

9.36 Township of Tabernacle

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

9.36.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Hazard Mitigation Plan Points of Contact	
Primary Point of Contact	Alternate Point of Contact
Name: William C. Lowe Title: Emergency Management Coordinator Address: 163 Carranza Rd., Tabernacle, NJ 08088 Phone Number: (609) 234-3714 Fax Number: (609) 268-7430 E-mail Address: wlowe@townshipoftabernacle-nj.gov	Name: Douglas Cramer Title: Township Administrator Address: 163 Carranza Rd., Tabernacle, NJ 08088 Phone Number: (609) 268-1220 Fax Number: (609) 268-7430 E-mail Address: dcramer@townshipoftabernacle-nj.gov

9.36.2 PROFILE

9.36.2.1 Population

The population of the Township of Tabernacle is estimated to be 6,949, based on information gathered during the 2010 U.S. Census.

9.36.2.2 Location

Tabernacle Township is a Township in Burlington County, New Jersey. As of the 2010 US Census, the township population was 6,949. Tabernacle was incorporated as a township by an Act of the New Jersey Legislature on March 22, 1901, from portions of Shamong, Southampton and Woodland Townships. According to the United States Census Bureau, the township has a total area of 49.614 square miles (128.501 km²), of which, 49.120 square miles (127.221 km²) of it is land and 0.494 square miles (1.280 km²) of it (1.00%) is water.

9.36.2.3 Brief History

The modern-day township sprang from the Village of Tabernacle, named for the log-cabin Tabernacle in the Wilderness Church, established in 1778 by Presbyterian minister John Brainerd. Brainerd was a missionary who sought to convert the indigenous Lenni-Lenape Indians to Christianity.

From its founding by Brainerd through the entire 19th century, the township was part of Southampton Township. Its two most historically significant buildings, Nixon's General Store (1850) and the Junior Order of Mechanics Building (1875), were erected during this era. The latter became the town hall in 1966.

In 1901, Tabernacle was chartered as its own municipality.¹

¹ http://www.courierpostonline.com/apps/pbcs.dll/article?AID=2006610190363&nlick_check=1



9.36.2.4 Governing Body Format

The Township of Tabernacle is governed under the Township form of government with a five-member Township Committee. The Township Committee is elected directly by the voters in partisan elections to serve three-year terms of office on a staggered basis, with one or two seats coming up for election each. At an annual reorganization meeting, the Township Committee selects one of its members to serve as Mayor and another as Deputy Mayor.

Under this form, all legislative powers are concentrated in the committee. The committee also has all executive powers not placed in the mayor either by general law or the revised Township act. Additionally, all municipalities under the traditional form may appoint a municipal administrator and “delegate to him all or a portion of the executive responsibilities of the municipality.”²

9.36.2.5 Growth/Development Trends

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

9.36.3 NATURAL HAZARD EVENT HISTORY SINCE 2007

Burlington County has a history of natural hazard events as detailed in Volume I, 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 from 2008 to the present 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 2008, refer to Volume I, Section 5.0 of this plan.

Natural Hazard Event History				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Severe Storms and Inland/Coastal Flooding (also identified as a Nor'Easter)	DR-1694	Yes	April 14-20, 2007	Minor damage incurred to the Township with minor power outage and Public Works employee overtime.
Fire	FM-2695	Yes	May 15-19, 2007	None
Winter Storm	DR-1873	Yes	December 19-2009	Minor damage incurred to the Township with minor power outages and Public Works employee overtime. Required sc closing of roads due to snow.
Winter Storm	DR-1889	Yes	February 5-6, 2010	Minor damage incurred to the Township with minor power outages and Public Works employee overtime. Required sc closing of roads due to snow.

