



SOMERSET COUNTY

# HAZARD MITIGATION PLAN

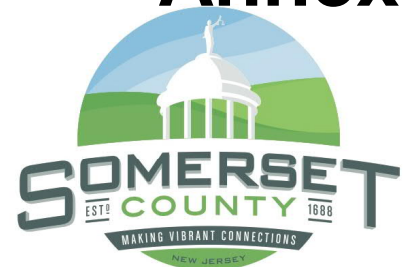
## SOMERSET COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

FINAL PLAN UPDATE  
JULY 2019

[www.co.somerset.nj.us/hmp](http://www.co.somerset.nj.us/hmp)

### Section 9.20: Borough of South Bound Brook Annex

*Prepared by the Somerset County  
Mitigation Planning Committee*



## 9.20 Borough of South Bound Brook

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

### 9.20.1 HAZARD MITIGATION PLAN POINTS OF CONTACT

Hazard Mitigation Plan Points of Contact					
Primary Point of Contact			Alternate Point of Contact		
Name: Mike Allenovitch, Emergency Manager Address: 12 Main Street, South Bound Brook, NJ, 08880 Phone Number: 732-921-0058 Fax Number: E-mail Address: <a href="mailto:mallenovitch@southboundbrook.com">mallenovitch@southboundbrook.com</a>			Name: Donald E. Kazar, Borough Administrator Address: 12 Main Street, South Bound Brook, NJ, 08880 Phone Number: 732-356-0258 ext. 120 Fax Number: E-mail Address: <a href="mailto:dkazar@southboundbrook.com">dkazar@southboundbrook.com</a>		
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	N/A				
Emergency Manager	Mike Allenovitch	<a href="mailto:Mallenovitch@southboundbrook.com">Mallenovitch@southboundbrook.com</a>	732-921-0058		Yes
Floodplain Manager/ Floodplain Administrator	NA				
Public Works Director / City Engineer	Ken Pine	<a href="mailto:kpine@southboundbrook.com">kpine@southboundbrook.com</a>	848-565-6054		Yes
Building Code Official	Bill Boyle	<a href="mailto:Bboyle@southboundbrook.com">Bboyle@southboundbrook.com</a>	732-356-0258		Yes
Fiscal/Budget Officer	Nancy Costa	<a href="mailto:Ncosta@southboundbrook.com">Ncosta@southboundbrook.com</a>	732-356-0258		Yes
Manager/Administrator	Donald Kazar	<a href="mailto:Dkazar@southboundbrook.com">Dkazar@southboundbrook.com</a>	73.2-356-0258		Yes
Elected Officials					
Other 1:	Chris Shoffner	<a href="mailto:Cshoffner@southboundbrook.com">Cshoffner@southboundbrook.com</a>	732-356-0258		Yes

## 9.20.2 PROFILE

### 9.20.2.1 Population

The population of South Bound Brook Borough is estimated to be 4,563, based on information gathered during the 2010 U.S. Census. Census population estimates of July 2017 indicated a total population of 4,657.

### 9.20.2.2 Location

South Bound Brook is a suburban community of 0.9 square miles in size. The Borough is located within Somerset County and is bordered by the following Boroughs: Bound Brook to the north, Franklin Township (Somerset) to the south, and Middlesex Borough/Piscataway (Middlesex County) to the east. The Raritan River forms the boundaries on all sides except for the Franklin portion. The Raritan River and the Delaware & Raritan Canal system forms a boundary on three sides sitting the Borough on a peninsula of land. The approximate residential population for the Borough is 5,000 with workday population increase of about 200 with no seasonal population increase or decrease. The only primary transportation route in proximity the Borough is Interstate Route 287. A secondary transportation route within the Borough is County Route 527 and County Route 623 which are the Borough's main thoroughfares.

### 9.20.2.3 Brief History

Approximately 1,280 acres was purchased in 1681 from the Lenape Indians for Lady Elizabeth Carteret. This land was later “subdivided” into many communities as experienced in present day South Bound Brook. In 1761 the Queens Bridge connecting Bound Brook and South Bound Brook was constructed. One of the oldest documented houses in South Bound Brook is 17 Von Steuben Lane, circa 1740 and is where General Baron Von Steuben entertained General and Mrs. Washington. South Bound Brook was incorporated in 1907.

### 9.20.2.4 Governing Body Format

South Bound Brook is governed by the borough form of government which consists of a mayor and six council members. Departments consist of Administration, Police, Public Works, Fire, Recreation and other State mandated departments. There are numerous boards and commissions to advise the mayor and council on various public policy issues.

