



SOMERSET COUNTY

HAZARD MITIGATION PLAN

SOMERSET COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

FINAL PLAN UPDATE
JULY 2019

www.co.somerset.nj.us/hmp

Section 9.19: Borough of Somerville Annex

*Prepared by the Somerset County
Mitigation Planning Committee*



9.19 Borough of Somerville

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

9.19.1 HAZARD MITIGATION PLAN POINTS OF CONTACT

Hazard Mitigation Plan Points of Contact					
Primary Point of Contact			Alternate Point of Contact		
Name: Steve Weinman, MHMO Address: 25 West End Avenue, Somerville, NJ 08876 Phone Number: 908-672-8368 Fax Number: E-mail Address: sweinman@somervillenj.org			Name: Kevin Sluka, Clerk/Administrator Address: 25 West End Avenue, Somerville, NJ 08876 Phone Number: 908-725-2300 ext. 1983 Fax Number: E-mail Address: ksluka@somervillenj.org		
Municipal HMP Committee Members					
Local Jurisdiction Role/Position	Name	Email	Phone	Date Notified About Mitigation Plan Development Process	Agreed to participate? (Yes/No)
Land Use/Community Planner	Michael Cole	mcole@mcolandassociates.com	609-306-2877	10/9/2017	Yes
Emergency Manager	Steve Weinman	sweinman@somervillenj.org	908-672-8368	10/9/2017	Yes
Floodplain Manager/ Floodplain Administrator	Frank Vuoso	fvuoso@somervillenj.org	908-725-2300 ext 1962	10/9/2017	Yes
Public Works Director	Rodney Hadley	rhadley@somervillenj.org	908-704-7195	10/9/2017	Yes
Borough Engineer	Michele Casey	casey@co.somerset.nj.us	908-231-7024	10/9/2017	Yes
Building Code Official	Frank Vuoso	fvuoso@somervillenj.org	908-725-2300 ext 1962	10/9/2017	Yes
Fiscal/Budget Officer	Paige Elster	pelster@somervillenj.org	908-725-2300 ext 1974	10/9/2017	Yes
Manager/Administrator	Kevin Sluka	ksluka@somervillenj.org	908-725-2300 ext 1983	10/9/2017	Yes
Council Liasion	Dennis Sullivan	d32149@optonline.net	908-442-3611	1/18/2018	Yes
OEM Deputy Coordinator	Ken Utter	utterguy@optonline.net	908-255-3555	10/9/2017	Yes
Fire Prevention/Marshall	Keith Thedinga	kthedinga@somervillenj.org	908-725-2300 ext 1968	10/9/2017	Yes

9.19.2 PROFILE

9.19.2.1 Population

The population of Somerville Borough is estimated to be 12,098, based on information gathered during the 2010 U.S. Census. Census population estimates of July 2017 indicated a total population of 12,418.

9.19.2.2 Location

Somerville is located at 40°34'15"N, 74°36'19"W (40.570831, -74.605344). According to the U.S. Census Bureau, the borough has a total area of 2.4 square miles. The Borough's territory is flat land. Somerville borders the Raritan River to the south sharing a border with Hillsborough. Somerville is bordered by Raritan to the west, and Bridgewater to the north and east.

9.19.2.3 Brief History

Somerville was settled in colonial times primarily by the Dutch who purchased land from the English proprietors of the colony. The early village grew up around a church, courthouse and a tavern built at a

crossroads shortly after the American Revolution. No one knows who gave Somerville its name, but it was known by this name by about 1800. Somerville was originally a sparsely populated farming community, but rapidly grew after the completion of the railroad in the 1840s and development of water power along the Raritan River in the 1850s. Under the Laws of Session of 1909 of the Senate and General Assembly of the State of New Jersey, the Borough of Somerville was created on April 16, 1909.

9.19.2.4 Governing Body Format

Somerville Borough is organized under the Mayor-Council form of government. The mayor is elected to a four-year term and six council members are elected for staggered three-year terms. Two council members are elected each year. The Borough Council elects a member to serve as Council President to act in the absence of the mayor. Each council member is appointed by the mayor to one of six standing committee's during the Annual Reorganization Meeting held on January 1st of each year.

