



SOMERSET COUNTY

HAZARD MITIGATION PLAN

SOMERSET COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

FINAL PLAN UPDATE
JULY 2019

www.co.somerset.nj.us/hmp

Section 9.3: Township of Bernards Annex

*Prepared by the Somerset County
Mitigation Planning Committee*



9.3 Township of Bernards

This section presents the jurisdictional annex for the Township of Bernards.

9.3.1 HAZARD MITIGATION PLAN POINTS OF CONTACT

Hazard Mitigation Plan Points of Contact					
Primary Point of Contact			Alternate Point of Contact		
Name: Mike Shimsky, Emergency Management Coordinator Address: One Collyer Lane Basking Ridge, New Jersey 07920 Phone Number: (908) 204-3043 Fax Number: E-mail Address: mshimsky@bernardspd.org			Name: Bruce McArthur, Township Administrator Address: One Collyer Lane Basking Ridge, New Jersey 07920 Phone Number: (908) 204-3098 Fax Number: E-mail Address: bmcarthur@bernards.org		
Municipal HMP Committee Members					
Local Jurisdiction Role/Position	Name	Email	Phone	Date Notified About Mitigation Plan Development	Agreed to participate? (Yes/No)
Land Use/Community Planner	Tom Timko	ttimko@bernards.org	908-204-3017	10/31/2017	Y
Emergency Manager	Chris Hurst	churst@bernardspd.org	908-204-3170	10/31/2017	Y
Floodplain Manager/ Floodplain Administrator	Tom Timko	ttimko@bernards.org	908-204-3017	10/31/2017	Y
Public Works Director / City Engineer	Jorge Casacuberta	icasacuberta@bernards.org	908-204-3086	10/31/2017	Y
Building Code Official	Dennis Bettler	dbettler@bernards.org	908-204-3030	10/31/2017	Y
Fiscal/Budget Officer	Terri Johnson	tjohnson@bernards.org	908-304-3064	10/31/2017	Y
Manager/Administrator	Pat Monaco	pmonaco@bernards.org	908-204-3098	10/31/2017	Y

9.3.2 PROFILE

9.3.2.1 Population

The population of the Township of Bernards is estimated to be 26,652, based on information gathered during the 2010 U.S. Census. Census population estimates of July 2017 indicated a total population of 27,061.

9.3.2.2 Location

The Township of Bernards is located in northern Somerset County and is approximately 40 miles west of New York City. The township is traversed by two major interstate highways 78 and 287. The Township is bordered by the Boroughs of Bernardsville and Far Hills to the north, the Townships of Bridgewater and Warren to the south, and Morris County to the East.

9.3.2.3 Brief History

Originally occupied by the Lenni Lenape Indians, the Township was settled by Scottish immigrants and several tracts purchased by King James II and William Penn. The Township of Bernards, originally name Bernardston Township was named after Sir Francis Bernard, the royal governor in 1758. The Township of Bernards was chartered in 1760 by King George II.

9.3.2.4 Governing Body Format

The Bernards Township Committee consists of five members elected by the public for three year terms in office. All legislative and executive powers of the township are the responsibility of the Committee, except for matters of health. The mayor is elected by Committee members at the annual Reorganization meeting held in January. All members have equal power and may vote on all issues.

9.3.2.5 Growth/Development Trends

The Township of Bernards did not note any major residential or commercial development since the 2014 HMP, or any major infrastructure development planned for the next 5 years in the municipality.