### 9.20.2.5 Growth/Development Trends

South Bound Brook noted the following major residential or commercial development, or major infrastructure development planned for the next 5 years in the municipality (updated in 2018).

New Development/Potential Development in Municipality						
Property Name	Type (Residential or Commercial)	No. of Structures	Address	Block and Lot	Known Hazard Zone	Description /Status
Landmark	Residential	22	Johnson St	74/1	None	Townhouses
Borough Hall Property	Residential Commercial	Unknown	Main	56/3	Not Known	

Jurisdictional regulations/codes/ordinances in place in your community that will work to protect new development from the effects of natural hazards including but not limited to the Borough’s Flood Damage Prevention Ordinance.

**9.20.3 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	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
Flood	N/A	N/A	July 16, 2014	No local damage reported

## SECTION 9.20: BOROUGH OF SOUTH BOUND BROOK

Natural Hazard Event History (2014 to present)				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
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
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

## SECTION 9.20: BOROUGH OF SOUTH BOUND BROOK

Natural Hazard Event History (2014 to present)				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
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	Showers and thunderstorms became severe in spots and produced locally heavy rains. Several cars were stranded in roadways in South Bound Brook and Piscataway.
Heavy Rain	N/A	N/A	July 30, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported

## SECTION 9.20: BOROUGH OF SOUTH BOUND BROOK

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
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
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

Natural Hazard Event History (2014 to present)				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
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



**9.20.4 NATURAL HAZARD RISK/VULNERABILITY RISK RANKING**

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

Natural Hazard Risk/Vulnerability Risk Ranking				
Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard <sup>a, c</sup>	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking <sup>b</sup>
Flood	1% Annual Chance: \$7,700,000 0.2% Annual Chance: \$16,100,000	Frequent	24	Medium
Severe Storm	100-Year MRP: \$394,600 500-Year MRP: \$2,467,885 Annualized Loss: \$22,819	Frequent	39	High
Severe Winter Storm	1% of GBS: \$5,566,690 5% of GBS: \$27,833,450	Frequent	27	Medium
Earthquake	500-Year MRP: \$1,002,653 2,500-Year MRP: \$14,775,939 Annualized Loss: \$15,337	Occasional	12	Low
Drought	Not available	Occasional	12	Low
Extreme Temperature	Not available	Frequent	27	Medium
Wildfire	Not available	Occasional	12	Low

## Note

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

### 9.20.5 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.

#### 9.20.5.1 Legal and Regulatory Capability

The table below summarizes the regulatory tools that are available to South Bound Brook 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	William Boyle, Building Construction Officer/Sub-Code Official/Fire Sub-Code	Uniform Construction Code of NJ Chapter 20, 02-08-1977 International Building Code – New Jersey Edition, NJAC 5:24-3.14 Adopted 2/20/07
2) Zoning Ordinance	Y	Planning Board	Chapter 34, 03-12-1974
3) Subdivision Ordinance	Y	Planning Board Secretary, Carol Rice	Chapter 21, 12-14-1976
4) NFIP Flood Damage Prevention Ordinance	Y	Donald E. Kazar, Administrator; Rob Russo, CME Engineer, Contracted Services	Flood Damage Prevention Ordinance # 009-2007 Adopted 10-09-2007
4a) Cumulative Substantial Damages	-	-	-
4b) Freeboard	-	-	-
5) Growth Management	Y	Planning Board	See Zoning Ordinance
6) Floodplain Management / Basin Plan	Y	Donald E. Kazar, Administrator; Rob Russo, CME Engineer, Contracted Services	See #4 Above

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)
7) Stormwater Management Plan/Ordinance	Y	Rob Russo, CME Engineer, Contracted Services	Ordinance 003-2007 Adopted 06-14-2007
8) Comprehensive Plan / Master Plan/ General Plan	Y	Planning Board	Master Plan Adopted 05-2005
9) Capital Improvements Plan	Y	Kenneth Pine, Superintendent of Public Works	Adopted with Annual Budget
10) Site Plan Review Requirements	Y	Rob Russo, CME Engineer, Contracted Services	Chapter 21, 12-14-1976
11) Open Space Plan	N-	-	-
12) Stream Corridor Management Plan	N-	-	-
13) Watershed Management or Protection Plan	N-	-	-
14) Economic Development Plan	N	-	-
15) Comprehensive Emergency Management Plan	N-	-	-
16) Emergency Response Plan	Y	Mike Allenovitch, Director OEM	Emergency Operations Plan of 2006, Adopted 5/23/2006
17) Post-Disaster Recovery Plan	Y	Mike Allenovitch Director OEM	-
18) Post-Disaster Recovery Ordinance	N	-	-
19) Real Estate Disclosure Requirement	Y	William Boyle, Building Construction Officer/Sub-Code Official/Fire Sub-Code	State Law
20) Other (Special Purpose Ordinances such as critical or sensitive areas)	-	-	-