² http://www.njslom.org/magart0307_p14.html

Natural Hazard Event History				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Severe Storms, Flooding	DR-1897	Yes	March 12-April 15, 2010	Minor damage incurred to the Township with minor power outages and Public Works employee overtime.
Winter Storm	DR-1954	Yes	December 26-27, 2010	Minor damage incurred to the Township with minor power outages and Public Works employee overtime. Required some closing of roads due to snow.
Tropical Storm/Hurricane Irene	DR-4021/ EM-3332	Yes	August 26-September 5, 2011	Minor damage incurred to the Township with minor power outages and Public Works employee overtime.
South Park Fire (See note below)		Yes/Township Designated	April, 2012	Minor damage incurred to the Township. 1000+ acres of forest burned. Fire was made more dangerous due to the large number of dead standing trees as a result of Gypsy Moth devastation
Hurricane Sandy	DR-4086	Yes	October 26-November 8, 2012	Minor damage incurred to the Township with minor power outages and Public Works employee overtime as a result of Hurricane Sandy. The following Nor'easter caused efforts in debris removal.

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.

Note Regarding Fire History:

Since forest fire is the major natural hazard threat to Tabernacle, a series of relevant conclusions can be drawn from a review of past fire history in the Township. Forest fires occur seasonally and primarily tend to occur between the beginning of April and the beginning of June but two of the largest fires recorded in Tabernacle Township began in July.

These are the periods when the moisture levels of the forest canopy tend to be lowest, the forest canopy is bare or just beginning to leaf out so the forest floor dries out quickly, ambient temperatures are elevated, humidity levels tend to be low, and winds tend to be gusty with cold front passages - characteristics that would serve to rapidly spread any fires that are ignited.

Acres Burned: Beginning in 1933 through the 1960's large wildfires (>100 acres) burned frequently in Tabernacle Township with at least 1 extremely large fire (>1000 acres) each decade. After 1968 large wildfires were more sporadic and smaller with the exception of the 1982 fire of 255 acres.

1. The 1920's saw 2 large wildfires that burned a total of 1,764 acres.
2. The 1930's saw 3 large wildfires that burned 4,082 acres.
3. The 1940's saw 2 large wildfires that burned 2,618 acres.
4. The 1950's saw 1 large wildfire that burned 20,788 acres.
5. 1980 had 1 large wildfire that burned 1,967 acres.



Ignition Frequency: The number of forest fires in Tabernacle of all sizes since 1954 have been steadily declining. This trend can generally be attributed to increased efforts to raise fire safety awareness. However, it should also be pointed out that almost all wildfires (estimates are as high as 99%) that occur within the project area, and elsewhere, are ignited as a result of human activity, underscoring the need for sustained education efforts. These fires may have been smaller in size but have threatened residences with the increased development in Tabernacle Township since the 1980's.



9.36.4 NATURAL HAZARD RISK/VULNERABILITY RISK RANKING

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

Natural Hazard Risk/Vulnerability Risk Ranking				
Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking
Wildfire	(See page 9.36-3) Major Hazard in Tabernacle impacts all homes, farms and businesses potential for devastating loss	100%	HIGH	
Winter Storm	Potential for losses in power and damage to houses and businesses. Damage to trees. At least one or two sever winter storms a year	100%	HIGH	
Severe Storms	Heavy rain and extreme winds that may or may not be related to a winter storm. Damage to trees will result in loss of power across the township. Loss of power relates to the loss of water to the residents of the town as all depend upon private wells for water	100%	HIGH	
Drought	Tabernacle resides on a large underground aquifer. Drought impacts upon the private wells of residents and the ability of farms to irrigate. Drought impacts the forested areas of the township increasing the potential for wild fires. Can occur at any time in the year with August the primary risk period.	50%	HIGH	
Flood	Excessive rain with damage due to winds. Tabernacle will have minor flooding with quick absorption	15%	LOW	
Earthquake	Might result in power loss die to falling trees and power poles. Minor threat	10 %	LOW	
Landslides	No threat	0	NONE	N
Coastal Erosion	No threat	0	NONE	N

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 Burlington County.
- High = Total hazard priority risk ranking score of 31 and above
Medium = Total hazard priority risk ranking of 20-30
Low = Total hazard risk ranking below 20
- 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.