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

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

9.3.3 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	Isolated river flooding due to 1-2 inches of rain. Event precipitation totals included 1.45 inches in Bernards.
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	Scattered strong to severe thunderstorms occurred, knocking down trees and power poles in several locations with some power outages. Power outages were reported in Basking Ridge, and trees and wires were downed in Liberty Corner (both in Bernards Township).
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	N/A	N/A	July 8, 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
W of Jersey Cty, NJ (Kearny Town)				
Flood	N/A	N/A	July 16, 2014	No local damage reported
Earthquake, Magnitude 1.2, 4 km SW of Ringwood, NJ (Ringwood Boro)	N/A	N/A	July 28, 2014	No local damage reported
Flash Flood	N/A	N/A	August 21, 2014	Thunderstorms with very heavy rain caused small stream and poor drainage flash flooding in northern Somerset County mainly in Bernards, Bridgewater and Warren Townships.
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	Thunderstorms with heavy downpours. Event precipitation totals included 2.52 inches in Bernards.
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	N/A	N/A	August 14, 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
km N of Bernardsville, NJ (Bernardsville Boro)				
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	All but four of NJ's 21 counties were declared during this event. Over \$73 million of FEMA Public Assistance grant dollars were obligated. Record snowfall occurred across most of the state. In Somerset County, snowfall totals included 30.0 inches in Bernards.
Earthquake, Magnitude 1.1, 1.1 km NW of Butler, NJ (Bloomingdale Boro)	N/A	N/A	February 19, 2016	No local damage reported
Flash Flood	N/A	N/A	February 24, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	April 2, 2016	No local damage reported
Earthquake, Magnitude 0.8, 4.4 km N of Butler, NJ (Bloomingdale Boro)	N/A	N/A	May 27, 2016	No local damage reported
Lightning	N/A	N/A	June 8, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	June 8, 2016	No local damage reported
Lightning	N/A	N/A	June 28, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	June 28, 2016	No local damage reported
Earthquake, Magnitude 1.1, 1 km NW of Butler, NJ (Butler Boro)	N/A	N/A	July 4, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 8, 2016	No local damage reported
Flood	N/A	N/A	July 8, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	July 18, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	July 25, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	July 25, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	July 25, 2016	No local damage reported
Flood	N/A	N/A	July 25, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 30, 2016	No local damage reported

Natural Hazard Event History (2014 to present)				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Flash Flood	N/A	N/A	July 31, 2016	No local damage reported
Earthquake, Magnitude 0.8, 2.2 km SW of Clifton, NJ (Bloomfield Twp)	N/A	N/A	July 31, 2016	No local damage reported
Earthquake, Magnitude 1.0, 2 km N of Wanaque, NJ (Wanaque Boro)	N/A	N/A	August 9, 2016	No local damage reported
Earthquake, Magnitude 0.5, 1 km N of Butler, NJ (Bloomingdale Boro)	N/A	N/A	August 9, 2016	No local damage reported
Earthquake, Magnitude 0.6, 5 km NE of Wanaque, NJ (Ringwood Boro)	N/A	N/A	September 20, 2016	No local damage reported
Earthquake, Magnitude 1.5, 2.6 km W of Bellmar, NJ (Westville Boro)	N/A	N/A	November 6, 2016	No local damage reported
Earthquake, Magnitude 2.0, 16.3 km E of Highlands, NJ (Middletown Twp)	N/A	N/A	November 6, 2016	No local damage reported
Earthquake, Magnitude 1.31, 1.4 km S Morris Plains, NJ (Morris Plains Boro)	N/A	N/A	March 25, 2017	No local damage reported
Flood	N/A	N/A	March 31, 2017	No local damage reported
Hail	N/A	N/A	May 14, 2017	No local damage reported
Hail	N/A	N/A	May 31, 2017	No local damage reported
Flood	N/A	N/A	June 24, 2017	No local damage reported
Flood	N/A	N/A	July 22, 2017	No local damage reported
Flood	N/A	N/A	August 22, 2017	No local damage reported
Flood	N/A	N/A	August 22, 2017	No local damage reported
Heavy Rain	N/A	N/A	August 23, 2017	No local damage reported
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,	N/A	N/A	September 30, 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
Magnitude 0.98, 2.7 km SW of Morris Plains, NJ (Morris Twp)				
Flood	N/A	N/A	October 29, 2017	No local damage reported
Earthquake, Magnitude 1.38, 3.5 km NW of Keansburg, NJ (Keansburg Boro)	N/A	N/A	November 8, 2017	No local damage reported
Severe Winter Storm and Snowstorm (Blizzard)	DR-4368	Yes	March 6, 2018	Although all portions of the county experienced significant snowfall from this event, the higher amounts (around one and one half feet) occurred in the eastern sections of the county closer to the off shore low pressure system. Thundersnow also occurred in a few locations.

