



SOMERSET COUNTY

HAZARD MITIGATION PLAN

SOMERSET COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

FINAL PLAN UPDATE
JULY 2019

www.co.somerset.nj.us/hmp

Section 9.7: Township of Bridgewater Annex

*Prepared by the Somerset County
Mitigation Planning Committee*



9.7 Township of Bridgewater

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

9.7.1 HAZARD MITIGATION PLAN POINTS OF CONTACT

Hazard Mitigation Plan Points of Contact					
Primary Point of Contact			Alternate Point of Contact		
Name: Thomas J. Forsythe, MHMO Address: 100 Commons Way Bridgewater, New Jersey 08807 Phone Number: (908) 725-6300 x 5513 Fax Number: (908) 429-0586 E-mail Address: tforsythe@bridgewaternj.gov			Name: David Battaglia, PE, Township Engineer Address: 100 Commons Way Bridgewater, New Jersey 08807 Phone Number: (908) 725-6300 Fax Number: (908) 429-0586 E-mail Address: dbattaglia@bridgewaternj.gov		
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	Scarlett Doyle	doyle45@comcast.net	(908) 725-6300	11/17/2017	Yes
Emergency Manager	Robert Szkodny	robert.szkodny@raritanval.edu	(908) 399-2347	11/17/2017	Yes
Floodplain Manager/ Floodplain Administrator	Dave Battaglia, PE	dbattaglia@bridgewaternj.gov	(908) 725-6300	11/17/2017	Yes
Public Works Director / City Engineer	Dave Battaglia, PE	dbattaglia@bridgewaternj.gov	(908) 725-6300	11/17/2017	Yes
Building Code Official	Steven Rodzinak	srodzinak@bridgewaternj.gov	(908) 725-6300	11/17/2017	Yes
Fiscal/Budget Officer	Natasha Turchan	nturchan@bridgewaternj.gov	(908) 725-6300	11/17/2017	Yes
Manager/Administrator	James Naples	jnaples@bridgewaternj.gov	(908) 725-6300	11/17/2017	Yes
Elected Officials	Mayor Daniel J. Hayes, Jr.	mayor@bridgewaternj.gov	(908) 725-6300	11/17/2017	Yes
Other 1:					
Other 2:					
Other 3:					

9.7.2 PROFILE

9.7.2.1 Population

The population of Bridgewater Township is estimated to be 44,464, based on information gathered during the 2010 U.S. Census. Census population estimates of July 2017 indicated a total population of 45,414.

9.7.2.2 Location

Bridgewater Township is located in central Somerset County, approximately 35 miles west of New York City. Interstate Highways 78 and 287 and State Highways 22, 28, 202 and 206 are major thoroughfares in the Township. The Township shares borders with Bedminster, Bernards and Warren to the north, Green Brook and Middlesex to the east, Bound Brook, Franklin, Hillsborough, Manville, Somerville and Raritan to the south, and Branchburg to the west.

9.7.2.3 Brief History

The thirty-three square mile area which is now the Township of Bridgewater was originally purchased from a local Indian tribe. Chartered by King George II of England in 1749, and incorporated in 1899, Bridgewater is a modern suburban municipality with a balance of residential and commercial uses. In the early years, Bridgewater was known as a farming town. What is now Somerville, Raritan, Bound Brook,

parts of Branchburg and Warren were once part of Bridgewater Township until they broke away years after the chartering.

Today, Bridgewater is a diverse and thriving township with a mix of both rural and suburban life. The Township is prime ground for many new and large businesses, including Sanofi-Aventis, Ethicon, Inc., Ortho Pharmaceutical, MetLife, and Phillips-Van Heusen. Bridgewater has progressed rapidly from its rural roots, and will continue to grow in the future.

9.7.2.4 Governing Body Format

The government within Bridgewater Township consists of elected officials including a mayor and five council members. The Township also has an administrator, public works department, police department, finance department, human services, municipal services, and municipal court.

9.7.2.5 Growth/Development Trends

The following table summarizes major residential/commercial development and major infrastructure development that are identified for the next five (5) years in the Township (2019-2024).

New Development/Potential Development in Municipality (for this plan update)						
Property Name	Type (Residential or Commercial)	No. of Structures	Address	Block and Lot	Known Hazard Zone	Description /Status
The Delaney (LCS Development)	Residential	16	Frontier Road	711/ 13	None	Age Restricted Community/ Approved
Patriot Green (Eden Woods)	Residential	33	East Main Street	329/ 3.01, 13.01 & 14	None	Apartment Complex/ Approved
Center of Excellence (Advance Realty)	Commercial/ Residential	unknown	Route 202/ 206	483/ 17, 18 & 19	None	Mix Use Development/ Conceptual Review
Lifetime Fitness Center	Commercial	1	Commons Way	411/ 39.07	None	Fitness Center/ Under Construction
Marriott Hotel	Commercial	2	Commons Way	411/ 39.02	None	Hotel/ Approved
Sunrise Senior Living	Residential	1	390 Route 22	400/ 5.04	None	Assisted Living/ Approved
The Learning Experience	Commercial	1	1940 Route 22, East	382/ 4	Flood Plain	Daycare/ Approved
PSE&G	Commercial	1	1920 Route 22, East	382/ 5 & 5.01	Flood Plain	Utility Control Center/ Under Construction
Bridgewater Hills	Commercial	5	Frontier Road	711/ 7	None	Hotel/ Under Review
Heritage Inn	Commercial	5	Route 22, East	222/ 3, 4 & 5	None	Hotel/ Under Review

Branchburg has identified the following jurisdictional regulations/codes/ordinances that will work to protect new development from the effects of natural hazards: Bridgewater Municipal Code – Chapter 126 Land Use; Bridgewater Municipal Code – Chapter 102, Flood Damage Prevention; Bridgewater Municipal Code – Chapter 114, Municipal Stormwater Regulation Program; Bridgewater Municipal Code – Chapter 99, Fire Prevention; Bridgewater Master Plan; Bridgewater Emergency Operations Plan; and International Building Code – New jersey Edition, NJAC 5:42-3.14