9.19.2.5 Growth/Development Trends

Somerville noted the following major residential/commercial development and major infrastructure development that are identified for the next five (5) years in the Borough (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
McAleavy	Residential	1	388 William Street	75/4.01	None	Approved
The Davenport	Residential	1	Davenport Street	115/17	None	Approved
Sterling/SOMA	Residential	1	110 S Bridge Street	123/4	None	Under Construction
JSM @ 154 Main	Retail/Residential	1	154 W Main Street	115/23	None	Proposed
JSM @ Somerville	Retail/Residential	3	West Main Street	117.01 1.03	None	Approved
DGM	Residential	1	Veterans Memorial Drive	61/6.01	None	Approved
Litgo	Residential	2	Haynes Street	50/3	None	Approved
DeSapio Properties	Retail/Office/Residential	1	46 East Main Street	63/1	None	Under Construction
The Davenport	Residential	1	21-29 Davenport Street	115/17	None	Approved
Somerset Station	Commercial Residential	15	N/A	123 & 124 Numerous Lots	None	Proposed
40 Haynes	Residential	2	40 Haynes Street	50 Lots 3, 13, 14	None	Approved
Viamare	2 SF Residential Commercial	3	William & Gaston	81/1.01	None	Approved

9.19.3 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 (2014 to present)				
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	One of the harshest arctic outbreaks in years occurred in NJ on the 7th. Record low temperatures occurred, combined with strong northwest winds produced wind chill factors as low as 15° to 25°F below zero in most areas. Low temperatures were near zero. High temperatures struggled to reach double digits. While temperatures were higher than occurred on January 4th, the wind made it feel much colder. Low temperatures included 2°F in Somerville.
Cold/Wind Chill	N/A	N/A	January 22, 2014	Strong northwest winds behind the departing strong low pressure system coupled with another arctic air mass dropped low temperatures in the morning into the single digit, with some below zero in the northwest part of the state. Low temperatures included 3°F in Somerville.
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	Event precipitation totals included 1.10 inches in Somerville.
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

Natural Hazard Event History (2014 to present)				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
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	A hot start to July peaked on the 2nd in interior NJ with high temperatures in the lower to mid-90s and afternoon heat index values reaching 100° to 105°F. Highest temperatures included 96°F in Hillsborough and 95°F in Somerville.
Thunderstorm Wind	N/A	N/A	July 3, 2014	No local damage reported
Flash Flood	N/A	N/A	July 3, 2014	Thunderstorms with very heavy rain caused flash flooding of roadways and smaller streams in central Somerset County. The flash flooding resulted in a rescue of a stranded motorist on Somerset Street in Somerville.
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	Event precipitation totals included 2.51 inches in Somerville.
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	Thunderstorms with very heavy rain caused small stream and poor drainage flash flooding in northern Somerset County mainly in Bernards, Bridgewater and Warren Townships. An intersection in Somerville was closed due to flooding.
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

Natural Hazard Event History (2014 to present)				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
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	Morning low temperatures were mainly in the single numbers above zero. In addition, gusty northwest winds continued into the morning and lowest hourly wind chill factors reached around 9° below zero throughout the state. Low temperatures included 6°F in Somerville. Lowest hourly wind chill factors included -9°F in Somerville.
Flood	N/A	N/A	January 18, 2015	Heavy rain caused poor drainage flooding as well as flooding along waterways in Somerset County. Event precipitation totals included 1.88 inches in Somerville.
Strong Wind	N/A	N/A	February 2, 2015	No local damage reported
Cold/Wind Chill	N/A	N/A	February 13, 2015	Northwest winds that persisted into the morning, combined with an arctic air mass to produce wind chill factors of around -10°F and low temperatures in the positive single digits. The lowest hourly wind chill factors included -11°F in Somerville. Actual morning low temperatures included 6°F in Somerville. Many counties and municipalities declared code blues.
Strong Wind	N/A	N/A	February 15, 2015	Strong wind gusts occurred across the state, ranging from about 45 to 60 mph. In Somerville, a gust of 47 mph was recorded. Downed trees and wires were common in locations across the state, as road crews were clearing snow from a storm the day before. Blowing snow reduced visibility.
Cold/Wind Chill	N/A	N/A	February 15, 2015	Strong high winds and an approaching arctic air mass produced wind chill factors 10-15°F below zero. Actual morning low temperatures were around 10°F. Many municipalities declared code blues. Actual low temperatures included 10°F in Somerville.