Note:

DR = Major Disaster Declaration

EM = Emergency Declaration

IA = Individual Assistance is eligible for the declaration.

N/A = Not applicable

PA = Public Assistance is eligible for the declaration.

9.3.4 NATURAL HAZARD RISK/VULNERABILITY RISK RANKING

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

Natural Hazard Risk/Vulnerability Risk Ranking				
Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{a, c}	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking ^b
Flood	1% Annual Chance: \$14,000,000 0.2% Annual Chance: \$30,300,000	Frequent	18	Medium
Severe Storm	100-Year MRP: \$2,886,461 500-Year MRP: \$15,291,184 Annualized Loss: \$144,366	Frequent	39	High
Severe Winter Storm	1% of GBS: \$40,437,730 5% of GBS: \$202,188,650	Frequent	27	Medium
Earthquake	500-Year MRP: \$7,179,610 2,500-Year MRP: \$105,204,767 Annualized Loss: \$108,482	Occasional	12	Low
Drought	Not available	Occasional	20	Medium
Extreme Temperature	Not available	Frequent	18	Medium
Wildfire	Not available	Occasional	32	High

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.

9.3.5 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.

9.3.5.1 Legal and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Township of Bernards. The Township reviewed its responses from the 2014 HMP and has revised accordingly as part of this latest plan update.

Legal and Regulatory Capability			
Regulatory Tools (Codes, Ordinances, Plans)	Do you have this? (Y or N)	Enforcement Authority	Code Citation (Section, Paragraph, Page Number, Date of Adoption)
1) Building Code	Y	Township Construction Official; Township Committee	International Building Code, 2015 NJAC 5:24-3,14
2) Zoning Ordinance	Y	Twp. Zoning Officer	General Ordinances, Ch. 21; Various
3) Subdivision Ordinance	Y	Twp. Zoning Officer, Planning Board	General Ordinances, Ch. 21; Various
4) NFIP Flood Damage Prevention Ordinance	Y	Township Engineer	Flood Damage Prevention Ordinance; 8/07
4a) Cumulative Substantial Damages	-	-	-
4b) Freeboard	-	-	-
5) Growth Management	Y	Planning Board, Zoning Board of Adjustment	Municipal Master Plan; 4/10
6) Floodplain Management / Basin Plan	Y	Township Engineer	Flood Damage Prevention Ordinance; 8/07
7) Stormwater Management Plan/Ordinance	Y	Zoning Enforcement Officer	General Ordinances Ch. 17; Various
8) Comprehensive Plan / Master Plan/ General Plan	Y	Planning Board	Municipal Master Plan; 4/10

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)
9) Capital Improvements Plan	Y	Local Finance Board, Director, Division of Local Government Services	Municipal Master Plan; 4/10
10) Site Plan Review Requirements	Y	Planning Board or Board of Adjustment	Zoning Ordinances; Construction Code; Various
11) Open Space Plan	Y	Planning Board or Board of Adjustment	Municipal Ordinance; Various
12) Stream Corridor Management Plan	Y	Local Finance Board, Director, Division of Local Government Services	Municipal Master Plan; 4/10
13) Watershed Management or Protection Plan	Y	Zoning Enforcement Officer	Stormwater Management Plan; 3/05
14) Economic Development Plan	-	-	-
15) Comprehensive Emergency Management Plan	Y	OEM Coordinator	Municipal EOP; 8/16
16) Emergency Response Plan	Y	OEM Coordinator	Municipal EOP; 8/16
17) Post-Disaster Recovery Plan	Y	OEM Coordinator	Municipal EOP; 8/16
18) Post-Disaster Recovery Ordinance	-	-	-
19) Real Estate Disclosure Requirement	-	-	-
20) Other (Special Purpose Ordinances such as critical or sensitive areas)	-	-	-

9.3.5.2 Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Bernards. The Township reviewed its responses from the 2014 HMP and has revised accordingly as part of this latest plan update.

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

9.3.5.3 Fiscal Capability

The table below summarizes financial resources available to the Township of Bernards. The Township reviewed its responses from the 2014 HMP and has revised accordingly as part of this latest plan update.