9.7.3 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	Heavy rain caused minor to moderate flooding in some areas in the County. Event precipitation totals included 2.78 inches in Bridgewater.
Flood	N/A	N/A	April 1, 2014	Heavy rain caused minor to moderate flooding in some areas in the County. Event precipitation totals included 2.78 inches in Bridgewater.
Thunderstorm Wind	N/A	N/A	April 15, 2014	No local damage reported
Flood	N/A	N/A	April 15, 2014	One to two inches of rain caused isolated flooding in some areas. Bridgewater reported 1.36 inches of rain during this event.
Flood	N/A	N/A	April 30, 2014 to May 1, 2014	Very heavy rain caused considerable poor drainage flooding and major river flooding across the County with total event damages countywide reported to be two million dollars. The exit ramps off of Interstate 287 at southbound exit 14 were flooded and closed in Bridgewater Township. In Franklin, Branchburg and Bridgewater Townships alone, there were 22 roads that were flooded and closed. A total of 4.59 inches of rain fell in Bridgewater during this event.
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

Natural Hazard Event History (2014 to present)				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
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	Thunderstorms with very heavy rain caused minor flooding in some areas; 2.31 inches of rain fell in Bridgewater during this event.
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. Event precipitation totals included 2.96 inches in Bridgewater.
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	Isolated, minor flooding occurred in some areas as a result of heavy rain; 1.22 inches of rain fell in Bridgewater during this event.
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

Natural Hazard Event History (2014 to present)				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Flood	N/A	N/A	March 11, 2015	Despite only 0.31 inches of rainfall in Bridgewater during this event, the combination of rainfall and snowmelt caused isolated flooding in some areas across the county.
Flood	N/A	N/A	March 14, 2015	Continued rainfall (0.88 inches in Bridgewater) combined with snowmelt caused minor flooding in isolated areas.
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
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

Natural Hazard Event History (2014 to present)				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Lightning	N/A	N/A	June 28, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	June 28, 2016	No local damage reported
Earthquake, Magnitude 1.1, 1 km NW of Butler, NJ (Butler Boro)	N/A	N/A	July 4, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 8, 2016	No local damage reported
Flood	N/A	N/A	July 8, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	July 18, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	July 25, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	July 25, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	July 25, 2016	No local damage reported
Flood	N/A	N/A	July 25, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 30, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Flash Flood	N/A	N/A	July 31, 2016	No local damage reported
Earthquake, Magnitude 0.8, 2.2 km SW of Clifton, NJ (Bloomfield Twp)	N/A	N/A	July 31, 2016	No local damage reported
Earthquake, Magnitude 1.0, 2 km N of Wanaque, NJ (Wanaque Boro)	N/A	N/A	August 9, 2016	No local damage reported
Earthquake, Magnitude 0.5, 1 km N of Butler, NJ (Bloomingdale Boro)	N/A	N/A	August 9, 2016	No local damage reported
Earthquake, Magnitude 0.6, 5 km NE of Wanaque, NJ (Ringwood Boro)	N/A	N/A	September 20, 2016	No local damage reported
Earthquake, Magnitude 1.5, 2.6 km W of Bellmar, NJ (Westville Boro)	N/A	N/A	November 6, 2016	No local damage reported
Earthquake, Magnitude 2.0, 16.3 km E of Highlands, NJ (Middletown Twp)	N/A	N/A	November 6, 2016	No local damage reported
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

Natural Hazard Event History (2014 to present)				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Flood	N/A	N/A	March 31, 2017	No local damage reported
Hail	N/A	N/A	May 14, 2017	No local damage reported
Hail	N/A	N/A	May 31, 2017	No local damage reported
Flood	N/A	N/A	June 24, 2017	No local damage reported
Flood	N/A	N/A	July 22, 2017	No local damage reported
Flood	N/A	N/A	August 22, 2017	No local damage reported
Flood	N/A	N/A	August 22, 2017	No local damage reported
Heavy Rain	N/A	N/A	August 23, 2017	No local damage reported
Earthquake, Magnitude 1.71, 3.7 km SW of Morris Plains, NJ (Morris Twp)	N/A	N/A	September 25, 2017	No local damage reported
Earthquake, Magnitude 0.98, 2.7 km SW of Morris Plains, NJ (Morris Twp)	N/A	N/A	September 30, 2017	No local damage reported
Flood	N/A	N/A	October 29, 2017	No local damage reported
Earthquake, Magnitude 1.38, 3.5 km NW of Keansburg, NJ (Keansburg Boro)	N/A	N/A	November 8, 2017	No local damage reported
Severe Winter Storm and Snowstorm (Blizzard)	DR-4368	Yes	March 6, 2018	Although all portions of the county experienced significant snowfall from this event, the higher amounts (around one and one half feet) occurred in the eastern sections of the county. Thundersnow occurred in a few locations. Snowfall totals included 14.0 inches in Bridgewater during this event.

Note:
DR = Major Disaster Declaration
EM = Emergency Declaration
N/A = Not applicable

9.7.4 NATURAL HAZARD RISK/VULNERABILITY RISK RANKING

The table below summarizes the vulnerability risk rankings of potential hazards of Bridgewater Township.

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: \$91,800,000 0.2% Annual Chance: \$163,600,000	Frequent	18 ^g	High
Severe Storm	100-Year MRP: \$5,140,558 500-Year MRP: \$20,900,589 Annualized Loss: \$219,089	Frequent	39	High
Severe Winter Storm	1% of GBS: \$71,321,500 5% of GBS: \$356,607,500	Frequent	27	Medium
Earthquake	500-Year MRP: \$12,368,338 2,500-Year MRP: \$181,721,224 Annualized Loss: \$188,217	Occasional	12	Low
Drought	Not available	Occasional	12 ^g	Medium
Extreme Temperature	Not available	Frequent	27	Medium
Wildfire	Not available	Occasional	24	Medium

Note

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

9.7.5 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.

9.7.5.1 Legal and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Township of Bridgewater. The Township has reviewed its responses from the 2014 HMP and has updated its assessment as applicable.

