



SOMERSET COUNTY

HAZARD MITIGATION PLAN

SOMERSET COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

FINAL PLAN UPDATE
JULY 2019

www.co.somerset.nj.us/hmp

Section 9.18: Borough of Rocky Hill Annex

*Prepared by the Somerset County
Mitigation Planning Committee*



9.18 Borough of Rocky Hill

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

9.18.1 HAZARD MITIGATION PLAN POINTS OF CONTACT

Hazard Mitigation Plan Points of Contact					
Primary Point of Contact			Alternate Point of Contact		
Name: Eric Mickelson, Fire Official Address: 15 Montgomery Avenue, Rocky Hill, NJ 0855 Phone Number: 908-910-7137 Fax Number: E-mail Address: fireofficial53@gmail.com			Name: William Tanner, Borough Engineer Address: 339 Amwell Road, Building B, Hillsborough, NJ 08844-5877 Phone Number: 609-333-0678 Fax Number: E-mail Address: btanner@vcea.org		
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	Tamara Lee	Tleeplan@earthlink.net	609-333-0678	1/10/2018	Y
Emergency Manager	Todd Harris	Rockyhilloem@gmail.com	609-240-4182	1/10/2018	Y
Floodplain Manager/ Floodplain Administrator	Bill Tanner	Btanner@vcea.org	609-333-0678	1/10/2018	Y
Public Works Director / City Engineer	Bill Tanner	Btanner@vcea.org	609-333-0678	1/10/2018	Y
Building Code Official	State of NJ/DCA				
Fiscal/Budget Officer	Joe Monzo	Rockyhillcfo@gmail.com	609-883-1004	1/10/2018	Y
Manager/Administrator	Rebecca Newman	Clerk@rockyhill.org	908-304-5885	1/10/2018	Y
Elected Officials					
Other 1:	Phil Kartsonis	Pkartsonis@rockyhill-nj.gov		1/10/2018	Y
Other 2:	Billy Dawson	Bdawson@rockyhill-nj.gov		1/10/2018	Y

9.18.2 PROFILE

9.18.2.1 Population

The population of Rocky Hill Borough is estimated to be 682, based on information gathered during the 2010 U.S. Census. Census population estimates of July 2017 indicated a total population of 688.

9.18.2.2 Location

Rocky Hill is located along County Route 518 in southeastern Somerset County just north of Princeton Township bordered by the Millstone River on the east and the Van Horne Brook on the south. The municipal boundaries border Montgomery to the west and Franklin to the east.

9.18.2.3 Brief History

Rocky Hill was originally part of Montgomery Township which was incorporated in 1772 but split from the Township and incorporated as an independent Borough in 1889. Rocky Hill is famed most for Washington's prolonged stay in 1783. When Congress met in Princeton, they wanted him nearby to get his "assistance and advice in the arrangements for peace."

9.18.2.4 Governing Body Format

The Borough government consists of a mayor, a council president, and five council members. The Borough functions with appointed attorney, auditor, clerk, deputy clerk, building inspector, and chief financial officer.

9.18.2.5 Growth/Development Trends

Borough of Rocky Hill did not note any major residential or commercial development, or major infrastructure development planned for the next 5 years in the municipality (updated in 2018). A previous application for development of senior citizen housing on Princeton Avenue (previously identified in the 2014 HMP) has expired.

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

The Borough will enforce its flood plain management ordinance to protect new development and substantial improvements in the floodplain.

9.18.3 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	No local damage reported
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	No local damage reported
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

Natural Hazard Event History				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
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	No local damage reported
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
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

Natural Hazard Event History				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
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	No local damage reported
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
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

Natural Hazard Event History				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
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
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

Natural Hazard Event History				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
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

Twp. = Township

Boro. = Borough

9.18.4 NATURAL HAZARD RISK/VULNERABILITY RISK RANKING

The table below summarizes the vulnerability risk rankings of potential hazards of Rocky Hill Borough (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: \$800,000 0.2% Annual Chance: \$1,300,000	Frequent	18	Medium
Severe Storm	100-Year MRP: \$124,796 500-Year MRP: \$568,954 Annualized Loss: \$4,828	Frequent	39	High
Severe Winter Storm	1% of GBS: \$1,151,330 5% of GBS: \$5,756,650	Frequent	27	Medium
Earthquake	500-Year MRP: \$184,516 2,500-Year MRP: \$2,741,855 Annualized Loss: \$2,833	Occasional	12	Low
Drought	Not available	Occasional	16	Medium
Extreme Temperature	Not available	Frequent	27	Medium
Wildfire	Not available	Occasional	28	Medium

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.