9.36.5 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
- Community classification.

Officials from the Township of Tabernacle indicated that the municipality has high planning, regulatory, administrative, technical, and fiscal capability; high community resiliency and community political capability; and a very willing political capability to enact policies or programs to reduce hazard vulnerabilities in the community.

9.36.5.1 Legal and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Township of Tabernacle.

Tool / Program	Status			Code Citation Section, Paragraph, Page Number	Dept./Agency Responsible	Effect on Loss Reduction: + Support O Neutral - Hinder	Change Since Last Plan: + Positive - Negative	Comments
	In Place	Date Adopted or Updated	Under Develop- ment					
1) Building Code	yes	annually			Construction Office	+	+	Dictated by state
2) Zoning Ordinance	yes	annually				+	+	Pinelands Comprehensive Management Plan
3) Subdivision Ordinance	yes							Part of Zoning Ordinance
4) NFIP Flood Damage Prevention Ordinance	N/A							Tabernacle is not within a flood plain
4a) Cumulative Substantial Damages	N/A							
4b) Freeboard	N/A							
5) Growth Management						+	+	Pinelands Comprehensive Management Plan
6) Floodplain Management / Basin Plan	N/A							
7) Stormwater Management Plan/Ordinance	yes	2007		yes	Township Administrator	+	+	

SECTION 9.36: TOWNSHIP OF TABERNACLE

Tool / Program	Status		Code Citation Section, Paragraph, Page Number	Dept./Agency Responsible	Effect on Loss Reduction: + Support 0 Neutral - Hinder	Change Since Last Plan: + Positive - Negative	Comments
	In Place	Date Adopted or Updated					
8) Master Plan	yes	2012	Ordinance	Zoning Officer	+	+	
9) Capital Improvements Plan	yes	Annual		Township Administrator	0		
10) Site Plan Review Requirements				Zoning Officer	+	+	
11) Open Space Plan	yes		Township Master Plan				
12) Stream Corridor Management Plan	N/A						
13) Watershed Management or Protection Plan	N/A						
14) Economic Development Plan		1999		Administrator			
15) Comprehensive Emergency Management Plan	yes	2012	State Law	OEM Coordinator	+	+	
16) Emergency Response Plan	yes						
17) Post Disaster Recovery Plan	no						
18) Post Disaster Recovery Ordinance	no						
19) Real Estate Disclosure Requirement				state	0		
20) Right-to-Know	yes	annually	State requirement	OEM Coordinator	+	+	



9.36.5.2 Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Tabernacle.

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

9.36.5.3 Fiscal Capability

The table below summarizes financial resources available to the Township of Tabernacle.

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

9.36.5.4 Community Classifications

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

Community Classifications		
Program	Classification	Date Classified
Community Rating System (CRS)		
Building Code Effectiveness Grading Schedule (BCEGS)		
Public Protection	ISO 4	2012
Storm Ready		
Firewise	CWPP	April 2013

Notes:

- = Unavailable
- N/A = Not applicable
- NP = Not participating.

The classifications listed above relate to the Township of Tabernacle'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/>

9.36.6 MITIGATION STRATEGY

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

9.36.6.1 Past Mitigation Actions/Status

The progress of mitigation actions outlined in the 2008 Burlington County Hazard Mitigation Plan is indicated in Section 9.36.7. Actions that are in not yet complete or are ongoing have been carried over to this plan update.