Natural Hazard Event History (2014 to present)				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Cold/Wind Chill	N/A	N/A	February 16, 2015	Winds were not as strong on the 16th, however air temperatures were lower. Wind chill factors were as low as 20°F below 0 in most of the state. Actual low temperatures were around zero. Code Blues remained in effect. Lowest hourly wind chill factors included -18°F in Somerville. Actual low temperatures included 1°F in Somerville.
Cold/Wind Chill	N/A	N/A	February 20, 2015	The arrival of another arctic air mass brought some of the lowest wind chills as well as the lowest temperatures of the winter season on the 20th and 21st. Wind chill factors on the 20th were as low as -20°F during the morning. Actual low temperatures were around zero. Lowest hourly wind chill factors included -15°F in Somerville with lowest actual temperatures including -4°F in Somerville.
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	High temperatures in most areas reached into the lower to mid-90s on the 19th and 20th. The combination of heat and humidity brought afternoon heat index values as high as 100-105°F, some of the highest indexes of the summer. Highest temperatures included 95°F in Somerville
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

Natural Hazard Event History (2014 to present)				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
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	All but four of NJ's 21 counties were declared during this event. Over \$73 million of FEMA Public Assistance grant dollars were obligated statewide. Record snowfall occurred across most of the state. In Somerville, 27.4 inches of snow were 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 (2014 to present)				
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 (2014 to present)				
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

Boro. = Borough

Twp. = Township

9.19.4 NATURAL HAZARD RISK/VULNERABILITY RISK RANKING

The table below summarizes the vulnerability risk rankings of potential hazards of Somerville 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: \$33,000,000 0.2% Annual Chance: \$56,900,000	Frequent	18	High ^g
Severe Storm	100-Year MRP: \$943,051 500-Year MRP: \$4,405,093 Annualized Loss: \$45,026	Frequent	30	Medium
Severe Winter Storm	1% of GBS: \$17,660,990 5% of GBS: \$88,304,950	Frequent	27	Medium
Earthquake	500-Year MRP: \$3,526,109 2,500-Year MRP: \$51,544,996 Annualized Loss: \$54,625	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.
- This rank was adjusted based on qualitative input from county/jurisdictional representatives due to hazard event history and other municipality-specific considerations.

9.19.5 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.

9.19.5.1 Legal and Regulatory Capability

The table below summarizes the regulatory tools that are available to Somerville Borough. The Borough reviewed its responses from the 2014 HMP and has updated information below as applicable for this plan update.

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	Community Development	International Building Code – New Jersey Edition, NJAC 5:24-3.14; 2/20/07
2) Zoning Ordinance	Y	Community Development	Ordinance No. 2152; 12/29/03
3) Subdivision Ordinance	Y	Community Development	Ordinance No. 2152; 12/29/03
4) NFIP Flood Damage Prevention Ordinance	Y	Community Development	Flood Damage Prevention Ordinance 2239; 8/20/07
4a) Cumulative Substantial Damages	-	-	-
4b) Freeboard	-	-	-
5) Growth Management	Y	Community Development	Ordinance No. 2152; 12/29/03
6) Floodplain Management / Basin Plan	Y	Community Development	Storm water Control Ordinance 2214; 3/20/06
7) Stormwater Management Plan/Ordinance	Y	Community Development	Storm water Control Ordinance 2214; 3/20/06
8) Comprehensive Plan / Master Plan/ General Plan	Y	Community Development	Master Plan; 2012 Refers to emergency services plan annex element of the master plan and relocation of flood prone properties
9) Capital Improvements Plan	-	-	-
10) Site Plan Review Requirements	Y	Community Development	Ordinance 2152; 12/29/03
11) Open Space Plan	-	-	-
12) Stream Corridor Management 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)
13) Watershed Management or Protection Plan	-	-	-
14) Economic Development Plan	-	-	-
15) Comprehensive Emergency Management Plan	-	-	-
16) Emergency Response Plan	Y	OEM	1/18/2011
17) Post-Disaster Recovery Plan	-	-	-
18) Post-Disaster Recovery Ordinance	-	-	-
19) Real Estate Disclosure Requirement	-	-	-
20) Other (Special Purpose Ordinances such as critical or sensitive areas)	-	-	-

9.19.5.2 Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Somerville Borough. The Borough reviewed its responses from the 2014 HMP and has updated information below as applicable for this plan update.

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	Community Development/ Consultant
2) Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	N	County Engineers Office and/ private consultant
3) Planners or engineers with an understanding of natural hazards	Y	Community Development/ Consultant
4) NFIP Floodplain Administrator	Y	Community Development, CFM, Construction Official
5) Surveyor(s)	Y	In house surveyor in engineering dept.
6) Personnel skilled or trained in GIS applications	N	-
7) Scientist familiar with natural hazards	N	-
8) Emergency Manager	Y	OEM
9) Grant Writer(s)	Y	Administrator
10) Staff with expertise or training in benefit/cost analysis	N	-

9.19.5.3 Fiscal Capability

The table below summarizes financial resources available to Somerville Borough. The Borough reviewed its responses from the 2014 HMP and has updated information below as applicable for this plan update.