Legal and Regulatory Capability			
Regulatory Tools (Codes, Ordinances, Plans)	Do you have this? (Y or N)	Enforcement Authority	Code Citation (Section, Paragraph, Page Number, Date of Adoption)
1) Building Code	Y	Building Code Enforcement Division	International Building Code – New Jersey Edition, NJAC 5:24-3.14, 2/07
2) Zoning Ordinance	Y	Zoning Officer	Bridgewater Municipal Code – Ch.126 Land Use
3) Subdivision Ordinance	Y	Planning Board and Zoning Board of Adjustment	Bridgewater Municipal Code – Ch. 126 Land Use; updated as needed
4) NFIP Flood Damage Prevention Ordinance	Y	Floodplain Manager, Engineering Division	Flood Damage Prevention Ordinance, 8/07
4a) Cumulative Substantial Damages	-	-	-
4b) Freeboard	-	-	-
5) Growth Management	Y	Planning Board	Bridgewater Master Plan; Originally adopted 1990; Most recently amended 2/8/2011
6) Floodplain Management/Basin Plan	Y	Floodplain Manager, Engineering Division	Bridgewater Municipal Code – Ch. 126 Land Use
7) Stormwater Management Plan/Ordinance	Y	Engineering Division	Bridgewater Municipal Code – Ch. 126 Land Use
8) Comprehensive Plan / Master Plan/ General Plan	Y	Planning Board	Bridgewater Master Plan
9) Capital Improvements Plan	Y	Engineering Division	Bridgewater Capital Improvements Plan, updated annually

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)
10) Site Plan Review Requirements	Y	Engineering and Planning Divisions	Bridgewater Municipal Code – Ch. 126 Land Use
11) Open Space Plan	Y	Planning Division	Bridgewater Master Plan
12) Stream Corridor Management Plan	Y	Engineering Division	Bridgewater Municipal Code – Ch. 126 Land Use
13) Watershed Management or Protection Plan	-	-	-
14) Economic Development Plan	Y	Planning Board and Zoning Board of Adjustment	Bridgewater Economic Development Plan
15) Comprehensive Emergency Management Plan	Y	Emergency Management Coordinator	Emergency Operations Plan 8/9/2017
16) Emergency Response Plan	Y	Emergency Management Coordinator	Emergency Operations Plan 8/9/2017
17) Post-Disaster Recovery Plan	Y	Emergency Management Coordinator	Emergency Operations Plan 8/9/2017
18) Post-Disaster Recovery Ordinance	Y	Emergency Management Coordinator	Emergency Operations Plan 8/9/2017
19) Real Estate Disclosure Requirement	-	-	-
20) Other (Special Purpose Ordinances such as critical or sensitive areas)	-	-	-

9.7.5.2 Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Bridgewater Township. The Township has reviewed its responses from the 2014 HMP and has updated its assessment as applicable.

Administrative and Technical Capability		
Staff/ Personnel Resources	Available (Y or N)	Department/ Agency/Position
1) Planner(s) or Engineer(s) with knowledge of land development and land management practices	Y	David Battaglia /Division of Engineering Township Engineer Chip Mills/Division of Engineering Engineering Division Manager
2) Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Steve Rodzinak /Division of Code Enforcement Construction Official
3) Planners or engineers with an understanding of natural hazards	Y	David Battaglia /Division of Engineering Township Engineer Chip Mills/Division of Engineering Engineering Division Manager
4) NFIP Floodplain Administrator	Y	David Battaglia /Division of Engineering Township Engineer
5) Surveyor(s)	Y	George Reiman /Division of Engineering Surveyor
6) Personnel skilled or trained in GIS applications	Y	Thomas Forsythe /Department of Municipal Services Assistant Township Engineer
7) Scientist familiar with natural hazards	N	
8) Emergency Manager	Y	Robert Szkodny /Office of Emergency Management Emergency Management Coordinator
9) Grant Writer(s)	Y	Jodi Schnieder /Office of the Grants Manager Grants Manager
10) Staff with expertise or training in benefit/cost analysis	Y	David Battaglia /Division of Engineering Township Engineer Thomas Forsythe /Division of Engineering Assistant Township Engineer

9.7.5.3 Fiscal Capability

The table below summarizes financial resources available to Bridgewater Township. The Township has reviewed its responses from the 2014 HMP and has updated its assessment as applicable.

Fiscal Capability	
Financial Resources	Accessible or Eligible to use (Yes/No/Don't know)
1) Community Development Block Grants (CDBG)	Y
2) Capital Improvements Project Funding	Y
3) Authority to levy taxes for specific purposes	Y
4) User fees for water, sewer, gas or electric service	Y
5) Impact fees for homebuyers or developers of new development/homes	N
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	-

9.7.5.4 Overall Capabilities

The Township of Bridgewater’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	Moderate	Moderate
How these capabilities can be expand and/or improved to reduce risk				
Additional monies could be used to hire more employees to manage the hazard mitigation measures that have been put in place. Items are generally reviewed but the details to current plans are not always kept in mind during the review of new projects or the improvement of existing facilities.				

9.7.5.5 Community Classifications

The table below summarizes classifications for community program available to Bridgewater Township.

Community Classifications		
Program	Classification	Date Classified
Community Rating System (CRS)	NP	
Building Code Effectiveness Grading Schedule (BCEGS)	4/4	Sep. 2012
ISO Public Protection Classification (PPC) Program - District 1 – Martinsville Fire Company	5	Nov. 2001
ISO Public Protection Classification (PPC) Program –District 2 – Bradley Gardens Fire Department	4	Nov. 2001
ISO Public Protection Classification (PPC) Program –District 3 – Green Knoll Volunteer Fire Company	5	Nov. 2001
ISO Public Protection Classification (PPC) Program –District 4 – Finderne Engine Company	4	Nov. 2001
Storm Ready	NP	-
Firewise	NP	-

Notes:

- = Unavailable

N/A = Not applicable

NP = Not participating

* CRS Ranking as of October 2017

The classifications listed above relate to Bridgewater Township’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/>

9.7.6 MITIGATION STRATEGY

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

9.7.6.1 Past Mitigation Actions/Status

The status of all 2014 HMP initiatives was evaluated by the Township of Bridgewater in 2018 and is presented in the following table. Bridgewater Township has completed some of the priority items from the 2014 HMP and has indicated that its priorities have otherwise not been changed. The Township continues to pursue the High Priority projects, seeking funding as available.

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	
BW1	Acquire Homes within the Flood Plain that have repetitive or substantial damage claims. Four properties on the same block have been identified to date, while another dozen may be appropriate for acquisition in the near future.	High	Flood	Engineering			X		Lack of Funding - Applications made for FEMA Grants have not been successful.	X		Project has not changed since last plan update, due to lack of funding.
BW2	Raise three homes within the Flood Plain that have repetitive damage claims. These homes are on the same block as the proposed property buyouts identified in initiative above.	High	Flood	Engineering			X		Lack of Funding - Applications made for FEMA Grants have not been successful.	X		Project has not changed since last plan update, due to lack of funding.
BW3 (BW3)	Eliminate the Cedarbrook Park impoundment area. Propose to remove the existing outlet structure at Cedarbrook Park to allow free flow of stormwater from the impoundment area, which is substantially silted and the numerous trees within the area disallow de-silting the basin.	Low	Flood	Municipal Services; Engineering; Public Works	X						X	Due to storm event dam was breached. No damage to any downstream facilities. Breach was stabilized with rip-rap and left in place.