Existing Mitigation Action	Status			Action Update Comments
	No Progress / Unknown	In Progress / Not Yet Complete	Continuous	
Ensure that local comprehensive plans incorporate natural disaster mitigation techniques by requiring a courtesy- review of draft plans by the County Emergency Management Agency.			yes	
Explore the need for hazard zoning and high-risk hazard land use ordinances.			yes	
Organize an annual event / fair for homeowners, builders and county and local jurisdictions that includes sale of NOAA weather radios, dissemination of information brochures about disasters and building retrofits, demonstration of "defensible-space" concept and fire resistant construction materials (for roofs/exterior finishes and inflammable coverings for openings like chimneys and attics) etc.				yes Tabernacle Touch-a-Truck Tabernacle Volunteer Day Fire/EMS Open Houses Tabernacle Memorial Day Events
Develop a storm water management plan that includes subdivision regulations to control run-off; both for flood reduction and to minimize saturated soils on steep slopes that can cause landslides.				yes
Create a mitigation outreach program that helps residents prepare for disasters.				yes
Publish and distribute pamphlets on water conservation techniques and drought management strategies.			yes	yes



SECTION 9.36: TOWNSHIP OF TABERNACLE

Existing Mitigation Action	Status			Action Update Comments
	No Progress/ Unknown	In Progress / Not Yet Complete	Continuous	
In consultation with NJFFS and local Forest Fire wardens, develop mapping of wildland/urban interface areas.			yes	April, 2013
Develop inventory of addresses for route alerting during wildfire emergencies that require public warning and information.			yes	
In consultation with NJFFS and local Forest Fire wardens, review local EOP's for possible wildfire components regarding Fire-Rescue, Alert and Evacuation.			yes	Tabernacle Emergency Operations Plan
Initiate a public outreach program for homeowners.			yes	OEM Ready Tabernacle Preparedness Exercise 2013
Community brush and debris removal and hazard fuels reduction.			yes	Annual mailing from township administration
Firewise landscaping in higher risk areas.			yes	Twice annually and as needed in emergencies
Promote (or purchase, for critical facilities) NOAA weather radios				CWPP
Educate residents about driving in winter storms and handling winter-related health effects			yes	"Reverse 911"



9.36.6.2 Hazard Vulnerabilities Identified

The Township noted hazard areas along the stream crossing at Bread and Cheese Run and the stream crossing at McKendum Creek.

In the Township of Tabernacle, an estimated _____ residents live within the 1% annual chance flood area (NFIP Special Flood Hazard Area). Of the municipality's total land area, _____% is located within the 1% annual chance flood area. A total of \$_____ (____%) of the municipality's general building stock replacement cost value (structure and contents) is located within the 1% annual chance flood area.

The Township of Tabernacle has a total of 150 NFIP policies, 49 of which are located within the 1% annual chance flood area. FEMA has identified 1 Repetitive Loss (RL) property.

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)

Source:

- (1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 2 in April 2012 using the "Comm_Name." These statistics are current as of [_____]. 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 [_____]).
- (3) The policy locations used are based on the latitude and longitude [provided by FEMA Region 2].

HAZUS-MH estimates, [_____]

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

Source: HAZUS-MH 2.1

Notes:

- = No loss (calculated by HAZUS-MH 2.1)
- X = Facility located within the DFIRM boundary.



(1) = HAZUS-MH 2.1 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 2.1 User Manual).

DFIRM =

HAZUS =

NA = Not available

T = Town

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.X.7 PROPOSED HAZARD MITIGATION INITIATIVES

Some of the identified mitigation initiatives in the table below are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Proposed Hazard Mitigation Initiatives												
Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	2008 Action Status
2013-1	<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 mitigation and emergency planning website, and regularly post notices on the County/municipal homepage(s). • Prepare and distribute informational letters to property owners 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 hazards and mitigation strategies, and 	N/A	All Hazards		Tabernacle OEM	Medium	Medium	Municipal Budget, Volunteer	Short Term	High	PE	