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	N
4) User fees for water, sewer, gas or electric service	N
5) Impact fees for homebuyers or developers of new development/homes	N
6) Incur debt through general obligation bonds	N
7) Incur debt through special tax bonds	Y
8) Incur debt through private activity bonds	N
9) Withhold public expenditures in hazard-prone areas	N
10) State mitigation grant programs	N
11) Other	-

9.19.5.4 Overall Capabilities

The Borough of Somerville'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	Moderate
How these capabilities can be expand and/or improved to reduce risk				
More financial support provided to the municipality from the county, state or federal levels. This support should be in the form of grants that will allow municipalities to hire EM staff to carry out the myriad of hazard mitigation tasks on an ongoing basis.				

9.19.5.5 Community Classifications

The table below summarizes classifications for community program available to Somerville Borough. The Borough reviewed its responses from the 2014 HMP and has updated information below as applicable for this plan update.

Community Classifications		
Program	Classification	Date Classified
Community Rating System (CRS)	NP	-
Building Code Effectiveness Grading Schedule (BCEGS)	3-Commercial; 3-Residential	2/2013
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 Somerville'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/>

9.19.6 MITIGATION STRATEGY

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

9.19.6.1 Past Mitigation Actions/Status

The status of all 2014 HMP initiatives was evaluated by the Borough of Somerville 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	
SV1 (SV3)	Acquire the Somerville Fire Department, Engine Company #1 property and relocate it out of a flood prone area.	Medium	Flood	Administration; Somerville Fire Department; Somerville OEM; Somerville Engineering; Code Enforcement		X			The Borough received a grant to perform this work. The Governing Body decided not to move forward with this action and declined to implement the action. The property is no longer insured for flood.	X		New Emergency Services Complex is anticipated within the next 3-4 years. SV1 (SV3) will be carried forward and combined with SV2.
SV2	Acquire the Somerville Rescue Squad property and relocate it out of a flood prone area.	Medium	Flood	Administration; Somerville Rescue Squad; Somerville OEM; Somerville Engineering; Code Enforcement				X	Lack of available land and financing to start project.	X		New Emergency Services Complex is anticipated within the next 3-4 years. SV2 will be carried forward and combined with SV1 (SV3).

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	
SV3	Acquire residential properties that have been identified as repetitive loss properties, with a priority of the most severe including Park Avenue, East High Street, and Bridge Street areas.	Medium	Flood	Administration; Somerville Engineering; Code Enforcement				X	The property on High Street had been sold privately and is currently occupied. The Park Avenue properties have been sold privately and rehabilitated. Other properties are occupied.	X		Purchase, relocate, elevate, or floodproof structures located in hazard-prone areas to protect structures from future damage, with repetitive loss properties as a 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.
SV4 (SV4)	Acquire the Department of Public Works property and relocate it out of a flood prone area.	Medium	Flood	Administration; Somerville DPW; Somerville Engineering; Code Enforcement				X	The Borough has decided to focus on relocating the Fire Company from the flood area before relocating Public Works.	X		The Borough is in the process of acquiring a property on Gaston Avenue to use to relocate the Fire House. Once that is constructed, the Borough will have to re-examine other flood prone properties.

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	
SV5	Mitigate impacts from flooding by increasing open space along Peter's Brook and through the redesign and redevelopment of flood-prone areas, in agreement with the Somerville Master Plan Reexamination Report and Amendments.	High	Flood	Planning Board			X		The development in this area is dependent upon private sector developers.	X		Will discuss with Borough Administration.
SV6	Elevate PSE&G substation above flood level as it is flood prone and was inundated during hurricane Irene causing 50% of community power including the hospital.	Medium	Flood	PSE&G	X				Completed		X	Completed
SV7 (SV5)	Test and evaluate continuation of operations, communications of government.	Medium	All	Engineering Borough of Somerville		X			Ongoing	X		Ongoing
SV8 (SV8)	Continue to support the implementation, monitoring, maintenance, and updating of this Plan/ Participate in multi-jurisdictional update of Somerset County All Hazards Mitigation Plan, as defined in Section 7.0.	High	All	Township Emergency Management with support from Planning Partners, County Planning, NJOEM, FEMA			X		Ongoing	X		Ongoing

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	
SV9 (SV9)	Strive to maintain compliance with and good-standing in the National Flood Insurance program.	Medium	Flood	Floodplain Manager			X		Employing a Certified Floodplain Manager, and enforcing current ordinances for flood prone areas.	X		Ongoing

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	
SV10	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		Limited community and public education due to time limitations.	X		Will continue to increase community outreach and provide public education. . Currently pushing out information via the Borough's E-Connect newsletter, Somerville OEM Facebook, Ville TV and Borough Website.