9.18.5 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.

9.18.5.1 Legal and Regulatory Capability

The table below summarizes the regulatory tools that are available to Rocky Hill Borough. The Borough reviewed its responses from the 2014 HMP and has updated any information that has changed since that time.

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	Building Code Official; State of New Jersey	DCA provides Service International Building Code – New Jersey Edition, NJAC 5:24-3.14 Adopted 2/20/07
2) Zoning Ordinance	Y	Mark Blasch, Zoning Officer	BRO Article 7 1976
3) Subdivision Ordinance	Y	Mark Blasch, Zoning Officer	RSIS standards govern although localities adopt separate Ordinances BRO Article 4 through 7
4) Special Purpose Ordinances (floodplain management, critical or sensitive areas)	Y	Borough Engineer	Flood Damage Protection Ordinance adopted 9/17/07
5) Growth Management	-	-	NA
6) Floodplain Management/Basin Plan	-	Bill Tanner, Engineer	NA
7) Stormwater Management Plan/ordinance	Y	Bill Tanner, Engineer; Tom Bremner, Councilman	NJ requires that localities adopt ordinances that reflect State Statutory powers BRO Article 10
8) General Plan or Comprehensive Plan	Y	Community Development Committee	Borough Master Plan Revisited 2004
9) Capital Improvements Plan	Y	Chief financial officer – Joseph Monzo	Required as part of the State mandated budget process
10) Site Plan Review Requirements	Y	Mark Blasch, Zoning Officer; Bill Tanner, Engineer	RSIS standards govern although localities adopt separate Ordinances NJAC Title 5 Chap 21
11) Habitat Conservation Plan	-	-	NA
12) Economic Development Plan	-	-	NA
13) Emergency Response Plan	Y	Emergency Management Coordinator– Todd Harris	4/2/2002
14) Shoreline Management Plan	-	-	NA
15) Post Disaster Recovery Plan	-	-	NA
16) Post Disaster Recovery	-	-	NA

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)
Ordinance			
17) Real Estate Disclosure req.	-	-	NA
18) Other	Y	-	DCA provides Service
19) Floodplain Management Ordinance	-	-	-

9.18.5.2 Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Rocky Hill Borough. The Borough reviewed its responses from the 2014 HMP and has updated any information that has changed since that time.

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	Consulting Services Van Cleef Engineering Associates (Engineering) Tamara Lee Consulting LLC
2) Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Provided by the State of New Jersey
3) Planners or engineers with an understanding of natural hazards	Y	Van Cleef Engineering Associates
4) Floodplain Administrator	Y	William C. Tanner P.E.
5) Surveyor(s)	Y	Provided by Van Cleef Engineering Associates
6) Personnel skilled or trained in "GIS" applications	Y	Provided by Van Cleef Engineering Associates
7) Scientist familiar with natural hazards in the Borough of Rocky Hill.	N	-
8) Emergency Manager	Y	Borough OEM
9) Grant Writer(s)	Y	Provided by Van Cleef Engineering Associates and by local volunteers
10) Staff with expertise or training in benefit/cost analysis	N	The Borough has no full time Staff

9.18.5.3 Fiscal Capability

The table below summarizes financial resources available to Rocky Hill Borough. The Borough reviewed its responses from the 2014 HMP and has updated any information that has changed since that time.

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

9.18.5.4 Overall Capabilities

The Borough of Rocky Hill'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
Moderate	Moderate	Low	Moderate	High
How these capabilities can be expanded and/or improved to reduce risk				
Additional financial support/opportunities. Additional staff to manage projects.				

9.18.5.5 Community Classifications

The following table summarizes classifications for community program available to the Borough of Rocky Hill. The Borough reviewed its responses from the 2014 HMP and has updated any information that has changed since that time.

