OBSERVATIONS & ADMINISTRATION MSA PERMIT & COMPLIANCE; CAPITAL IMPROVEMENTS							
Describe barriers to running an effective NFIP program in the community (if applicable):							
When was most recent FEMA Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?*	Is a CAV or CAC scheduled or needed?	Does the current floodplain management ordinance exceed FEMA or State minimum requirements? If so, describe how.	Is training of staff regarding NFIP issues planned?	Does your community intend to continue to enforce the floodplain management requirements including regulating new construction in Special Flood Hazard Areas (SFHAs)?	Does your community participate in the CRS? If so, state your Class.	Does your community intend to continue its participation in the CRS program?	If your community is not currently participating in the CRS program, are you intending to initiate the process during the next planning cycle?
	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No * Class HP	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
*Describe any outstanding compliance issues (i.e., current violations):							
NONE							

Provide an explanation of your local floodplain permitting process:								
CONSTRUCTION OFFICIAL WILL REFER ANY PERMIT APPLICATIONS, 10 FHA, TO BOROUGH ENGINEER FOR REVIEW OF COMPLIANCE W/ORDINANCE OR REFERS APPLICANT TO DEP.								
Does your community intend to continue floodplain identification and mapping services including any local requests for map updates?	Does your community intend to initiate/continue the buyouts of repetitive loss properties?	Does your community intend to commit staff or resources to improve local mapping or code administration in the future?	Does your community intend to provide local outreach to promote the sale of flood insurance?	Does your community intend to participate in RiskMAP meetings and planning initiatives?	Does your community intend to continue to implement structural improvements to mitigate against flooding - culverts, drainage basins, etc.?	Does your community intend to continue to implement home improvement programs designed to minimize basement flooding?	Does your community intend to continue to implement roadway improvements to reduce damage from future flooding events?	Does your community intend to implement plans and programs in coordination with a local or regional drainage/sewer authority?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does your community intend to adopt the new FEMA Advisory Base Flood Elevations?	As Floodplain Manager, did you (or your predecessor at the time) actively participate in the development of the initial Hazard Mitigation Plan?		As Floodplain Manager, are you actively participating in the development of this Hazard Mitigation Plan Update?		Have there been any changes to your community's local floodplain management program since the last version of the plan in 2009?			
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input checked="" type="checkbox"/> Yes* <input type="checkbox"/> No			
* If you answered "yes", that there have been changes to your local program since 2009, please describe:								
UPDATES FLOOD DAMAGE PREVENTION ORDINANCE								
Provide a description of your community assistance and monitoring activities:								
REVIEW, APPRAISE, MONITOR ANY FLOODPLAIN RELATED PROGRAMS.								
NFIP participating communities are required to update/revise their floodplain management ordinance to ensure that it complies with the latest FEMA regulations. Will your community continue to commit to this program requirement?					NFIP participating communities are also required to update/revise their floodplain management ordinance to be consistent with the latest FIRMS. Will your community continue to commit to this program requirement?			
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			