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	
SV11	Develop programs/procedures to capture and archive loss data from events. Examples include:	Medium	All Hazards	Municipality with support from County, NJOEM and FEMA				X	Some preliminary discussion has been held. Lack of available resources and finances have prevented this from moving forward.	X		Will continue to discuss and review with both Borough Administration and the Emergency Management Committee.
SV12	Support ongoing updates of Comprehensive Emergency Management Plans	High	All Hazards	Municipality with support from County Emergency Management			X		Updates are made and indicated.	X		Will revise on an ongoing basis as indicated.
SV13	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		Mutual aid plans for police, fire and EMS in place and are updated on an annual basis or as needed.	X		Mutual aid plans for police, fire and EMS in place and are updated on an annual basis or as needed.

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	
SV14	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	Some preliminary discussion has been held. Lack of available resources and finances have prevented this from moving forward.	X		Will continue to discuss and review with both Borough Administration and the Emergency Management Committee.
SV15	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	Municipality with support from County, NJOEM and FEMA			X		Somerville has staffing within its Community Development Department to provide local damage assessment. All staff attends ongoing continuing education and maintains appropriate certifications.	X		Ongoing
SV16	Obtain and archive elevation certificates.	High	Flood, Severe Storm	NFIP Floodplain Administrator			X		This is on an as needed basis when development is proposed.	X		Ongoing

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	
SV17	Promote the participation of Floodplain Administrators within the planning process and other activities.	Medium	Flood	Municipality with support from County, NJOEM and FEMA			X		The planning process is dynamic and ongoing.	X		The planning process is dynamic and ongoing.
SV18	Enhance the County/community resilience to severe storms (incl. 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	Limited time to investigate this program.	X		Will discuss with Borough Administration and develop a plan moving forward.
SV19	Adopt regulations for undergrounding utilities in new developments.	High	Severe Storm	Municipal Council				X	No reason provided.		X	No reason provided.
SV20	Implement permit fee waivers for installation of backup power for private property.	High	Severe Storm	Municipal Council				X	Decided not to pursue.		X	Decided not to pursue.
SV21	Provide public education and outreach on proper installation and/or use of backup power.	High	Severe Storm	Municipal Clerk				X	Decided not to pursue.		X	Decided not to pursue.

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	
SV22	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		This is an ongoing process.	X		Ongoing

9.19.6.2 Hazard Vulnerabilities Identified

The Borough indicates repetitive flooding occurs along various water courses throughout the jurisdiction.

It is estimated that in Somerville Borough, 47 residents live within the 1% annual chance flood area (NFIP Special Flood Hazard Area). \$256,865,000 (8.2%) of the municipality's general building stock replacement cost value (structure and contents) is located within the 1% annual chance flood area.

There are 97 NFIP policies in the community and there are 63 policies located within the 1% annual chance flood area. FEMA has identified 25 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, \$33,000,000 (1.05%) of the municipality's general building stock replacement cost value (structure and contents) will be damaged, 683 households may be displaced, 479 people may seek short-term sheltering, and an estimated 1,632 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)
Somerville (B)	97	164	\$8,816,968	25	-	63	5	29

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

HAZUS-MH critical facility damage estimates for Somerville 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⁾
PSE&G Substation	Somerville (B)	Electric Substation	x	x	-	-	-	-	-	-
Engine Company No.1	Somerville (B)	Fire	x	x	10.0	20.0	480.0	13.5	62.5	630
Somerville First Aid and Rescue Squad	Somerville (B)	Fire	x	x	10.8	33.5	480.0	15.9	75.0	630
DPW	Somerville (B)	DPW	x	x	37.1	47.1	NP	48.9	63.4	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 5.0 of this plan for additional vulnerability information relevant to this jurisdiction.