### 9.20.5.2 Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to South Bound Brook. 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	Rob Russo, CME Engineer, Contracted Services
2) Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Rob Russo, CME Engineer, Contracted Services
3) Planners or engineers with an understanding of natural hazards	Y	Rob Russo, CME Engineer, Contracted Services
4) NFIP Floodplain Administrator	Y	Donald E. Kazar, Borough Clerk and Administrator
5) Surveyor(s)	N	Contract
6) Personnel skilled or trained in GIS applications	N	Contract
7) Scientist familiar with natural hazards	N	Contract
8) Emergency Manager	Y	Mike Allenovitch, Director OEM
9) Grant Writer(s)	Y	Donald E. Kazar, Borough Clerk / Administrator
10) Staff with expertise or training in benefit/cost analysis	Y	Donald E. Kazar, Borough Clerk / Administrator

### 9.20.5.3 Fiscal Capability

The table below summarizes financial resources available to South Bound Brook 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)	Y
2) Capital Improvements Project Funding	Y
3) Authority to levy taxes for specific purposes	Y
4) User fees for water, sewer, gas or electric service	Y
5) Impact fees for homebuyers or developers of new development/homes	Y
6) Incur debt through general obligation bonds	Y
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	Y
11) Other	-

### 9.20.5.4 Overall Capabilities

The Borough of South Bound Brook'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	Moderate	Low	Low
<b>How these capabilities can be expanded and/or improved to reduce risk</b>				
Grants or Shared services with other agencies to provide the resources for developing the programs.				

### 9.20.5.5 Community Classifications

The table below summarizes classifications for community program available to South Bound Brook. 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)	NP	-
Building Code Effectiveness Grading Schedule (BCEGS)	N/A	-
Public Protection	N/A	-
Storm Ready	N/A	-
Firewise	N/A	-

Notes:

- = Unavailable

N/A = Not applicable

NP = Not participating

\* CRS Ranking as of October 2017

The classifications listed above relate to South Bound Brook'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/>