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	
BW4	Stabilize the banks of Cuckholds Brook to Prevent damage to homes along Graybar Drive	High	Flood	Municipal Services; Engineering; Public Works	X						X	Capital Project completed.
BW5 (BW5)	Stabilize the Stream banks at Blossom Drive to prevent the continuing erosion which eventually may cause damage to homes along Blossom Drive.	Medium	Flood	Municipal Services; Engineering; Code; Planning; Public Works			X		Lack of Funding and unable to obtain an NJDEP permit as conditions required are unreasonable.	X		Bank erosion problems continue to exist, nearing homes.
BW6	Acquire and install a backup generator at the Municipal Complex to serve the Administration Office.	High	All	Municipal Services; Engineering; Code; Planning; Public Works			X		Funding Planned	X		Municipal Complex has no backup power in the event of a power failure. Offices maybe required to shut down, denying service to residents in time of need.
BW7 (BW-17)	Consider participation in Storm Ready program to enhance the community resilience to severe storms (incl. severe winter storms)	Medium	Flood	Engineering			X		Although a good program, Township is not ready to commit fully to it, due to lack of staff and funding.	X		Program would need dedicated staff to operate this program.

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	
BW8 (BW-1)	Complete design/installation of generator connections at the Township Senior Center on Somerville Road. A generator was purchased to provide a backup power source as part of a retrofit for a critical shelter facility in hazard prone area.	Medium	All	Engineering; Public Works			X		Project funded but placed not yet installed.	X		The Senior Center facility backup generator project should be constructed this year (2018).
BW9 (BW-6)	Create access roads in wildfire areas to increase access and efficiency for emergency response teams.	Low	Wildfire	Engineering; Public Works; Fire safety officer			X		Although a good program, limits of available open space/ public land to create access roads and minimal hazard of forest fires in area.	X		Program needs further study to determine if appropriate for Township.
BW10 (BW-8)	Research the feasibility and costs associated with participation in Firewise program, and propose application to Township Board/ Administration.	Low	Wildfire	Emergency Management, Engineering			X		Although some research was performed by prior Fire Official additional research must be done to determine is appropriate for Township.	X		Although some research was performed by prior Fire Official additional research must be done to determine is appropriate for Township.

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	
BW11 (BW-9)	Research the feasibility, costs, and benefits associated with participation in CRS and propose application to Township Board/ Administration.	Low	Flood	Engineering			X		Although a good program, benefits to Township residents have not been determined.	X		Program could save the few residents paying flood insurance the cost in research and record keeping currently outweigh benefit.
BW12 (BW-10)	Strive to maintain compliance with and good-standing in the National Flood Insurance program, including maintaining and updating local flood damage prevention ordinances.	High	Flood	Engineering			X		Records maintained by the Engineering Division. This is an ongoing process that is expected to continue for a long time.	X		Records maintained by the Engineering Division. This is an ongoing process that is expected to continue for a long time.

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	
BW13	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		This is an ongoing process that is expected to continue for the foreseeable future.	X		This is an ongoing process that is expected to continue for the foreseeable future.

2014 HMP Initiative #	Mitigation Initiative Description	2014 HMP Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
BW14	Incorporate ordinances and/or zoning restrictions as part of continual updates to control and mitigate future development in hazard areas, specifically as identified in Section 9.7.11.	Medium	All Hazards	Municipality with support from County, NJOEM and FEMA			X		Ordinances are reviewed as necessary and updates or revisions made.	X		Ordinances are reviewed as necessary and updates or revisions made.
BW15	Develop programs/procedures to capture, archive, and coordinate data loss from events. Sources to be brought into a coordinated database should include: Construction records of flood damage repairs/retrofits; Engineering records of bridge washouts and other major damage. FEMA submissions recording damages, recovery time and labor records.	Medium	All Hazards	Municipality with support from County, NJOEM and FEMA			X		Upgrades to software to better maintain these records and coordinate between Code Enforcement and Engineering Divisions.	X		This is an ongoing process and will continue for the foreseeable future.
BW16	In addition to projects at the senior center and admin building, obtain and install backup power sources at other appropriate critical facilities.	Medium	All Hazards	Municipality with support from County, NJOEM and FEMA			X		The Township has not had the resources to investigate any additional locations for back-up generators for municipal facilities.	X		This is an ongoing process and will continue for the foreseeable future.

2014 HMP Initiative #	Mitigation Initiative Description	2014 HMP Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
BW17	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. Support state, county and local planning efforts including mitigation (including updates to the State HMP), comprehensive emergency management, debris management, and land use. Utilize data gathered as part of this HMP update to influence and support future efforts to enhanced risk assessment efforts.	Medium	All Hazards	Hazard Mitigation Plan Coordinator			X		The Township does participate in local, county and state projects and programs.	X		This is an ongoing process and will continue for the foreseeable future.
BW18	Support ongoing updates of Comprehensive Emergency Management Plans, particularly the Bridgewater Township Emergency Operations Plan.	High	All Hazards	Municipality with support from County Emergency Management			X		The Township supports the Comprehensive Emergency Management Plan in coordination with EOM.	X		The is an ongoing process and will continue for the foreseeable future.

2014 HMP Initiative #	Mitigation Initiative Description	2014 HMP Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
BW19	Formalize and codify existing mutual aid agreements with neighboring communities for continuity of operations. Many existing agreement are not currently written in Twp. code.	High	All Hazards	Municipality with support from County, NJOEM, FEMA and surrounding communities			X		The Township has begun this process with neighbor municipalities but due to other work tasks has not completed any formal agreements.	X		This is an ongoing task and will continue until its completion.
BW20	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		The Township has begun this process with neighbor municipalities but due to other work tasks has not completed any formal agreements.	X		This is an ongoing task and will continue until its completion.

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	
BW21	Continue to promote the maintenance of professional licensure and credentials, as well as continuing education for Twp. officials and staffers and certification of qualified individuals (e.g. code officials, floodplain managers, engineers) to maintain effective damage assessment capabilities. When available, take advantage of County and NJOEM-sponsored training programs.	Medium	All Hazards	Municipality with support from County, NJOEM and FEMA			X		The Township supports the maintenance of existing licensure and continuing education.	X		This is an ongoing process and will continue for the foreseeable future.
BW22 (BW7)	Continue to support the implementation, monitoring, maintenance, and updating of this Plan (through participating in the 5 year Plan Update), as defined in Section 7.0	High	All Hazards	Municipality with support from Planning Partners,			X		The Township participates in and supports the Hazard Mitigation Plan process and plan.	X		This is an ongoing process and will continue for the foreseeable future.