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

Notes:

- = Unavailable

N/A = Not applicable

NP = Not participating

* CRS Ranking as of October 2017

The classifications listed above relate to Rocky Hill'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/>

9.18.6 MITIGATION STRATEGY

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

9.18.6.1 Past Mitigation Actions/Status

The status of all 2014 HMP initiatives was evaluated by the Borough of Rocky Hill 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	
RH1 (RH1)	Where appropriate, support retrofitting and/or purchasing structure located in hazard prone areas, including those located along the east side of Princeton Avenue (Raise 9 homes /1 Business). 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.	High	Flooding	Borough Engineer				X	Lack of Funding	X		No Change
RH2 (RH2)	Retrofit Critical Facilities: Generators are needed at the water pump at the well, and at the municipal building.	Medium	All	Borough Emergency Management		X			Generator constructed; will be installed and operational after all involved parties finalize details.	X		No Change
RH3 (RH4)	Participate in multi-jurisdictional update of Somerset County All Hazards Mitigation Plan.	Medium	All	Borough Emergency Management			X		Ongoing	X		No Change

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	
RH4 (RH5)	Strive to maintain compliance with and good-standing in the National Flood Insurance program including adoption and enforcement of floodplain management requirements.	Medium	Flood	Borough Engineer			X		Ongoing	X		No Change
RH5	Support ongoing updates of Comprehensive Emergency Management Plans.	High	All Hazards	Municipality with support from County Emergency Management			X		Ongoing	X		No Change
RH6	Continue to involve the acting Floodplain Administrators (currently the Borough Engineer) within the planning process and other activities.	Medium	Flood	Municipality with support from County, NJOEM and FEMA			X		Ongoing	X		No Change
RH7	Implement, review, and enforce municipal policies and programs to prevent trees from threatening lives and impacting power availability/interruption. Of special concern is the area along Montgomery Avenue, where major limbs and trees have come down in past storms, creating a transportation hazard and blocking one of three access/exit routes to the Borough.	High	Severe Storm	Municipal Code Enforcement			X		Ongoing; Lack of Funding	X		No Change

9.18.6.2 Hazard Vulnerabilities Identified

Borough officials reported that the major issues are flooding and loss of power, and that the Borough feels good about the amount of hazard risk to which they are currently vulnerable. There is one continuous floodplain in the town, located on east side along Princeton Ave. Structures set far back on those properties may be vulnerable, but only one has reported repetitive flood problems. The Borough has its own water supply, and would like to have a backup generator installed on that pump facility/building. This would also benefit the needs of people who come to the building for shelter during an emergency or hazard event, where they could get warm, charge cell phones, and receive information about the status of current hazard events. Borough officials reported that the greatest hazard vulnerability in Rocky Hill occurs during severe storm and flood events, when people get trapped within the borough. Historic flooding has closed down the 518/Georgetown Franklin Turnpike Bridge over the Millstone River, and has blocked SR 206, south of the Van Horne Brook near the Princeton airport. Severe storms also bring down trees on Montgomery Ave, blocking the third and final route in and out of the Borough

It is estimated that in Rocky Hill Borough, 3 residents live within the 1% annual chance flood area (NFIP Special Flood Hazard Area). \$58,273,000 (29.4%) of the municipality's general building stock replacement cost value (structure and contents) is located within the 1% annual chance flood area.

There are 9 NFIP policies in the community and there are 3 policies located within the 1% annual chance flood area. FEMA has identified 2 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, \$800,000 (0.40%) of the municipality's general building stock replacement cost value (structure and contents) will be damaged, 92 households may be displaced, 54 people may seek short-term sheltering, and an estimated 58 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)
Rocky Hill (B)	9	11	\$398,098	2	-	3	3	3

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 Rocky Hill).
- (3) The policy locations used are based on the latitude and longitude provided by FEMA Region 2.

HAZUS-MH does not report any critical facility damage estimates for Rocky Hill Borough. Please refer to the Hazard Profiles in Section 5.0 of this plan for additional vulnerability information relevant to this jurisdiction.