## 9.20.6 MITIGATION STRATEGY

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

### 9.20.6.1 Past Mitigation Actions/Status

The status of all 2014 HMP initiatives was evaluated by the Borough of South Bound Brook 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	
SB1 (SB1)	Enhance emergency response radio communications through the installation of a VHF repeater system utilizing existing equipment and install UHF repeater compatible with county system.	High	All	OEM			x		Lack of Staffing; Lack of Funding	x		No Change
SB2 (SB2)	Relocate DPW out Flood Hazard Zone as this critical facility is flood prone. Equipment had to be relocated out of the facility to avoid damage during Hurricane Irene. Structural damage was also sustained during Irene.	Medium	All	SBB			x		Lack of Staffing; Lack of Funding	x		No Change
SB3 (SB4)	Provide backup power at Borough Hall which houses Police & OEM.	High	All	SBB			x		Lack of Staffing; Lack of Funding	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	
SB4 (SB5)	Continue to develop, enhance and implement existing emergency response.	High	All	OEM Police Fire EMS			x		Lack of Staffing; Lack of Funding	x		No Change
SB5 (SB6)	Develop post disaster plan for debris removal, structure repair, utility restoration, human needs.	High	All	OEM			x		Lack of Staffing; Lack of Funding	x		No Change
SB6 (SB7)	Develop annual rescue training program.	Medium	All	OEM Police Fire EMS			x		Lack of Staffing; Lack of Funding	x		No Change
SB8 (SB9)	Continue to support the implementation, monitoring, maintenance, and updating of this Plan (through participating in the 5 year Plan Update), as defined in Section 7.0.	Medium	All	SBB OEM			x		Lack of Staffing; Lack of Funding	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	
SB9	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. Update Borough Facebook page with preparedness information.	High	All Hazards	Municipality with support from Planning Partners, County Planning, NJOEM, FEMA			x		Lack of Staffing; Lack of Funding	x		No Change
SB10	Incorporate ordinances and/or zoning restrictions to control and mitigate future development in hazard areas, specifically as identified in Section 9.19.11.	Medium	All Hazards	Municipality with support from County, NJOEM and FEMA			x		Lack of Staffing; Lack of Funding	x		No Change
SB11	Develop programs/ procedures to capture and archive loss data from events including the location and length of roadway closures; high water marks, amount of municipal and residential damage.	Medium	All Hazards	Municipality with support from County, NJOEM and FEMA			x		Lack of Staffing; Lack of Funding	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	
SB12	Participate in local, county and/or state level projects and programs to develop improved structure and facility inventories and hazard datasets to support enhanced risk assessment efforts. Such programs may include developing a detailed inventory of critical facilities based upon FEMA's Comprehensive Data Management System (CDMS) which could be used for various planning and emergency management purposes including: Support the performance of enhanced risk and vulnerability assessments for hazards of concern. Support state, county and local planning efforts including mitigation (including updates to the State HMP), comprehensive emergency management, debris management, and land use. Improved structural and facility inventories could incorporate flood, wind and seismic-specific parameters (e.g. first floor elevations, roof types, structure types based on FEMA-154 "Rapid Visual Screening of Buildings for Potential Seismic Hazards" methodologies). It is recognized that these programs will need to be initiated and supported at the County and/or State level, and will require training, tools and funding provided at the county, state and/or federal level.	Medium	All Hazards	Hazard Mitigation Plan Coordinator			x		Lack of Staffing; Lack of Funding	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	
SB13	Support ongoing updates of Comprehensive Emergency Management Plans.	High	All Hazards	Municipality with support from County Emergency Management			x		Lack of Staffing; Lack of Funding	x		No Change
SB14	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		Lack of Staffing; Lack of Funding	x		No Change
SB15	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		Lack of Staffing; Lack of Funding	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	
SB16	Purchase, relocate, or elevate structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss property as priority, and particularly focusing on the Barber Blvd. area where homes have experienced up to three feet of water on the first floor. Phase 1: Identify appropriate candidates based on cost-effectiveness. Phase 2: Where determined to be a viable option, work with property owners toward implementation of the determined action based on available funding from FEMA and local match availability.	Medium	Flood, Severe Storm	Municipality (via Municipal Engineer/NFIP Floodplain Administrator ) with support from County Planning, NJOEM, FEMA			x		Lack of Staffing; Lack of Funding	x		No Change
SB17 (SB10)	Maintain compliance with and good-standing in the NFIP including adoption and enforcement of floodplain management requirements (e.g. regulating all new and substantially improved construction in Special Hazard Flood Areas), floodplain identification and mapping, and flood insurance outreach to the community.	High	Flood, Severe Storm	Municipality (via Municipal Engineer/NFIP Floodplain Administrator ) with support from NJOEM, FEMA			x		Lack of Staffing; Lack of Funding	x		No Change
SB18	Obtain and archive elevation certificates.	High	Flood, Severe Storm	NFIP Floodplain Administrator			x		Lack of Staffing; Lack of Funding	x		No Change

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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	
SB19	Promote the participation of Floodplain Administrator within the planning process and other activities.	Medium	Flood	Municipality with support from County, NJOEM and FEMA			x		Lack of Staffing; Lack of Funding	x		No Change
SB20	Enhance 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		Lack of Staffing; Lack of Funding	x		No Change
SB21	Implement permit fee waivers for installation of backup power for private property.	High	Severe Storm	Municipal Council			x		Lack of Staffing; Lack of Funding	x		No Change
SB22	Provide public education and outreach on proper installation and/or use of backup power.	High	Severe Storm	Municipal Clerk			x		Lack of Staffing; Lack of Funding	x		No Change
SB23	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		Lack of Staffing; Lack of Funding	x		No Change

### 9.20.6.2 Hazard Vulnerabilities Identified

It is estimated that in South Bound Brook Borough, 64 residents live within the 1% annual chance flood area (NFIP Special Flood Hazard Area). \$115,777,000 (12.8%) of the municipality's general building stock replacement cost value (structure and contents) is located within the 1% annual chance flood area.

There are 51 NFIP policies in the community and there are 20 policies located within the 1% annual chance flood area. FEMA has identified 7 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, \$7,700,000 (0.85%) of the municipality's general building stock replacement cost value (structure and contents) will be damaged, 332 households may be displaced, 283 people may seek short-term sheltering, and an estimated 437 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)
South Bound Brook (B)	51	66	\$2,252,319	7	-	20	3	28

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

HAZUS-MH critical facility damage estimates for South Bound Brook 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 <sup>(1)</sup>	Percent Structure Damage	Percent Content Damage	Days to 100-Percent <sup>(1)</sup>
South Bound Brook Disaster Control	South Bound Brook (B)	EOC	x	x	-	-	-	7.6	10.3	480
South Bound Brook Boro PD	South Bound Brook (B)	Police	x	x	-	-	-	-	-	-
DPW	South Bound Brook (B)	DPW	x	x	39.4	50.7	NP	47.7	60.6	NP
South Bound Brook Rescue Squad	South Bound Brook (B)	Fire	x	x	-	-	-	-	-	-
South Bound Brook Borough Hall	South Bound Brook (B)	Town Hall	x	x	-	-	-	-	-	-

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
- PD = Police Department

- (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.