2014 HMP Initiative #	Mitigation Initiative Description	2014 HMP Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
BW23	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, including those projects proposed in BW1 and BW2 above. 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,	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from County Planning, NJOEM, FEMA			X		The Township maintains the necessary record and makes applications for grants to obtain flood prone properties when funding is available.	X		This is an ongoing process and will continue for the foreseeable future.
BW24 (BW10)	Maintain compliance with and good-standing in the NFIP, and continue to meet and/or exceed the minimum NFIP standards and criteria through the following NFIP-related continued compliance actions.	High	Flood, Severe	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from NJOEM, FEMA			X		The Township is in compliance and good standing with NFIP.		X	The Township is in compliance and good standing with the NFIP. Maintaining compliance is a program requirement and existing capability. Maintaining compliance is an ongoing process and will continue for the foreseeable future as an existing capability..

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	
BW25	Continue to obtain and archive elevation certificates.	High	Flood, Severe Storm	NFIP Floodplain Administrator			X		The records are maintained by the Engineering Division.	X		This is an ongoing process and will continue for the foreseeable future.
BW26	Continue to involve the Twp. Floodplain Administrator in the planning process and other activities.	Medium	Flood	Municipality with support from County, NJOEM and FEMA			X		The is an ongoing process and will continue for the foreseeable future.	X		This is an ongoing process and will continue for the foreseeable future.
BW27	Adopt regulations for undergrounding utilities in new developments. The Twp. currently promotes undergrounding utilities as an engineering policy during the review of development proposals, but will pursue the opportunity to create an ordinance making it a requirement for certain projects.	H	Severe Storm	Municipal Council			X		The is an ongoing process and will continue for the foreseeable future.	X		This is an ongoing process and will continue for the foreseeable future.

2014 HMP Initiative #	Mitigation Initiative Description	2014 HMP Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
BW28	Consider implementing permit fee waivers for installation of backup power for private property. Also, continue to waive fees for repairs of major floods and other hazard events, by emergency ordinance on an event by event basis.	H	Severe Storm	Municipal Council				X	Residents have been making the necessary permit application for back-up generators without any incentive program.		X	Policy never instituted.

9.7.6.2 Hazard Vulnerabilities Identified

The Township has identified vulnerabilities to flooding in residential areas near the Raritan River and North Branch. The Township also identified vulnerabilities to power lines during snowstorms, hurricanes, and other high wind events. The power lines historically have been brought down by winds or fallen trees. Soil erosion is likewise an issue within the Township.

It is estimated that in Bridgewater Township, 303 residents live within the 1% annual chance flood area (NFIP Special Flood Hazard Area). \$2,404,261,000 (20.3%) of the municipality's general building stock replacement cost value (structure and contents) is located within the 1% annual chance flood area.

There are 249 NFIP policies in the community and there are 123 policies located within the 1% annual chance flood area. FEMA has identified 13 Repetitive Loss (RL) properties including 2 Severe Repetitive Loss (SRL) properties in the municipality.

HAZUS-MH estimates that for a 1% annual chance flood, \$91,800,000 (3.07%) of the municipality's general building stock replacement cost value (structure and contents) will be damaged, 1,209 households may be displaced, 673 people may seek short-term sheltering, and an estimated 3,660 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)
Bridgewater (T)	249	198	\$3,541,488	13	-	123	14	112

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

HAZUS-MH critical facility damage estimates for Bridgewater Township 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)
Milltown School	Bridgewater (T)	School		x	-	-	-	9.0	59.1	480

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⁾
Somerset Secondary Academy	Bridgewater (T)	School	x	x	-	-	-	7.6	42.7	480
Somerset Alternative Academic High	Bridgewater (T)	School	x	x	-	-	-	7.6	42.7	480
NJ American Water Company	Bridgewater (T)	Potable Water	x	x	13.9	NA	NP	40.0	NA	NP
Well C-1	Bridgewater (T)	Potable Water	x	x	-	-	-	40.0	NA	NP
Well C-2	Bridgewater (T)	Potable Water	x	x	-	-	-	40.0	NA	NP
Kirside at North Branch	Bridgewater (T)	Senior		x	-	-	-	-	-	-
Chelsea at Bridgewater	Bridgewater (T)	Senior		x	-	-	-	20.4	100	NP
Park Commission	Bridgewater (T)	County	x	x	-	-	-	2.8	16.9	NP
Commerce Ball Park	Bridgewater (T)	County		x	-	-	-	15.9	100	NP
Bound Brook Pump House	Bridgewater (T)	County	x	x	13.7	80.1	NP	33.1	100	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 available

T = Township

(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.

9.7.7 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. Bridgewater Township has completed some of the priority items from the 2014 HMP and has indicated that its priorities have otherwise not been changed. The Township continues to pursue the High Priority projects, seeking funding as available. 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 Township has opted to carry forward legacy initiative numbers from the 2014 plan for internal municipal tracking purposes, formatted as: “2019#(2014#)”.

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
BW1 (BW1)	Home Acquisition	Acquire Homes within the Flood Plain that have repetitive or substantial damage claims. Four properties on the same block have been identified to date, while another dozen may be appropriate for acquisition in the near future.	Carrying Forward	Existing	Flood	1,4,8	Grant Manager	High	High	FMA, HMGP, PDM, RFC, SRL	DOF	Medium	Action/Project, PR, PP	Ongoing. Lack of funding. Applications made for FEMA grants have not been successful.
BW2 (BW2)	Home Elevation	Raise three homes within the Flood Plain that have repetitive damage claims. These homes are on the same block as the proposed property buyouts identified in initiative above.	Carrying Forward	Existing	Flood	1,4,8	Grant Manager	High	High	FMA, HMGP, PDM, RFC, SRL Properties are adjacent to County Park, so cost share may be available.	DOF	Medium	Action/Project, PR, PP	Ongoing. Lack of funding. Applications made for FEMA grants have not been successful.
BW3 (BW5)	Blossom Drive	Stabilize the Stream banks at Blossom Drive to prevent the continuing erosion which eventually may cause damage to homes along Blossom Drive.	Carrying Forward	Existing	Flood	1,8,10	Municipal Services; Engineering; Code; Planning; Public Works	High	High	FMA, PDM	DOF	High	Action/Project, PP, NR, SP	Ongoing. Lack of Funding and unable to obtain an NJDEP permit as conditions required are unreasonable. Bank erosion problems continue to exist, nearing homes.