9.19.7 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 Somerville 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
SV1 [SV1 (SV3) & SV2 (SV2)]	Emergency Services Complex to include PD, Fire, EMS and OEM	Consolidate emergency services agencies into one location to solve aging infrastructure and flooding issues.	Carried Forward	Existing	Flood	4,6,7,8, 11	Administration; Somerville Fire Department; Somerville OEM; Somerville Engineering; Code Enforcement	High	High	FEMA PDM; Capital Improvement Budget	Short	Medium	Action/Project, PP	Initiated but not completed. New Emergency Services Complex is anticipated within the next 3-4 years.
SV2 [SV4 (SV4)]	DPW Complex Relocation	Acquire the Department of Public Works property and relocate it out of a flood prone area.	Carried Forward	Existing	Flood	4,6,7,8	Administration; Somerville DPW;; Somerville Engineering; Code Enforcement	High	High	FEMA PDM; Capital Improvement Budget	Short	Medium	Action/Project, PP	Not initiated. The Borough has decided to focus on relocating the Fire Company from the flood area before relocating Public Works. New Emergency Services Complex is anticipated within the next 3-4 years. The Borough is in the process of acquiring a property on Gaston Avenue to use to relocate the Fire House. Once that is constructed, the Borough will be able to re-examine other flood prone properties.
SV3 [(SV5)]	Peter's Brook Open Space Project	Mitigate impacts from flooding by increasing open space along Peter's Brook and through the redesign and redevelopment of flood-prone areas, in agreement with the Somerville Master Plan Reexamination Report and Amendments.	Carried Forward	Both	Flood	1,4,8,9, 10	Planning Board	Medium	Low (Transfer of Development Rights)	Private Developer Money	Ongoing-Happens as development occurs	High	Action/Project, NR	Initiated but not completed. The development in this area is dependent upon private sector developers.
SV4 [SV7 (SV5)]	Government Continuity of Operations	Test and evaluate continuation of operations, communications of government.	Carried Forward	Existing	All	5,11,13	Engineering Borough of Somerville	Low	Low	HMGP, FMA, PDM & Borough Funds	Short	Medium	Capability, PR ES	Initiated but not completed; work is ongoing.

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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
SV5 [(SV8)]	Mitigation Planning	Continue to support the implementation, monitoring, maintenance, and updating of this Plan/ Participate in multi-jurisdictional update of Somerset County All Hazards Mitigation Plan, as defined in Section 7.0.	Carried Forward	Existing	All	All	Township Emergency Management with support from Planning Partners, County Planning, NJOEM, FEMA	High	Medium	Operating Budget, FEMA planning grants	Long	High	Capability, PR	Ongoing type of activity.
SV6 [SV9 (SV9)]	National Flood Insurance Program	Strive to maintain compliance with and good-standing in the National Flood Insurance program.	Carried Forward	Both	Flood	4	Township Engineer	Medium	Low	Operating Budget	Short	Medium	Capability, PR	Ongoing type of activity. Employing a Certified Floodplain Manager, and enforcing current ordinances for flood prone areas.
SV7 [(SV10)]	Public Awareness	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	Action/ Project, PE	Ongoing type of activity. Limited community and public education due to time limitations. Currently pushing out information via the Borough's E-Connect newsletter, Somerville OEM Facebook, Ville TV and Borough Website.
SV8 [(SV11)]	Loss Archive Project	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).	Carried Forward	N/A	All Hazards	1	Municipality with support from County, NJOEM and FEMA	Medium	Medium	Municipal Budget	Short	Medium	Capability, PR	Some preliminary discussion has been held. Lack of available resources and finances have prevented this from moving forward.