## 9.20.7 PROPOSED HAZARD MITIGATION INITIATIVES

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.

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
SB1 [SB1 (SB1)]	Radio Communications	Enhance emergency response radio communications through the installation of a VHF repeater system utilizing existing equipment and install UHF repeater compatible with county system.	Carried Forward	Both	All	6,7	OEM	High	7500 Additional Needed	Borough Bond	Long Term	High	Capability, PR ES	Ongoing. Lack of staffing. Lack of funding.
SB2 [SB2 (SB2)]	Critical Facilities	Relocate DPW out Flood Hazard Zone as this critical facility is flood prone. Equipment had to be relocated out of the facility to avoid damage during Hurricane Irene. Structural damage was also sustained during Irene.	Carried Forward	Both	All	1,6,7,8	S.B.B	Medium	Over 1,000,000	HMGP, FMA, PDM Borough share	Short	Medium	Action/Project, PP	Ongoing. Lack of staffing. Lack of funding.
SB3 [SB3 (SB4)]	Backup Power for Critical Facilities	Provide backup power at Borough Hall which houses Police & OEM	Carried Forward	Existing	All	6,7	S.B.B	High	20,000.00	Borough Bond	Short	Medium	Action/Project, PR ES	Ongoing. Lack of staffing. Lack of funding.
SB4 [SB4 (SB5)]	Emergency Response	Continue to develop, enhance and implement existing emergency response	Carried Forward	Existing	All	6,7	OEM Police Fire EMS	High	Low	Borough	OG	Medium	Capability, PR ES	Ongoing. Lack of staffing. Lack of funding.
SB5 [SB5 (SB6)]	Post-Disaster Plan	Develop post disaster plan for debris removal, structure repair, utility restoration, human needs	Carried Forward	Existing	All	8,9	OEM	Medium	Low	Borough	OG	Medium	Capability, PR	Ongoing. Lack of staffing. Lack of funding.
SB6 [SB6 (SB7)]	Training Programs	Develop annual rescue training program	Carried Forward	Both	All	6,7	OEM Police Fire EMS	Medium	Low	Borough	Short	Medium	Capability, ES	Ongoing. Lack of staffing. Lack of funding.
SB7 [SB7 (SB8)]	CRS	Consider participation in CRS	Carried Forward	Both	Flood	12	SBB	Medium	2,500/year	Borough/Public	OG	Medium	Action/Project, PR	Ongoing. Lack of staffing. Lack of funding.
SB8 [SB8 (SB9)]	Plan Update	Continue to support the implementation, monitoring, maintenance, and updating of this Plan (through participating in the 5 year Plan Update), as defined in Section 7.0	Carried Forward	Existing	All	All	SBB OEM	Medium	Medium	Operating Budget	OG	Medium	Capability, PR	Ongoing. Lack of staffing. Lack of funding.



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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
SB9 [(SB9)]	Public Outreach and Education	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. Update Borough Facebook page with preparedness information.	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	Capability, PE	Ongoing. Lack of staffing. Lack of funding.
SB10 [(SB10)]	Zoning Restrictions	Incorporate ordinances and/or zoning restrictions to control and mitigate future development in hazard areas, specifically as identified in Section 9.19.11.	Carried Forward	N/A	All Hazards	1,6,9,10	Municipality with support from County, NJOEM and FEMA	Medium	Medium	Municipal Budget	Short	Medium	Capability, PR	Ongoing. Lack of staffing. Lack of funding.
SB11 [(SB11)]	Archiving Loss Data	Develop programs/ procedures to capture and archive loss data from events including the location and length of roadway closures; high water marks, amount of municipal and residential damage.	Carried Forward	N/A	All Hazards	1	Municipality with support from County, NJOEM and FEMA	Medium	Medium	Municipal Budget	Short	Medium	Capability, PR	Ongoing. Lack of staffing. Lack of funding.