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

9.2.5.4 Overall Capabilities

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

Overall legal and regulatory capability to implement hazard mitigation strategies	Overall technical capability to implement hazard mitigation strategies	Overall fiscal capability to implement hazard mitigation strategies	Overall administrative capability to implement hazard mitigation strategies	Community's willingness to enact policies and programs that reduce hazard vulnerabilities
High	High	Low	Moderate	Moderate
How these capabilities can be expand and/or improved to reduce risk				
The main obstacle is the Township's ability to allocate funds in order to initiate mitigation projects.				

9.3.5.5 Community Classifications

The table below summarizes classifications for community program available to the Township of Bernards.

Community Classifications		
Program	Classification	Date Classified
Community Rating System (CRS)	7	05/01/2017
Building Code Effectiveness Grading Schedule (BCEGS)	-	-
Public Protection	-	-
Storm Ready	-	-
Firewise	-	-

Notes:

- = Unavailable

N/A = Not applicable

NP = Not participating

* CRS Ranking as of October 2017

The classifications listed above relate to the Township of Bernards' 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

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- 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/>

9.3.6 MITIGATION STRATEGY

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

9.3.6.1 Past Mitigation Actions/Status

The status of all 2014 HMP initiatives was evaluated by the Township of Bedminster 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	
BN1 (BN6)	Retrofit the municipal building with a generator to enable it to be a shelter, warming station, charging center, and congregation area during a crisis for the public. It will also ensure the continuity of municipal functions such as tax collection, health department, and fire officials.	H	All	Bernards Township Emergency Management	X				Waiting for FEMA reimbursement		X	Project is completed.
BN2 (BN5)	Support retrofitting and/or purchasing vulnerable critical facilities and structures located in hazard prone areas, including but not limited to: Lord Stirling Schools, Inc.; Liberty Corner First Aid Squad, Madisonville Pump Station, Harrison Brook STP, Fellowship Village	M	Flood	Bernards Township Emergency Management; Bernards Township Engineering				X	Lack of interest in property owners to sell/re-locate		X	Lack of interest in property owners to sell/re-locate
BN3 (BN7)	Continue participation CRS program. Maintain current rating, continue to evaluate cost-effective opportunities to lower the current rating, as new programs become available.	M	Flood	Bernards Township Emergency Management; Bernards Township Engineering			X		CRS participation is an ongoing activity involving regular municipal engagement as a condition of remaining in good standing.		X	Existing capability; Bernards is an active participant in the CRS program.

BN4	<p>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:</p> <ul style="list-style-type: none"> · 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	CRS participation is an ongoing activity involving regular municipal engagement as a condition of remaining in good standing.		X	Existing capability; Bernards is an active participant in the CRS program.
BN5	Improve communication systems.	Medium	All Hazards	Municipality with support from County, NJOEM and FEMA				X	HMPG grants not permissible to purchase hardware		X	This is more of a response activity, as opposed to hazard mitigation, so is being eliminated from our mitigation strategy in the hazard mitigation plan