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
BW4 (BW6)	Municipal Complex Generator	Acquire and install a backup generator at the Municipal Complex to serve the Administration Office.	Carrying Forward	Existing	All	1, 2, 4, 6, 7, 11, 13	Municipal Services; Engineering; Code; Planning; Public Works	High	Medium	FMA, PDM	DOF	Medium	Action/Project, PR, ES	Ongoing. Funding planned. Municipal Complex has no backup power in the event of a power failure. Offices maybe required to shut down, denying service to residents in time of need.
BW5 (BW7)	Storm Ready Program	Consider participation in Storm Ready program to enhance the community resilience to severe storms (incl. severe winter storms)	Carrying Forward	All	Flood	1,12	Engineering	Medium	Low	Municipal Operating Budget	Short	Low	Capability, PR, PE, ES	Ongoing. Although a good program, Township is not ready to commit fully to it, due to lack of staff and funding. Program would need dedicated staff to operate this program.
BW6 (BW8)	Senior Center Generator	Complete design/installation of generator connections at the Township Senior Center on Somerville Road. A generator was purchased to provide a backup power source as part of a retrofit for a critical shelter facility in hazard prone area.	Carrying Forward	New	All	1, 2, 4, 6, 7, 11, 13	Engineering; Public Works	Medium	Medium	Capital Budget, FMA, PDM	Short	Medium	Action/Project, PR, SP, ES	Ongoing. Project funded but placed not yet installed. The Senior Center facility backup generator project should be constructed this year (2018).
BW7 (BW9)	Wildfire Access Roads	Create access roads in wildfire areas to increase access and efficiency for emergency response teams.	Carrying Forward	New	Wildfire	6, 7	Engineering; Public Works; Fire safety officer	Medium	Low	Municipal Operating Budget	DOF	Low	Capability, PR ES	Ongoing. Although a good program, limits of available open space/ public land to create access roads and minimal hazard of forest fires in area. Program needs further study to determine if appropriate for Township.
BW8 (BW10)	Firewise Program	Research the feasibility and costs associated with participation in Firewise program, and propose application to Township Board/ Administration.	Carrying Forward	Both	Wildfire	1,12	Emergency Management, Engineering	Medium	Low	Municipal Operating Budget	Short	High	Capability, PR PE	Ongoing. Although some research was performed by prior Fire Official additional research must be done to determine is appropriate for Township. Although some research was performed by prior Fire Official additional research must be done to determine is appropriate for Township.



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
BW9 (BW11)	Community Rating System (CRS)	Research the feasibility, costs, and benefits associated with participation in CRS and propose application to Township Board/ Administration.	Carrying Forward	Both	Flood	1,12	Engineering	Medium	Low	Municipal Operating Budget	Short	Low	Capability, PR PE	Ongoing. Although a good program, benefits to Township residents have not been determined. Program could save the few residents paying flood insurance the cost in research and record keeping currently outweigh benefit.
BW10 (BW12)	National Flood Insurance Program (NFIP)	Strive to maintain compliance with and good-standing in the National Flood Insurance Program, including maintaining and updating local flood damage prevention ordinances.	Carrying Forward	Both	Flood	1, 5, 8, 9, 12, 13	Engineering	Medium	Low	Operating Budget	Short	High	Capability, PR PE	Ongoing. Records maintained by the Engineering Division. This is an ongoing process that is expected to continue for a long time. Records maintained by the Engineering Division. This is an ongoing process that is expected to continue for a long time.

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
BW11 (BW13)	Public Outreach and Education Program	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.	Carrying Forward	N/A	All Hazards	5, 12	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	This is an ongoing process that is expected to continue for the foreseeable future.
BW12 (BW14)	Ordinance Updating	Incorporate ordinances and/or zoning restrictions as part of continual updates to control and mitigate future development in hazard areas, specifically as identified in Section 9.7.11.	Carrying Forward	N/A	All Hazards	9	Municipality with support from County, NJOEM and FEMA	Medium	Medium	Municipal Budget	Short	Medium	Capability, PR	Ongoing. This is an ongoing process that is expected to continue for the foreseeable future.

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
BW13 (BW15)	Consolidate and Coordinate Flooding Records	Develop programs/procedures to capture, archive, and coordinate data loss from events. Sources to be brought into a coordinated database should include: Construction records of flood damage repairs/retrofits; Engineering records of bridge washouts and other major damage. FEMA submissions recording damages, recovery time and labor records.	Carrying Forward	N/A	All Hazards	1,8	Municipality with support from County, NJOEM and FEMA	Medium	Medium	Municipal Budget	Short	Medium	Capability, PR	Ongoing. Upgrades to software to better maintain these records and coordinate between Code Enforcement and Engineering Divisions. This is an ongoing process and will continue for the foreseeable future.
BW14 (BW16)	Generators for Other Government Facilities	In addition to projects at the senior center and admin building, obtain and install backup power sources at other appropriate critical facilities.	Carrying Forward	N/A	All Hazards	1, 2, 4, 6, 7, 11, 13	Municipality with support from County, NJOEM and FEMA	Medium	Medium	Municipal Budget	Short	Medium	Capability, ES	Ongoing. The Township has not had the resources to investigate any additional locations for back-up generators for municipal facilities. This is an ongoing process and will continue for the foreseeable future.
BW15 (BW17)	County Hazard Mitigation Program	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. Support state, county and local planning efforts including mitigation (including updates to the State HMP), comprehensive emergency management, debris management, and land use. Utilize data gathered as part of this HMP update to influence and support future efforts to enhanced risk assessment efforts.	Carrying Forward	N/A	All Hazards	All	Hazard Mitigation Plan Coordinator	Medium-High	Medium-High	FEMA Mitigation Grant Programs with local match	Long Term DOF	Medium	Capability, PR	Ongoing. The Township does participate in local, county and state projects and programs. This is an ongoing process and will continue for the foreseeable future.