9.18.7 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 Rocky Hill 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
RH1 [RH1 (RH1)]	Retrofitting and/or purchasing structure located in hazard prone areas	Where appropriate, support retrofitting and/or purchasing structure located in hazard prone areas, including those located along the east side of Princeton Avenue (Raise 9 homes /1 Business). 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.	Carried Forward	Existing	Flooding	4	Borough Engineer	High	High	FEMA HMGP PDM	Long	High	Action/ Project, PP	Not initiated; lack of funding.
RH2 [RH2 (RH2)]	Water pump generator	Retrofit Critical Facilities: Generators are needed at the water pump at the well, and at the municipal building.	Carried Forward	Existing	All	4,6,7	Borough Emergency Management	Medium	Medium	Capital Budget	Long	Medium	Action/ Project, PP	Initiated but not completed. Generator constructed; will be installed and operational after all involved parties finalize details.
RH3 [RH3 (RH4)]	All Hazards Mitigation Plan	Participate in multi-jurisdictional update of Somerset County All Hazards Mitigation Plan.	Carried Forward	Existing	All	All	Borough Emergency Management	Medium	Medium	Operating Budget	Long	Medium	Capability, PR	Ongoing type of activity.
RH4 [RH4 (RH5)]	NFIP	Strive to maintain compliance with and good-standing in the National Flood Insurance program including adoption and enforcement of floodplain management requirements.	Carried Forward	Both	Flood	4	Borough Engineer	Medium	Low	Operating Budget	Short	Medium	Capability, PR	Ongoing type of activity.
RH5 [(RH5)]	Comprehensive Emergency Management Plan	Support ongoing updates of Comprehensive Emergency Management Plans.	Carried Forward	New and Existing	All Hazards	8,9	Municipality with support from County Emergency Management	Low	Low	Municipal Budget	On-going	High	Capability, PR	Ongoing type of activity.
RH6 [(RH6)]	Involve Floodplain Administrator	Continue to involve the acting Floodplain Administrators (currently the Borough Engineer) within the planning process and other activities.	Carried Forward	N/A	Flood	All	Municipality with support from County, NJOEM and FEMA	Medium	Medium	Municipal Budget	Short	Medium	Capability, PR	Ongoing type of activity.

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
RH7 [(RH7)]	Implement, review, and enforce municipal policies	Implement, review, and enforce municipal policies and programs to prevent trees from threatening lives and impacting power availability/interruption. Of special concern is the area along Montgomery Avenue, where major limbs and trees have come down in past storms, creating a transportation hazard and blocking one of three access/exit routes to the Borough.	Carried Forward	N/A	Severe Storm	2,3,5,8	Municipal Code Enforcement	Medium	Low	Municipal Budget	Short	H	Action/Project, PR	Ongoing; lack of funding.

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
- 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.

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

Timeline:

- Short Term= 1 to 5 years
- Long Term = 5 years or greater
- OG = On-going 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



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.

4. NR = projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
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.

9.18.8 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)
RH1 (RH1)	1	H	H	Y	Y	N	H
RH2 (RH2)	3	M	M	Y	N	Y	M
RH3 (RH4)	13	M	L	Y	N	Y	M
RH4 (RH5)	1	M	L	Y	N	Y	M
RH5	2	L	L	Y	N	Y	H
RH6	13	M	M	Y	N	Y	M
RH7	4	M	L	Y	N	Y	H

Notes:

H = High

L = Low

M = Medium

N = No

Y = Yes

9.18.8.1 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

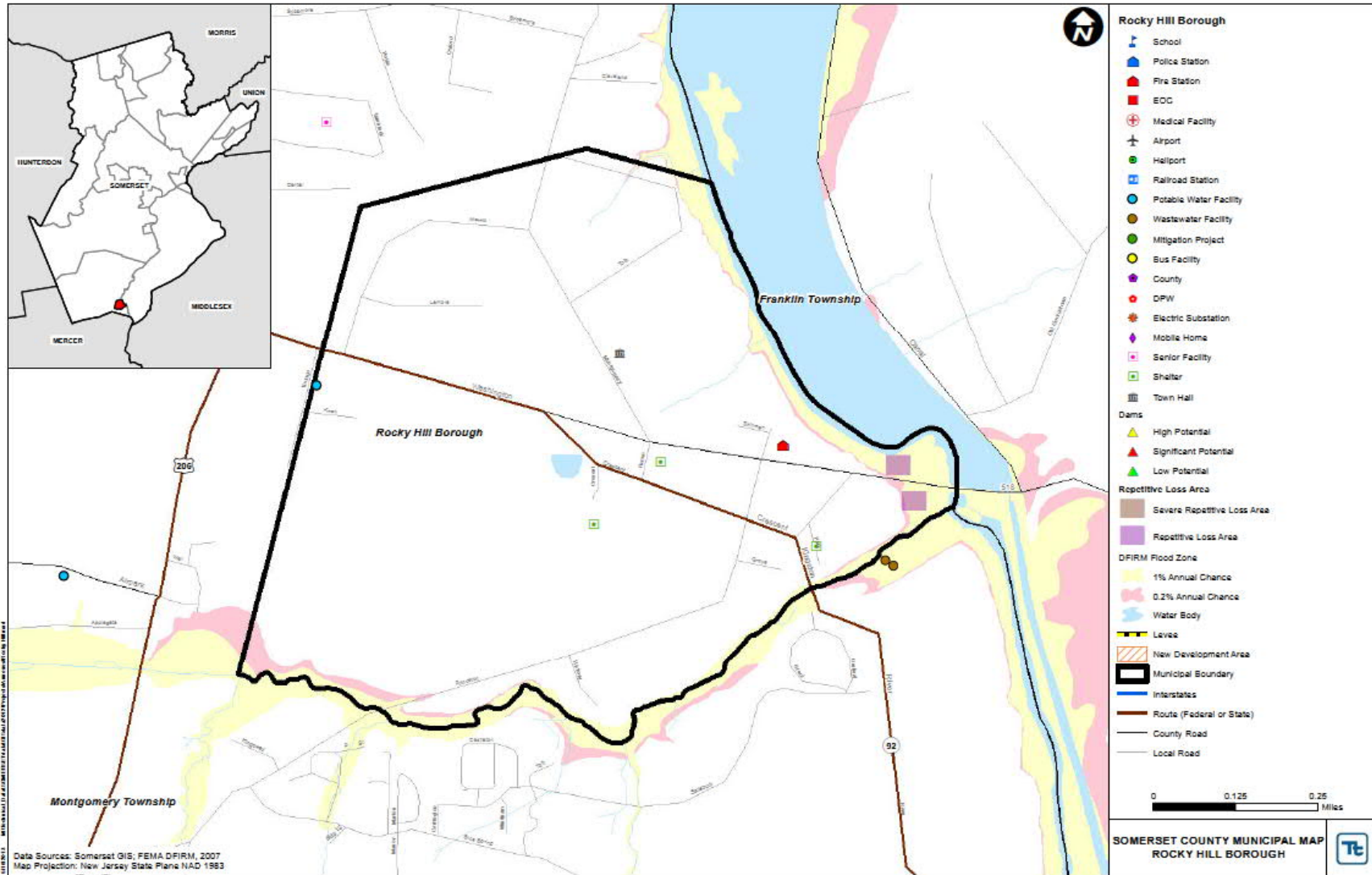
Was prioritization of initiatives based on parameters other than those stated above? Not applicable

9.18.9 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

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

9.18.10 HAZARD AREA EXTENT AND LOCATION

A hazard area extent and location map illustrating the probable areas impacted within the 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 Rocky Hill Borough has significant exposure. The planning area maps are provided in the hazard profiles within Section 5.4 of this plan.



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

It is the intention of Rocky Hill 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
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
Human Resource Manual Employee job descriptions may contain hazard mitigation actions.	-	-	X	
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
Comprehensive Land Use Plan When applicable, the municipality will incorporate hazard mitigation actions in the development and extent of the regulations.	-	-	-	X
Grant Applications Data and maps will be used as supporting documentation in grant applications.	-	-	X	X
Municipal Ordinances When updating municipal ordinances, hazard mitigation will be a priority.	-	-	X	X
Fire Plan The Hazard Mitigation Plan will be used as a resource for the development of future Fire Plans.	-	-	X	X
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

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)
Day-to-Day Operations The municipality will incorporate hazard mitigation actions in daily operations and all projects.	-	-	-	X *
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.	-	-	-	X
Municipal Budget Adopted annually, the municipality will look at mitigation actions when allocating funding.	-	-	-	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

* Borough does not own or operate any schools.

9.18.12 ADDITIONAL COMMENTS

There are no additional comments at this time.

9.18.12 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 a Certified Floodplain Manager?	Is floodplain management an auxiliary function?	Is your community in good standing with the NFIP?	
2016	1971	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.):								
Local administrator implements ordinance by granting or denying development permit applications in accordance with its provisions.								
Describe barriers to running an effective NFIP program in the community (if applicable):								
No full time staff								
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?	
None	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No * Class _____	<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:								
Review development permits for: compliance with ordinance; receipt of other applicable Federal/State/Local permits; determination of whether the proposed development is located in the floodway and assurance that encroachment provisions are met.								
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 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	<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 2014?			
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No			
* If you answered "yes", that there have been changes to your local program since 2009, please describe:								
Provide a description of your community assistance and monitoring activities:								
Committee oversight of ongoing conditions								
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				