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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
SB12 [(SB12)]	Risk Assessment	Participate in local, county and/or state level projects and programs to develop improved structure and facility inventories and hazard datasets to support enhanced risk assessment efforts. Such programs may include developing a detailed inventory of critical facilities based upon FEMA's Comprehensive Data Management System (CDMS) which could be used for various planning and emergency management purposes including: Support the performance of enhanced risk and vulnerability assessments for hazards of concern. Support state, county and local planning efforts including mitigation (including updates to the State HMP), comprehensive emergency management, debris management, and land use. Improved structural and facility inventories could incorporate flood, wind and seismic-specific parameters (e.g. first floor elevations, roof types, structure types based on FEMA-154 "Rapid Visual Screening of Buildings for Potential Seismic Hazards" methodologies). It is recognized that these programs will need to be initiated and supported at the County and/or State level, and will require training, tools and funding provided at the county, state and/or federal level.	Carried Forward	N/A	All Hazards	1,3	Hazard Mitigation Plan Coordinator	Medium-High	Medium-High	FEMA Mitigation Grant Programs with local match	Long Term DOF	Medium	Capability, PR	Ongoing. Lack of staffing. Lack of funding.
SB13 [(SB13)]	Emergency Management Plan	Support ongoing updates of Comprehensive Emergency Management Plans	Carried Forward	New and Existing	All Hazards	6,7	Municipality with support from County Emergency Management	Low	Low	Municipal Budget	OG	High	Capability, PR	Ongoing. Lack of staffing. Lack of funding.
SB14 [(SB14)]	Mutual Aid	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. Lack of staffing. Lack of funding.

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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
SB15 [[SB15]]	Disaster Mitigation	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	3,7	Municipality with support from County, NJOEM and FEMA	Medium	Medium	Municipal Budget	Short Term	Medium	Capability, PR, ES	Ongoing. Lack of staffing. Lack of funding.
SB16 [[SB16]]	Flood Mitigation & Hazard Prone Structures	Purchase, relocate, or elevate structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss property as priority, and particularly focusing on the Barber Blvd. area where homes have experienced up to three feet of water on the first floor. 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	Flood, Severe Storm	4	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from County Planning, NJOEM, FEMA	High	High	FEMA Mitigation Grants	Long Term DOF	Medium	Action/Project, PP	Ongoing. Lack of staffing. Lack of funding.
SB17 [SB17 (SB10)]	National Flood Insurance Program	Maintain compliance with and good-standing in the NFIP including adoption and enforcement of floodplain management requirements (e.g. regulating all new and substantially improved construction in Special Hazard Flood Areas), floodplain identification and mapping, and flood insurance outreach to the community.	Carried Forward	N/A	Flood, Severe Storm	4	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from NJOEM, FEMA	High	Low-Medium	Municipal Budget	OG	High	Capability, PR, PE	Ongoing. Lack of staffing. Lack of funding.
SB18 [[SB18]]	Elevation Certificates	Obtain and archive elevation certificates	Carried Forward	N/A	Flood, Severe Storm	1	NFIP Floodplain Administrator	Medium	Low	Municipal Budget	OG	High	Capability, PR	Ongoing. Lack of staffing. Lack of funding.
SB19 [[SB19]]	Floodplain Mitigation	Promote the participation of Floodplain Administrator within the planning process and other activities.	Carried Forward	N/A	Flood	4	Municipality with support from County, NJOEM and FEMA	Medium	Medium	Municipal Budget	Short Term	Medium	Capability, PR	Ongoing. Lack of staffing. Lack of funding.

Proposed Hazard Mitigation Initiatives														
2019 Initiative Number	Initiative Name	Initiative Description	New Initiative or Carried Forward	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	2018 Action Status
SB20 [(SB20)]	Community Resilience	Enhance 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	Ongoing. Lack of staffing. Lack of funding.
SB21 [(SB21)]	Permit Fee Waivers	Implement permit fee waivers for installation of backup power for private property.	Carried Forward	N/A	Severe Storm	12	Municipal Council	Medium	Low	Municipal Budget	Short Term	High	Capability, PR	Ongoing. Lack of staffing. Lack of funding.
SB22 [(SB22)]	Public Outreach and Education	Provide public education and outreach on proper installation and/or use of backup power	Carried Forward	N/A	Severe Storm	5,13	Municipal Clerk	Medium	Low	Municipal Budget	Short Term	High	Capability, PR	Ongoing. Lack of staffing. Lack of funding.
SB23 [(SB23)]	Tree Mitigation	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 Term	High	PR	Ongoing. Lack of staffing. 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

**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

**Costs:**

Where actual project costs have been reasonably estimated:

Low = < \$10,000

Medium = \$10,000 to \$100,000

High = > \$100,000

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

Low = Possible to fund under existing budget. Project is part of, or can be part of an existing on-going program.

Medium = Could budget for under existing work plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.

High = Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.

**Benefits:**

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

Low = < \$10,000

Medium = \$10,000 to \$100,000

High = > \$100,000

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

Low = Long-term benefits of the project are difficult to quantify in the short term.

Medium = Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.

High = Project will have an immediate impact on the reduction of risk exposure to life and property.

