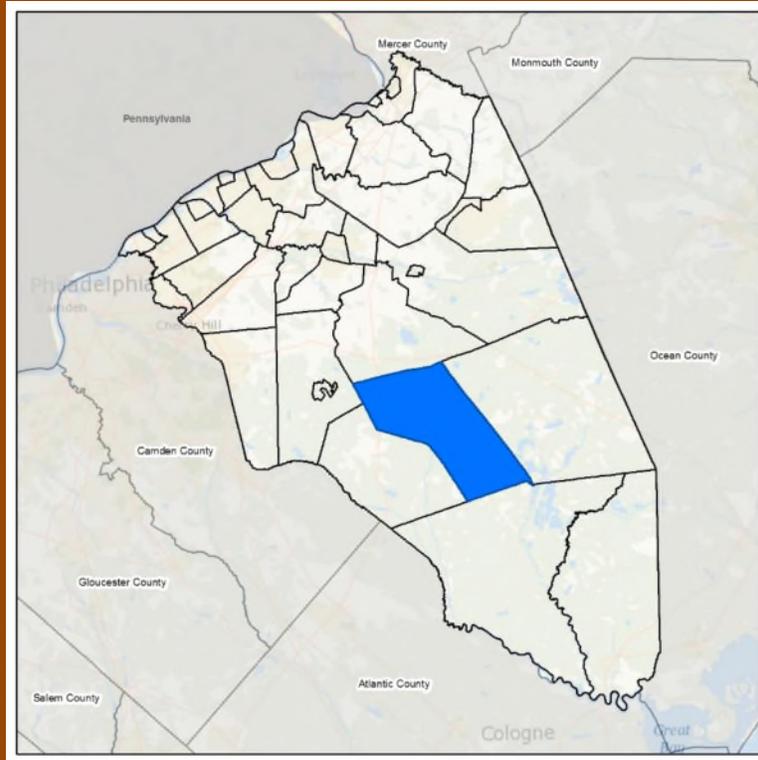




# MUNICIPAL ANNEX | Tabernacle Township



 <p>Total Population (2010 Census)</p> <p><b>6,949</b></p>	 <p>Total Number of Buildings</p> <p><b>4,452</b></p>	 <p>Number of National Flood Insurance Program (NFIP) Policies and Percent in Regulatory Floodplain</p> <p><b>13 (8%)</b></p>	 <p>Total Agricultural Land (square miles)</p> <p><b>4.5</b></p>
 <p>Total Land (square miles)</p> <p><b>49.6</b></p>	<p>Percent of Buildings in Regulatory Floodplain</p> <p><b>1%</b></p>	<p>Number of Repetitive Loss (RL/SRL) Properties</p> <p><b>0 / 0</b></p>	 <p>Percent of Land on Steep Slopes (&gt;15%)</p> <p><b>0.4%</b></p>
 <p>Proposed Project Types</p> <p>Structure and Infrastructure Projects, Education and Awareness Programs, and Local Plans and Regulations</p>		 <p>Mitigation Focus</p> <p>Multi-Hazard</p>	



## 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

The following individuals have been identified as the hazard mitigation plan’s primary and alternate points of contact.

Primary Point of Contact	Alternate Point of Contact
Col. William C. Lowe, OEM Coordinator 163 Carranza Road, Tabernacle, NJ 08088 609.234.3714 clowe@townshipoftabernacle-nj.gov	Douglas Cramer, CPWM, Township Administrator 163 Carranza Road, Tabernacle, NJ 08088 609.268.1220 dcramer@townshipoftabernacle-nj.gov

### 9.36.2 Municipal Profile

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.<sup>1</sup>

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.”<sup>2</sup>

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.

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

<sup>1</sup> [http://www.courierpostonline.com/apps/pbcs.dll/article?AID=2006610190363&nclck\\_check=1](http://www.courierpostonline.com/apps/pbcs.dll/article?AID=2006610190363&nclck_check=1)

<sup>2</sup> [http://www.njslom.org/magart0307\\_p14.html](http://www.njslom.org/magart0307_p14.html)





Tabernacle contains lands within the Pinelands which is managed by the Pinelands Comprehensive Management Plan. The plan establishes nine land use management areas with goals, objectives, development intensities and permitted uses for each. The boundaries of these management areas are displayed on the Pinelands Land Capability Map. They are implemented through local zoning that must conform with Pinelands land use standards. The Township of Tabernacle has lands designated as preservation area district, forest area, agricultural production area, rural development area, regional growth area, Pinelands Village, and special agricultural production area.