BN6	Develop programs/procedures to capture and archive loss data from events. Examples include: <ul style="list-style-type: none"> · Record location and length of roadway closures; · Develop a database of residential and commercial property damage, including permit history for such repairs; · High water marks, perhaps painting phone poles with high water marks and or regulatory Base Flood Elevations (BFEs). 	Medium	All Hazards	Municipality with support from County, NJOEM and FEMA				X	The Township has reconsidered this action, and now prefers to focus its limited resources on true mitigation initiatives, as opposed to data collection.		X	The Township has reconsidered this action, and now prefers to focus its limited resources on true mitigation initiatives, as opposed to data collection.
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BN7	<p>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:</p> <ul style="list-style-type: none"> - 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	Township remains willing to participate, pending State/County initiative	X	Township remains willing to participate, pending State/County initiative
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BN8 (BN3)	Support ongoing updates of Comprehensive Emergency Management Plans	High	All Hazards	Municipality with support from County Emergency Management			X		This is an ongoing activity involving regular municipal engagement as a condition of remaining in good standing.		X	Existing capability
BN9 (BN1, BN2)	Maintain and enhance mutual aid agreements with neighboring communities, including Bernardsville, Bedminster, Far Hills, Bridgewater, Warren, Long Hill, Harding as well as Somerset County. for continuity of operations. Currently, the Township's COOP plan is a document which is regularly updated, but has not been adopted by ordinance or resolution.	High	All Hazards	Municipality partnering with the County and surrounding communities: Bernardsville Borough, Bedminster Twp., Far Hills Borough, Bridgewater Twp., Warren, Long Hill Twp., Harding Twp.; NJOEM, FEMA			X		This is an ongoing activity involving regular municipal engagement.		X	Existing capability.
BN10	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	Participating in the Somerset County OEM rollout of the Orion Damage Assessment software.		X	Existing
BN11	Work with regional agencies (i.e. County and NJOEM) to help develop damage assessment capabilities at the local level through such things as training programs, certification of qualified individuals (e.g. code officials, floodplain managers, engineers).	Medium	All Hazards	Municipality with support from County, NJOEM and FEMA			X		Participating in the Somerset County OEM rollout of the Orion Damage Assessment software.		X	Existing

BN12 (BN4)	Continue to support the implementation, monitoring, maintenance, and updating of this Plan (through participation in the 5 year Plan Update), as defined in Section 7.0	High	All Hazards	Municipality with support from Planning Partners, County Planning, NJOEM, FEMA			X		This is an ongoing activity involving regular municipal engagement as a condition of remaining in good standing.		X	Existing capability.
BN13 (BN8)	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. Further, continue to meet and/or exceed the minimum NFIP standards and criteria through the following NFIP-related continued compliance actions identified as Initiatives below.	High	Flood, Severe Storm	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from NJOEM, FEMA			X		This is an ongoing activity involving regular municipal engagement as a condition of remaining in good standing.		X	Existing capability.
BN14	Obtain and archive elevation certificates	High	Flood, Severe Storm	NFIP Floodplain Administrator			X		This is an ongoing activity involving regular municipal engagement as a condition of remaining in good standing.		X	Existing capability
BN15	Promote the participation of Floodplain Administrators within the planning process and other activities.	Medium	Flood	Municipality with support from County, NJOEM and FEMA			X		This is an ongoing activity involving regular municipal engagement as a condition of remaining in good standing.		X	Existing capability

BN16	Enhance the County/community resilience to severe storms (incl. severe winter storms) by joining the NOAA "Storm Ready" program and supporting communities in joining the program.	Medium	Severe Storm	Municipality with support from County, NJOEM and FEMA				X	Not feasible for township to implement at this time		X	Not feasible for township to implement at this time
BN17	Implement permit fee waivers for installation of backup power for private property.	H	Severe Storm	Municipal Council				X	Not feasible for township to implement		X	Not feasible for township to implement
BN18	Provide public education and outreach on proper installation and/or use of backup power	H	Severe Storm	Municipal Clerk				X	Form exists on Township website guiding the public on the proper installation techniques and required permits		x	Existing capability
BN19	Implement, review, and enforce municipal policies and programs to prevent trees from threatening lives and impacting power availability/interruption.	H	Severe Storm	Municipal Code Enforcement				X	Need to work with Township code enforcement and Shade Tree Commission to assess feasibility	x		Carrying forward with no changes
BN20	In accordance with the Twp. Master Plan, · Conduct a water audit in support of implementation of bio-filtration systems (bioretention systems, rain gardens, and constructed wetlands). · Identify parking lots, roads, or other parcels where small areas of curbing can be eliminated and bio-filtration systems can be constructed on the other side to treat the stormwater runoff. · Identify and protect environmentally sensitive areas within the Township, including moderate and steep slopes, wetlands, flood plains, water bodies, ridge lines and areas of significant vegetation	L	All	Bernards Township Emergency Management				X	Potential for this to be implemented in the future	x		Carrying forward with no changes

9.3.6.2 Hazard Vulnerabilities Identified

It is estimated that in the Township of Bernards, 131 residents live within the 1% annual chance flood area (NFIP Special Flood Hazard Area). \$1,607,912,000 (24.6 percent) of the municipality's general building stock replacement cost value (structure and contents) is located within the 1% annual chance flood area.