**Notes (for Mitigation Type):**

1. PR = Prevention: Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
2. PP = Property Protection: These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
3. PE = Public Education and Awareness: Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
4. NR = Natural Resource Protection: Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
5. SP = Structural Projects: Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
6. ES = Emergency Services: Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.
7. Initiative= Initiatives are comprised of EVERYTHING your community wants to do or is doing in order to meet its mitigation goals. Initiatives include Capabilities, Actions and Projects.
8. Capability= Regulatory, administrative, technical, and fiscal staffing, tools and/or resources. Capabilities can be existing, or in need of further development/expansion.
8. Action/Project= Specific activities or projects that your community plans to undertake or is currently completing in order to achieve its long term mitigation goals. Actions/Projects can include, but are not limited to: structural projects, infrastructure projects, natural systems protection projects, or education and awareness programs.

## 9.20.8 PRIORITIZATION OF MITIGATION INITIATIVES

The table below summarizes the priority levels for each mitigation initiative, listed by number.

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)
SB1 [SB1 (SB1)]	2	H	M	Y	N	N	M
SB2 [SB2 (SB2)]	4	M	H	Y	Y	N	M
SB3 [SB3 (SB4)]	2	H	H	Y	Y	N	M
SB4 [SB4 (SB5)]	2	H	H	Y	Y	N	M
SB5 [SB5 (SB6)]	2	H	M	Y	Y	N	M
SB6 [SB6 (SB7)]	2	M	L	Y	N	Y	M
SB7 [SB7 (SB8)]	1	M	M	Y	Y	N	M
SB8 [SB8 (SB9)]	13	M	M	Y	N	Y	M
SB9 [(SB9)]	2	M	M	Y	Y	Y	H
SB10 [(SB10)]	4	M	M	Y	N	Y	M
SB11 [(SB11)]	1	M	M	Y	N	Y	M
SB12 [(SB12)]	2	M	M	Y	N	Y	M
SB13 [(SB13)]	2	L	L	Y	N	Y	H
SB14 [(SB14)]	2	M	L	Y	N	Y	H
SB15 [(SB15)]	2	M	M	Y	N	Y	M
SB16 [(SB16)]	1	H	H	Y	Y	N	H
SB17 [SB17 (SB10)]	1	H	H	Y	Y	N	M
SB18 [(SB18)]	1	H	L-M	Y	N	Y	H
SB19 [(SB19)]	1	M	M	Y	N	Y	M
SB20 [(SB20)]	1	M	L	Y	N	Y	M
SB21 [(SB21)]	1	M	L	Y	N	Y	H
SB22 [(SB22)]	2	M	L	Y	N	Y	H
SB23 [(SB23)]	4	M	L	Y	N	Y	H

Notes:

H = High

L = Low

M = Medium

N = No

Y = Yes

### 9.20.8.1 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

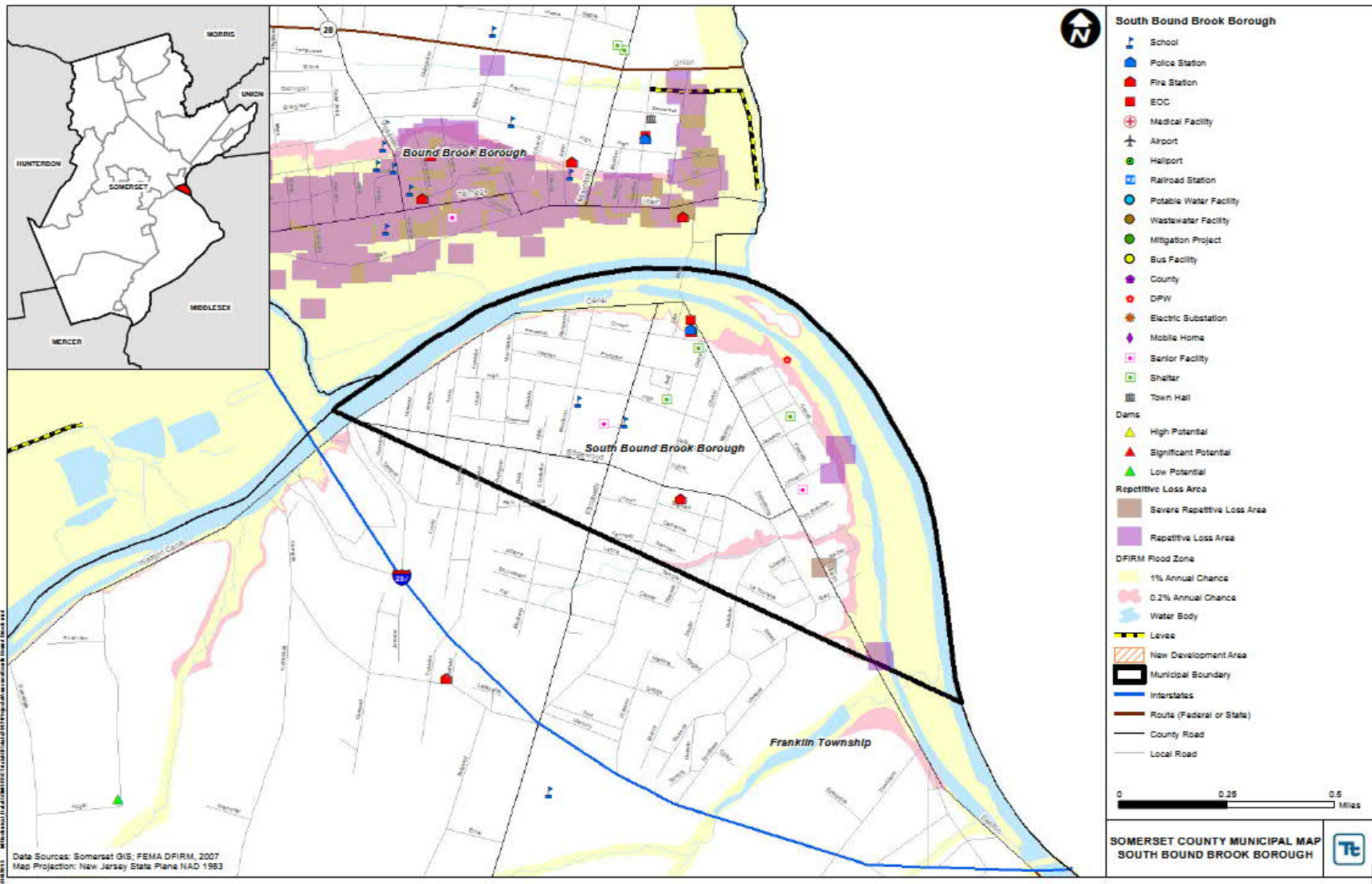
Was prioritization of initiatives based on parameters other than those stated above? Not applicable

### 9.20.9 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

South Bound Brook has no additional risk vulnerabilities that need to be addressed at this time.

### 9.20.10 HAZARD AREA EXTENT AND LOCATION

A hazard area extent and location map illustrating the probable areas impacted within South Bound Brook 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.





### 9.20.11 STATUS OF INCORPORATION OF MITIGATION PLANNING INTO EXISTING AND FUTURE PLANNING MECHANISMS

It is the intention of South Bound Brook 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)
<b>Operating Budget</b> 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
<b>Capital Improvement Budget</b> 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
<b>Human Resource Manual</b> Employee job descriptions may contain hazard mitigation actions.	-	-	-	X
<b>Building and Zoning Ordinances</b> 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
<b>Comprehensive Land Use Plan</b> When applicable, the municipality will incorporate hazard mitigation actions in the development and extent of the regulations.	-	-	-	X
<b>Grant Applications</b> Data and maps will be used as supporting documentation in grant applications.	-	-	-	X
<b>Municipal Ordinances</b> When updating municipal ordinances, hazard mitigation will be a priority.	-	-	-	X
<b>Fire Plan</b> The Hazard Mitigation Plan will be used as a resource for the development of future Fire Plans.	-	-	-	X
<b>Capital Improvement Planning</b> 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
<b>Day-to-Day Operations</b> The municipality will incorporate hazard mitigation actions in daily operations and all 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)
<b>Local School Service Projects</b> 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
<b>Municipal Budget</b> Adopted annually, the municipality will look at mitigation actions when allocating funding.	-	-	-	X
<b>Economic Development</b> The local economic development group will take into account information regarding identified hazard areas when assisting new businesses in finding a location.	-	-	-	X

### 9.20.12 ADDITIONAL COMMENTS

There are no additional comments at this time.

9.20.12 NFIP ADMINISTRATOR INPUT

Adoption Date of your Current Floodplain Management Ordinance	Date of Entry into NFIP <sup>1</sup>	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?	
10/9/2007		Building Construction Officer		<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	
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):							
None or Lack of 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?
Not Known	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No* 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							

<b>MITIGATION PLAN</b>								
Provide an explanation of your local floodplain permitting process:								
Review all development permits to determine that the permit requirements of the ordinance has been satisfied; receipt of other Federal/State/Local permits; determination of whether the proposed development is located in the floodway								
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 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 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Not Known			<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:								
N/A								
Provide a description of your community assistance and monitoring activities:								
Review, approve, monitor floodplain related projects								
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				