SECTION 9.36: TOWNSHIP OF TABERNACLE

Proposed Hazard Mitigation Initiatives												
Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	2008 Action Status
	personal natural hazard risk reduction measures. <ul style="list-style-type: none"> Work with civic and business groups to disseminate hazard mitigation 											
2013-2	Improve communication systems.	N/A	All Hazards		Municipality with support from County, NJOEM and FEMA	Medium	Medium	Municipal Budget	Short	Medium	ES PR	
2013-3	Create/Enhance/Maintain Mutual Aid agreements with neighboring communities for continuity of operations	N/A	All Hazards		Municipality with support from County, NJOEM, FEMA and surrounding communities	Medium	Low	Municipal Budget	Short Term	High	PR, ES	
2013-4	Work with regional agencies (i.e. County and NJOEM) to help develop damage assessment capabilities at the local level to include training and certification programs (e.g. code officials, floodplain managers, engineers).	N/A	All Hazards		Tabernacle OEM; Pinelands Regional CERT	Medium	Medium	Municipal Budget, FEMA HMA and HLS grant programs	Short-Long Term DOF	Medium	PR	
2013-5	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0	New and Existing	All Hazards		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	PR	
2013-6	Enhance Tabernacle resilience to severe storms (incl. severe winter	N/A	Severe Storm		Tabernacle OEM, Public Works, Fire and EMS	Medium	Low	Municipal Budget	Short Term DOF	Medium	PE	



SECTION 9.36: TOWNSHIP OF TABERNACLE

Proposed Hazard Mitigation Initiatives												
Initiative	Mitigation Initiative	Applies to New and/or Existing Structures	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	2008 Action Status
	storms). Join NOAA "Storm Ready" program and supporting communities in joining the program. "StormReady" communities are better prepared to save lives from the onslaught of severe weather through advanced planning, education and awareness. Participation in the NOAA "StormReady" program shall include providing information on the "StormReady" program, facilitating public outreach and awareness programs, and supporting community storm risk reduction activities as appropriate.											
2013-7	Provide public education and outreach on proper installation and/or use of backup power	N/A	Severe Storm		Tabernacle OEM	Medium	Low	Municipal Budget	Short	H	PR	
2013-8	Implement, review, and enforce municipal policies and programs to prevent trees from threatening lives and impacting power availability/interruption..	N/A	Severe Storm		Municipal Code Enforcement Tabernacle OEM, Tabernacle Public Works	Medium	Low	Municipal Budget	Short	H	PR	

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.

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.
- 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.

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 = 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 acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
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 planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
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.