There are 103 NFIP policies in the community and there are 34 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, \$14,000,000 (0.21%) of the municipality's general building stock replacement cost value (structure and contents) will be damaged, 819 households may be displaced, 647 people may seek short-term sheltering, and an estimated 182 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)
Bernards (T)	103	61	\$828,488	7	0	34	5	64

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

HAZUS-MH critical facility damage estimates for the Township of Bernards 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⁾
Lord Stirling Schools, Inc.	Bernards (T)	School	x	x	9.0	62.4	480.0	10.4	68.7	630
Liberty Corner First Aid Squad	Bernards (T)	Fire	x	x						
Madisonville PS	Bernards (T)	WW	x	x						
Harrison Brook STP	Bernards (T)	WW	x	x						
Fellowship Village	Bernards (T)	Senior	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 available
- Twp = 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 of this plan for additional vulnerability information relevant to this jurisdiction.

9.3.7 PROPOSED HAZARD MITIGATION INITIATIVES

The list below represents a summary of community mitigation initiatives developed in 2018 as part of the most recent plan update. The Township of Bedminster has carried forward all but one of its 2014 HMP initiatives, and has identified no changes in local priorities since the last version of the plan in 2014. Detailed Action Worksheets are included only for NEW Mitigation Actions/Projects. Some of the identified mitigation initiatives in the table below are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Please note that the 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 #	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
BN1 [BN7]	Enhanced 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: (1) Support the performance of enhanced risk and vulnerability assessments for hazards of concern; and (2) 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	Both	All Hazards	3, 8	Hazard Mitigation Plan Coordinator	Medium-High	Medium-High	FEMA Mitigation Grant Programs with local match	Long Term DOF	Medium	Mitigation Action/Project, PR	Not initiated. Township remains willing to participate, pending State/County initiative. Carried forward with no changes.

BN2 [BN19]	Tree Management to Limit Impact on Power Grid	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, 6, 7	Municipal Code Enforcement	Medium	Low	Municipal Budget	Short	High	Mitigation Action/Project, PR	Ongoing; need to work further with Township code enforcement and Shade Tree Commission. Carried forward with no changes.
BN3 [BN20]	Stormwater and Runoff Management	In accordance with the Twp. Master Plan: <ul style="list-style-type: none"> • Conduct a water audit in support of implementation of bio-filtration systems (bioretention systems, rain gardens, and constructed wetlands). • Identify parking lots, roads, or other parcels where small areas of curbing can be eliminated and bio-filtration systems can be constructed on the other side to treat the stormwater runoff. • Identify and protect environmentally sensitive areas within the Township, including moderate and steep slopes, wetlands, flood plains, water bodies, ridge lines and areas of significant vegetation 	Carried Forward	Both	All	8, 10	Bernards Township Emergency Management	Low	Medium	HMPG, Capital	Long	Low	Mitigation Action/Project, PR, ES	Ongoing; carried forward with no changes.

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

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

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.

- 2. PP = storm water management regulations. 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.

9.3.8 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 HMP, 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)
BN1 [BN7]	2	M	M	Y	N	Y	M
BN2 [BN19]	3	M	L	Y	N	Y	H
BN3 [BN20]	2	M	M	Y	Y	Y	L

Notes:

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

9.3.8.1 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 an 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