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
BW16 (BW18)	Emergency Management Plan	Support ongoing updates of Comprehensive Emergency Management Plans, particularly the Bridgewater Township Emergency Operations Plan.	Carrying Forward	New and Existing	All Hazards	All	Municipality with support from County Emergency Management	Low	Low	Municipal Budget	Ongoing	High	Capability, PR	Ongoing. The Township supports the Comprehensive Emergency Management Plan in coordination with EOM. This is an ongoing process and will continue for the foreseeable future.
BW17 (BW19)	Mutual Aid Agreements	Formalize and codify existing mutual aid agreements with neighboring communities for continuity of operations. Many existing agreements are not currently written in Twp. code.	Carrying Forward	N/A	All Hazards	3, 6, 7, 13	Municipality with support from County, NJOEM, FEMA and surrounding communities	Medium	Low	Municipal Budget	Short Term	High	Capability, PR, ES	Ongoing. The Township has begun this process with neighboring municipalities but due to other work tasks has not completed any formal agreements. This is an ongoing task and will continue until its completion.
BW18 (BW20)	Emergency Agreements	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.	Carrying Forward	N/A	All Hazards	6, 7	Municipality with support from County, NJOEM and FEMA	Medium	Medium	Municipal Budget	Short Term	Medium	Capability, PR, ES	Ongoing. The Township has begun this process with neighboring municipalities but due to other work tasks has not completed any formal agreements. This is an ongoing task and will continue until its completion.
BW19 (BW21)	Professional Licensing	Continue to promote the maintenance of professional licensure and credentials, as well as continuing education for Twp. officials and staffers and certification of qualified individuals (e.g. code officials, floodplain managers, engineers) to maintain effective damage assessment capabilities. When available, take advantage of County and NJOEM-sponsored training programs.	Carrying Forward	N/A	All Hazards	6, 7	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 The Township supports the maintenance of existing licensure and continuing education. This is an ongoing process and will continue for the foreseeable future.

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
BW20 (BW22)	Plan Updates	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	Carrying Forward	New and Existing	All Hazards	All	Municipality with support from Planning Partners, County Planning, NJOEM, FEMA	High	Low – High (for 5 year update)	Municipal Budget, FEMA planning grants	On-going	High	Capability, PR	Ongoing. The Township participates in and supports the Hazard Mitigation Plan process and plan. This is an ongoing process and will continue for the foreseeable future.
BW21 (BW23)	Identify Other Locations for Raising Homes or Buyouts	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, including those projects proposed in BW1 and BW2 above. 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	Carrying Forward	Existing	Flood, Severe Storm	1, 4, 8	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from County Planning, NJOEM, FEMA	High	High	FEMA Mitigation Grants	Long Term DOF	Medium	Capability, PP	Ongoing. The Township maintains the necessary record and makes applications for grants to obtain flood prone properties when funding is available. This is an ongoing process and will continue for the foreseeable future.
BW22 (BW25)	Elevation Certificates	Continue to obtain and archive elevation certificates.	Carrying Forward	N/A	Flood, Severe Storm	1,8	NFIP Floodplain Administrator	Medium	Low	Municipal Budget	On-going	High	Capability, PR	Ongoing. The records are maintained by the Engineering Division. This is an ongoing process and will continue for the foreseeable future.
BW23 (BW26)	Floodplain Administrator	Continue to involve the Twp. Floodplain Administrator in the planning process and other activities.	Carrying Forward	N/A	Flood	All	Municipality with support from County, NJOEM and FEMA	Medium	Medium	Municipal Budget	Short	Medium	Capability, PR	This is an ongoing process and will continue for the foreseeable future.
BW24 (BW27)	Underground Utility Programs	Adopt regulations for undergrounding utilities in new developments. The Twp. currently promotes undergrounding utilities as an engineering policy during the review of development proposals, but will pursue the opportunity to create an ordinance making it a requirement for certain projects.	Carrying Forward	N/A	Severe Storm	1,2,4, 6,7,9, 11,13	Municipal Council	Medium	Low	Municipal Budget	Short	High	Capability, PR	This is an ongoing process and will continue for the foreseeable future.



Notes:

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

Acronyms and Abbreviations:

ARC	American Red Cross
DPW	Department of Public Works
FEMA	Federal Emergency Management Agency
HMA	Hazard Mitigation Assistance
HMP	Hazard Mitigation Proposal
N/A	Not applicable
NFIP	National Flood Insurance Program
NJOEM	New Jersey Office of Emergency Management
NOAA	National Oceanic and Atmospheric Administration
SCPD	Somerset County Planning Department
USACE	U.S Army Corp of Engineers
USGS	U.S. Geological Survey

Costs:

Where actual project costs have been reasonably estimated:

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

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

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

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.

Potential FEMA HMA Funding Sources:

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

Timeline:

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

Notes (for Mitigation Type):

1. PR = Prevention: Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
2. PP = Property Protection: These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
3. PE = Public Education and Awareness: Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach 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.

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.

- 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.

9.7.8 PRIORITIZATION OF MITIGATION INITIATIVES

The table below summarizes the priority levels for each mitigation initiative, listed by number. Again, please note that the Township has opted to carry forward legacy initiative numbers from the 2014 plan for internal municipal tracking purposes.

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)
BW1 (BW1)	3	H	H	Y	Y	N	M
BW2 (BW2)	3	H	H	Y	Y	N	M
BW3 (BW5)	3	H	M	Y	Y	N	H
BW4 (BW6)	7	H	M	Y	Y	N	M
BW5 (BW7)	2	M	L	Y	Y	Y	L
BW6 (BW8)	7	M	M	Y	Y	Y	M
BW7 (BW9)	2	M	L	Y	Y	Y	L
BW8 (BW10)	2	M	L	Y	Y	Y	H
BW9 (BW11)	2	M	L	Y	Y	Y	L
BW10 (BW12)	6	M	L	Y	Y	Y	H
BW11 (BW13)	2	M	M	Y	Y	Y	H
BW12 (BW14)	1	M	M	Y	N	Y	M
BW13 (BW15)	2	M	M	Y	N	Y	M
BW14 (BW16)	7	M	M	Y	N	Y	M
BW 15 (BW17)	13	M	M	Y	N	Y	M
BW 16 (BW18)	13	L	L	Y	N	Y	H
BW 17 (BW19)	4	M	L	Y	N	Y	H
BW18 (BW20)	2	M	M	Y	N	Y	H
BW19 (BW21)	2	M	M	Y	N	Y	M
BW20 (BW22)	13	M	M	Y	N	Y	H
BW21 (BW23)	3	H	H	Y	Y	N	M
BW22 (BW25)	2	H	L-M	Y	N	Y	H
BW23 (BW26)	13	M	M	Y	N	Y	M
BW24 (BW27)	8	M	L	Y	N	Y	H