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
SV9 [(SV12)]	Emergency Management Planning	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. Updates are made and indicated.
SV10 [(SV13)]	Mutual Aid Agreements	Create/Enhance/Maintain Mutual Aid agreements with neighboring communities for continuity of operations.	Carried Forward	N/A	All Hazards	3,7	Municipality with support from County, NJOEM, FEMA and surrounding communities	Medium	Low	Municipal Budget	Short Term	High	Capability, PR, ES	Ongoing type of activity. Mutual aid plans for police, fire and EMS in place and are updated on an annual basis or as needed.
SV11 [(SV14)]	Resource Archiving	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.	Carried Forward	N/A	All Hazards	3	Municipality with support from County, NJOEM and FEMA	Medium	Medium	Municipal Budget	Short Term	Medium	Capability, PR, ES	Some preliminary discussion has been held. Lack of available resources and finances have prevented this from moving forward.
SV12 [(SV15)]	Damage Assessment Resourcing	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).	Carried Forward	N/A	All Hazards	3	Municipality with support from County, NJOEM and FEMA	Medium	Medium	Municipal Budget, FEMA HMA and HLS grant programs	Short-Long Term DOF	Medium	Capability, PR	Ongoing type of activity. Somerville has staffing within its Community Development Department to provide local damage assessment. All staff attends ongoing continuing education and maintains appropriate certifications.
SV13 [(SV16)]	New Development Archiving	Obtain and archive elevation certificates.	Carried Forward	N/A	Flood, Severe Storm	1,3	NFIP Floodplain Administrator	Medium	Low	Municipal Budget	On-going	High	Capability, PR	Ongoing type of activity. This is on an as needed basis when development is proposed.
SV14 [(SV17)]	Floodplain Planning	Promote the participation of Floodplain Administrators 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	The planning process is dynamic and ongoing.
SV15 [(SV18)]	Community Resilience	Enhance the County/community resilience to severe storms (incl. severe winter storms) by joining the NOAA "Storm Ready" program and supporting communities in joining the program.	Carried Forward	N/A	Severe Storm	12	Municipality with support from County, NJOEM and FEMA	Medium	Low	Municipal Budget	Short Term DOF	Medium	Capability, PE	Not initiated. Limited time to investigate this program.
SV16 [(SV22)]	Code/ Policy Enforcement	Implement, review, and enforce municipal policies and programs to prevent trees from threatening lives and impacting power availability/interruption.	Carried Forward	N/A	Severe Storm	2,3,5,8	Municipal Code Enforcement	Medium	Low	Municipal Budget	Short	High	Capability, PR	Ongoing type of activity/process.

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
SV17 [(SV3)]	Repetitive Flood Loss Property Abatement	Purchase, relocate, elevate, or floodproof structures located in hazard-prone areas to protect structures from future damage, with repetitive loss properties as a 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. Acquire residential properties that have been identified as repetitive loss properties, with a priority of the most severe including Park Avenue, East High Street, and Bridge Street areas.	Carried Forward	Existing	Flood	4	Administration; Somerville Engineering; Code Enforcement	High	High	Municipal Budget, HMA programs with local or county match	Short	Medium	Action/Project, PP	The property on High Street has been sold privately and is currently occupied. The Park Avenue properties have been sold privately and rehabilitated. Other properties are occupied.

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:

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.



- 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.

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.

9.19.8 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 and 2009 plans, respectively, 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)
SV1 [SV1 (SV3) & SV2 (SV2)]	5	H	H	Y	Y	N	M
SV2 [SV4 (SV4)]	4	H	H	Y	Y	N	M
SV3 [(SV5)]	5	M	L	Y	N	Y	H
SV4 [SV7 (SV5)]	3	L	L	Y	Y	Y	M
SV5 [SV8 (SV8)]	13	H	M	Y	N	Y	H
SV6 [SV9 (SV9)]	1	M	L	Y	N	Y	M
SV7 [(SV10)]	2	M	M	Y	Y	Y	H
SV8 [(SV11)]	1	M	M	Y	N	Y	M
SV9 [(SV12)]	2	L	L	Y	N	Y	H
SV10 [(SV13)]	2	M	L	Y	N	Y	H
SV11 [(SV14)]	1	M	M	Y	N	Y	M
SV12 [(SV15)]	1	M	M	Y	N	Y	M
SV13 [(SV16)]	2	H	L-M	Y	N	Y	H
SV14 [(SV17)]	13	M	M	Y	N	Y	M
SV15 [(SV18)]	1	M	L	Y	N	Y	M
SV16 [(SV22)]	4	M	L	Y	N	Y	H
SV17 [(SV3)]	1	H	H	Y	Y	N	M

Notes:

H = High

L = Low

M = Medium

N = No

Y = Yes

9.19.8.1 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

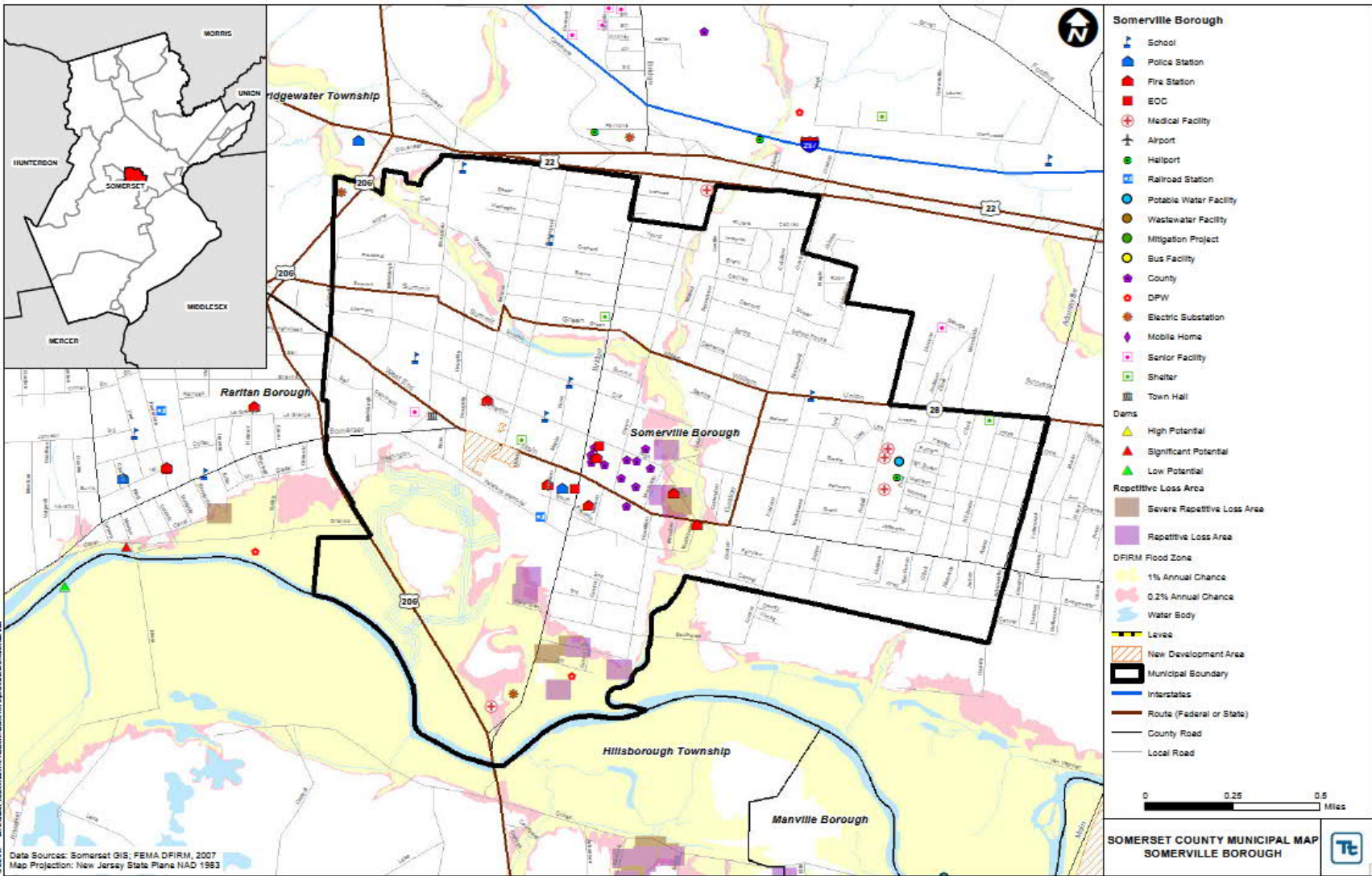
Was prioritization of initiatives based on parameters other than those stated above? Not applicable

9.19.9 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

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

9.19.10 HAZARD AREA EXTENT AND LOCATION

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



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

It is the intention of Somerville 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
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	-
Human Resource Manual Employee job descriptions may contain hazard mitigation actions.	X	-	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	-	X	-
Comprehensive Land Use Plan When applicable, the municipality will incorporate hazard mitigation actions in the development and extent of the regulations.	X	-	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	-	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	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	-	X
Municipal Budget Adopted annually, the municipality will look at mitigation actions when allocating funding.	-	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	-

9.19.12 ADDITIONAL COMMENTS

There are no additional comments at this time.

9.19.12 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?
8/20/2007	1/6/1983	Construction Official			<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
Provide an explanation of NFIP administration services (i.e., permit review, GIS, education or outreach, inspections, engineering capability, etc.):							
Permit review and inspection							
Describe barriers to running an effective NFIP program in the community (if applicable):							
Funding and staffing							
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?
N/A	<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 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:								
Engineering review required, floodplain manager review required, construction official and subcode official review required to demonstrate compliance with applicable regulations and ordinances for constructing in a floodplain.								
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 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	<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 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:								
Available upon request or complaint driven.								
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			