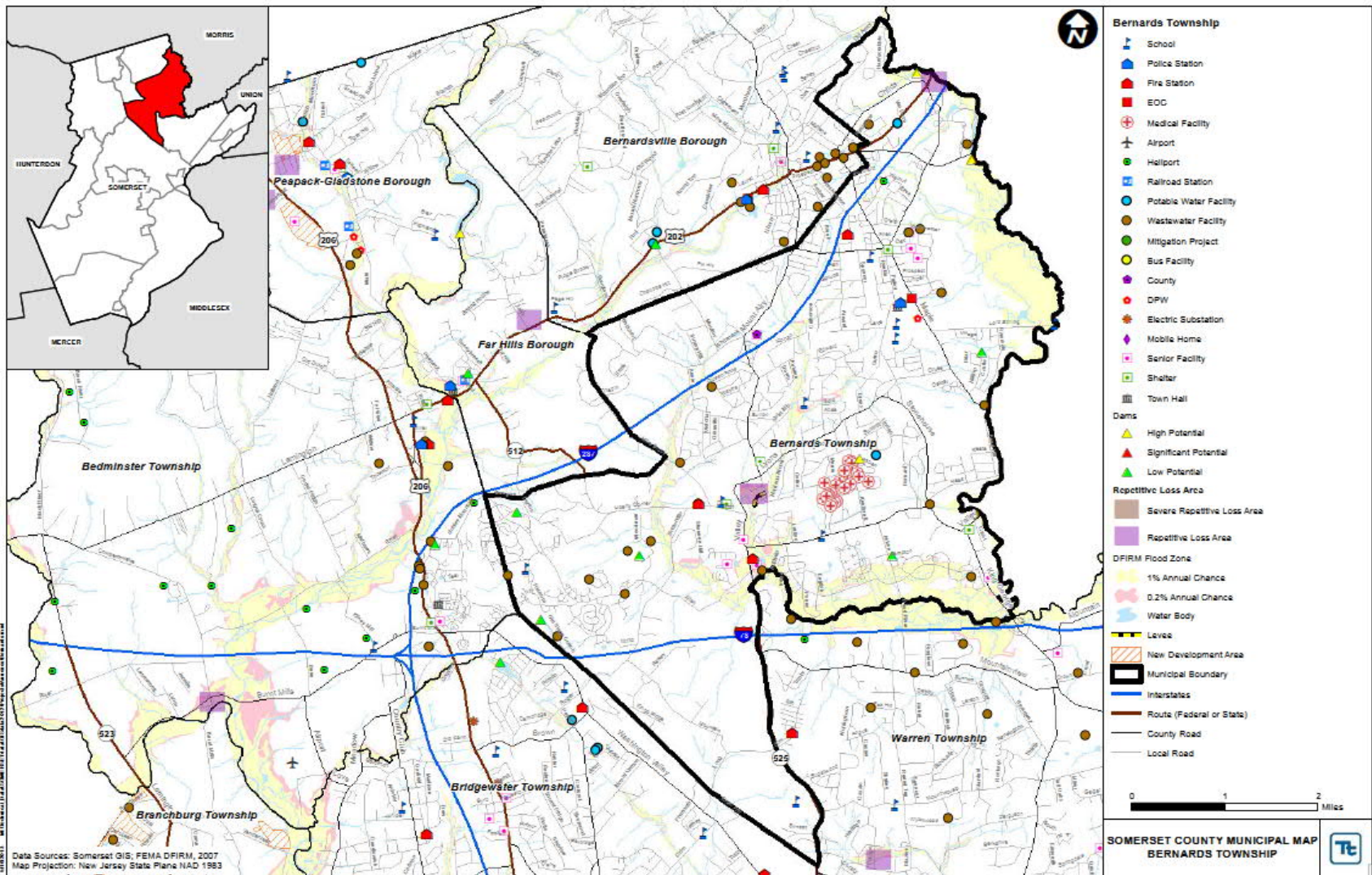
Was prioritization of initiatives based on parameters other than those stated above? Not applicable

9.3.9 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

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

9.3.10 HAZARD AREA EXTENT AND LOCATION

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



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

It is the intention of Township of Bernards 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 the prior plan maintenance cycles, and those that will be incorporated into municipal procedures during the upcoming plan maintenance cycle (2019-2023).