9.36.8.1 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**

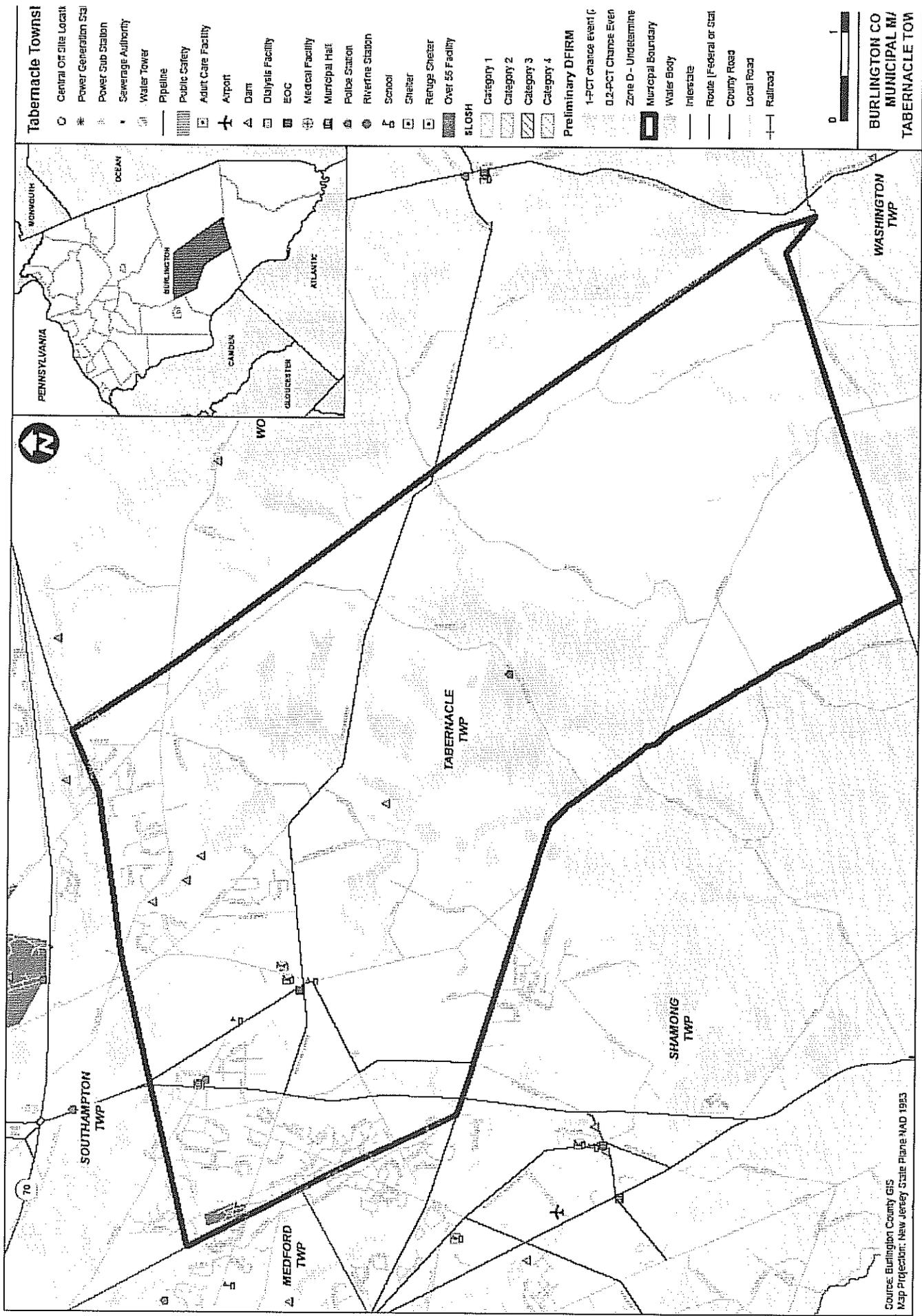
9.36.9 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

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

9.36.10 HAZARD AREA EXTENT AND LOCATION

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

SECTION 9.36: TOWNSHIP OF TABERNACLE



Source: Burlington County GIS
Map Projection: New Jersey State Plane NAD 1983

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

It is the intention of the Township of Tabernacle to incorporate mitigation planning as an integral component of daily municipal operations. The following table contains a list of planning mechanisms that have been or will be incorporated into municipal procedures.

Status of Incorporation of Mitigation Planning Into Existing and Future Planning Mechanisms		
Planning Mechanisms	Has Been Utilized	Will Be Utilized
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.		
Building and Zoning Ordinances A variety of building and zoning regulations are used to restrict the uses of land and establish building specifications. 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 A land use plan is intended to identify land use issues and to make recommendations on how to address these issues. 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
Fire Plan The Hazard Mitigation Plan will be used as a resource for the development of future Fire Plans.		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 projects.	X	X
Local School Service Projects The municipality will work closely with the local school district and assist with community service projects for the service organizations. Several of the municipality's hazard mitigation actions can be implemented as a joint project with the school district.		X
Municipal Budget Adopted annually, the municipality will look at mitigation actions when allocating funding.		X
Economic Development The local economic development group will take into account information regarding identified hazard areas when assisting new businesses in finding a location.		X



9.36.12 ADDITIONAL COMMENTS

There are no additional comments at this time.