Notes: H = High
 L = Low
 M = Medium
 N/A = Not applicable
 N = No
 Y = Yes

9.7.8.1 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

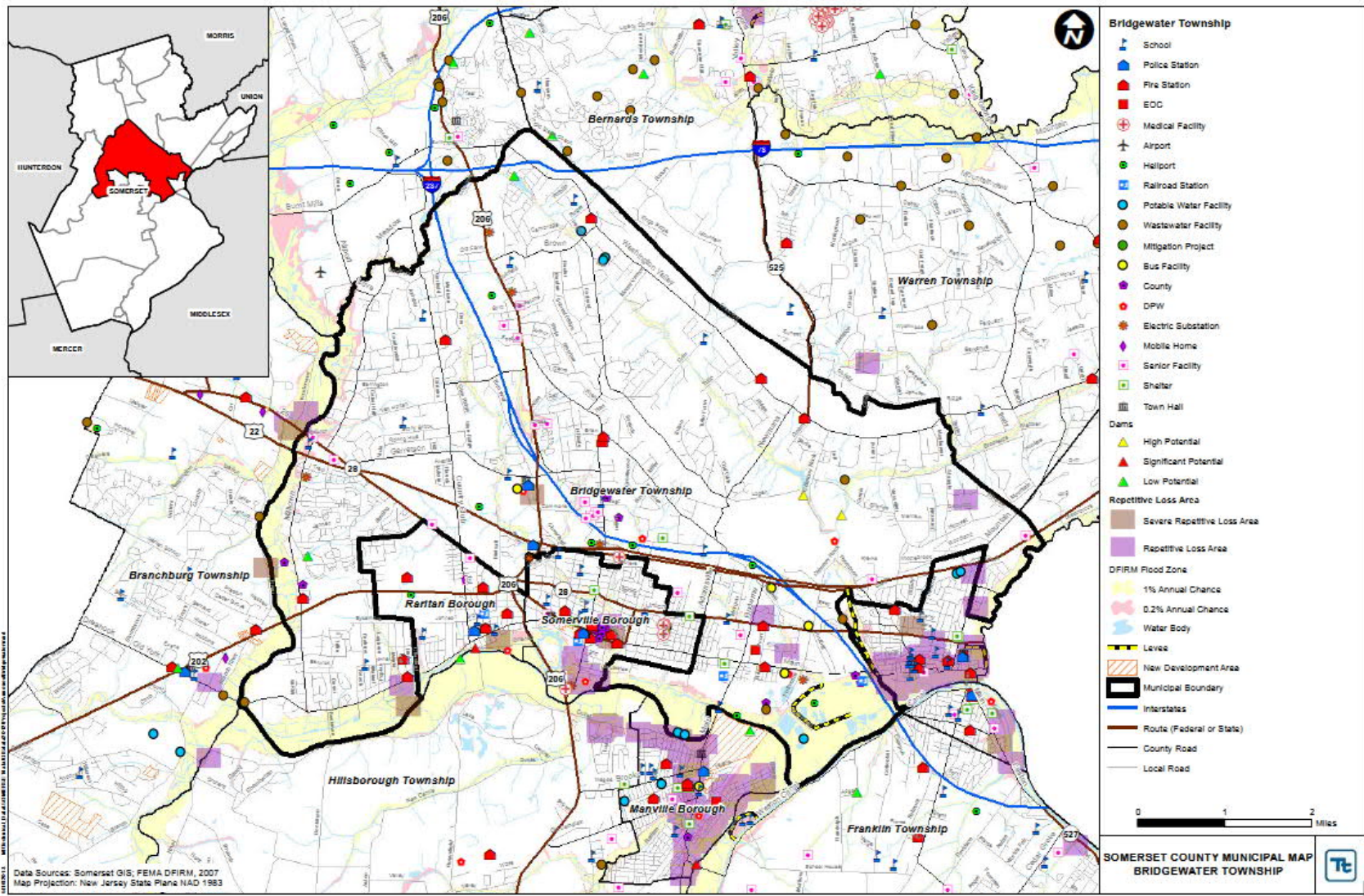
Was prioritization of initiatives based on parameters other than those stated above? Not applicable

9.7.9 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

The Township of Bridgewater has no additional risk vulnerabilities that need to be addressed at this time.

9.7.10 HAZARD AREA EXTENT AND LOCATION

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



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

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

Status of Incorporation of Mitigation Planning into Existing and Future Planning Mechanisms				
Planning Mechanisms	Reported Utilization (2009-2014)	Planned Utilization (2014-2019)	Reported Utilization (2014-2019)	Planned Utilization (2019-2024)
Operating Budget When constructing upcoming budgets, hazard mitigation actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the hazard mitigation goals and objectives.	X	X		X
Capital Improvement Budget When constructing upcoming budgets, hazard mitigation actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the hazard mitigation goals and objectives.	X	X		X
Human Resource Manual Employee job descriptions may contain hazard mitigation actions.	X	X	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	X	X
Comprehensive Land Use Plan When applicable, the municipality will incorporate hazard mitigation actions in the development and extent of the regulations.	X	X	X	X
Grant Applications Data and maps will be used as supporting documentation in grant applications.	X	X		X
Municipal Ordinances When updating municipal ordinances, hazard mitigation will be a priority.	X	X		X
Fire Plan The Hazard Mitigation Plan will be used as a resource for the development of future Fire Plans.		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		X
Day-to-Day Operations The municipality will incorporate hazard mitigation actions in daily operations and all projects.	X	X	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	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		X

9.7.12 ADDITIONAL COMMENTS

There are no additional comments at this time.

9.7.12 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?	
74-	6/28/1974	Floodplain Manager		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Provide an explanation of NFIP administration services (i.e., permit review, GIS, education or outreach, inspections, engineering capability, etc.):							
During the construction permit process the submittals are compared to the existing flood hazard mapping within the Township and revisions are requested based on that review.							
Describe barriers to running an effective NFIP program in the community (if applicable):							
The Township does not have sufficient staff to for any staff member to concentrate solely on Flood Plain Management and Enforcement.							
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?
1/23/2016	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No * Class _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
*Describe any outstanding compliance issues (i.e., current violations):							

Provide an explanation of your local floodplain permitting process:								
During the construction permit process the submittals are compared to the existing flood hazard mapping within the Township and revisions are requested based on that review.								
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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes * <input checked="" type="checkbox"/> No			
* 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:								
The only monitoring is part of the construction permit review process.								
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				