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 (2019-2023)
Operating Budget When constructing upcoming budgets, hazard mitigation actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the hazard mitigation goals and objectives.	X		X	
Capital Improvement Budget When constructing upcoming budgets, hazard mitigation actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the hazard mitigation goals and objectives.	X		X	
Human Resource Manual Employee job descriptions may contain hazard mitigation actions.		X		X
Building and Zoning Ordinances Prior to land use, zoning changes, or development permitting, the municipality will review the hazard mitigation plan and other hazard analyses to ensure consistent and compatible land use.	X		X	
Comprehensive Land Use Plan When applicable, the municipality will incorporate hazard mitigation actions in the development and extent of the regulations.	X		X	
Grant Applications Data and maps will be used as supporting documentation in grant applications.		X		X
Municipal Ordinances When updating municipal ordinances, hazard mitigation will be a priority.	X		X	
Fire Plan The Hazard Mitigation Plan will be used as a resource for the development of future Fire Plans.		X		X
Capital Improvement Planning The municipality will establish a protocol to review current and future projects for hazard vulnerability. The municipality will incorporate hazard-resistant construction standards into the design and location of projects.	X		X	
Day-to-Day Operations The municipality will incorporate hazard mitigation actions in daily operations and all	X		X	

Status of Incorporation of Mitigation Planning into Existing and Future Planning Mechanisms				
Planning Mechanisms	Reported Utilization (2009-2014)	Planned Utilization (2014-2019)	Reported Utilization (2014-2019)	Planned Utilization (2019-2023)
projects.				
Local School Service Projects The municipality will work closely with the local school district and assist with community service projects for the service organizations. Several of the municipality's hazard mitigation actions can be implemented as a joint project with the school district.		X		X
Municipal Budget Adopted annually, the municipality will look at mitigation actions when allocating funding.	X		X	
Economic Development The local economic development group will take into account information regarding identified hazard areas when assisting new businesses in finding a location.		X		X

9.3.12 ADDITIONAL COMMENTS

There are no additional comments at this time.

9.3.12 NFIP ADMINISTRATOR INPUT

The Township provided the following NFIP Administrator Input in 2018, for inclusion in the 2019 HMP.

Adoption Date of your Current Floodplain Management Ordinance	Date of Entry into NFIP ¹	Position or Title of Your Jurisdiction's Designated Floodplain Manager/Administrator (may also be called NFIP Coordinator)		Is this person is a Certified Floodplain Manager?	Is floodplain management an auxiliary function?	Is your community in good standing with the NFIP?	
8/14/2007	9/1/1978	Municipal Engineer		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Provide an explanation of NFIP administration services (i.e., permit review, GIS, education or outreach, inspections, engineering capability, etc.):							
Permit review, construction oversight/inspections, GIS, maintain file of building elevation certificates, assist/advise the public on NFIP program							
Describe barriers to running an effective NFIP program in the community (if applicable):							
High land value precludes the removal of buildings from the floodplain							
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?
2016	<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 * Class __7__	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
*Describe any outstanding compliance issues (i.e., current violations):							

Provide an explanation of your local floodplain permitting process:								
All construction permit applications are reviewed for compliance to the flood plain ordinance								
Does your community intend to continue floodplain identification and mapping services including any local requests for map updates?	Does your community intend to initiate/continue the buyouts of repetitive loss properties?	Does your community intend to commit staff or resources to improve local mapping or code administration in the future?	Does your community intend to provide local outreach to promote the sale of flood insurance?	Does your community intend to participate in RiskMAP meetings and planning initiatives?	Does your community intend to continue to implement structural improvements to mitigate against flooding - culverts, drainage basins, etc.?	Does your community intend to continue to implement home improvement programs designed to minimize basement flooding?	Does your community intend to continue to implement roadway improvements to reduce damage from future flooding events?	Does your community intend to implement plans and programs in coordination with a local or regional drainage/sewer authority?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does your community intend to adopt the new FEMA Advisory Base Flood Elevations?	As Floodplain Manager, did you (or your predecessor at the time) actively participate in the development of the initial Hazard Mitigation Plan?		As Floodplain Manager, are you actively participating in the development of this Hazard Mitigation Plan Update?		Have there been any changes to your community's local floodplain management program since the last version of the plan in 2009?			
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes * <input checked="" type="checkbox"/> No			
* If you answered "yes", that there have been changes to your local program since 2009, please describe:								
Provide a description of your community assistance and monitoring activities:								
All construction is monitored. Engineering Dept. assists and advises property owners with questions about NFIP, compliance, construction, etc.								
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			