### Growth/Development Trends

The following table summarizes recent residential/commercial development since 2013 to present and any known or anticipated major residential/commercial development and major infrastructure development that has been identified in the next five years within the municipality. Refer to the map in 9.36.8 of this annex which illustrates the hazard areas along with the location of potential new development.

**Table 9.36-1. Growth and Development**

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or block/lot)	Known Hazard Zone(s)	Description/Status of Development
<b>Known or Anticipated Development in the Next Five (5) Years</b>					
Carranza Road	Infrastructure	2	Various locations	None	Replace Stormwater drains and pipe
Zimmerman Road	Infrastructure	6	Various locations	None	Replace Stormwater drains and pipe
Worrell Road	Infrastructure	1	Intersection of Worrell and Rictor Drives	None	Replace Stormwater drains and pipe

*\* Only location-specific hazard zones or vulnerabilities identified.*

### 9.36.3 Natural Hazard Event History Specific to the Municipality

Burlington County has a history of natural and non-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. For the purpose of this plan update, events that have occurred in the County from 2013 to present were summarized to indicate the range and impact of hazard events in the community. Information regarding specific damages is included, if available, based on reference material or local sources. This information is presented in the table below. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

**Table 9.36-2. Hazard Event History**

Dates of Event	Event Type (Disaster Declaration if applicable)	Burlington County Designated?	Summary of Damages/Losses
October 29, 2012	Sandy DR-4086	State Declaration	Local EOC opened, emergency services on stand to, no local impact. While Sandy had a major impact on the State, the impact on Tabernacle was minimal. It is included here to highlight the winter storm patterns that effect Tabernacle. Nor'westers and winter storm cells that may or may not be reflected in other areas but which provide a short term serious winter weather event, Sandy did not





Dates of Event	Event Type (Disaster Declaration if applicable)	Burlington County Designated?	Summary of Damages/Losses
			<p>impact on Tabernacle but the winter storm that followed a week later closed roads and resulted in one fatality. During these reoccurring Winter Storms the same pattern is followed resulting in emergency protective measure. These measures include activation of the EOC or snow room, over-time payment for Public Works and heavy use of trucks and plows. Emergency services volunteer personnel are brought into the two emergency services building to reduce risk to responders and reduce response time. In addition, the ESBs can be used for short term respite shelters.</p>
Jan 2, 2014	Winter storm	State Declaration	Emergency protective measures, road clearing, closed offices and schools, established shelters in emergency services building, local EOC opened
Jan 21-22, 2014	Winter Storm Janis	State Declaration	Emergency protective measures, road clearing, closed offices and schools, established shelters in emergency services building, local EOC opened
Feb 13-14, 2014	Winter Storm/Nor'easter	New Jersey Declaration	Major emergency protective measures, emergency services building used as shelter, power outages, schools and offices closed
March 2-3, 2014	Winter Storm Titan	New Jersey Declaration	Major emergency protective measures, emergency services buildings open for resident comfort care, local EOC opened
April 30-May 1, 2014	Heavy Rain and Flooding		Heavy rain caused considerable poor drainage and creek flooding in the northern Burlington County. Rancocas Creek was hit the hardest by flooding. Many roads were flooded and closed. Approximately \$1 million in property damage in the County.
January 22-24, 2015	Winter Storm Juno	New Jersey Declaration	Local EOC opened, emergency services on stand to, major emergency protective measures
June 23, 2015	Wind Shear/ Severe Storm (DR-4231)	Yes	<p>Local EOC opened, emergency services on stand to, major protective measures, debris removal over the next 3 months, emergency services buildings opened to the public as respite sites, power out to majority of the township for five days.</p> <p>If Sandy and its follow-up storms demonstrate one of the common hazards to Tabernacle, the Sever Storm of 23 June 2015 was an example of the other major risks to Tabernacle – the sever wind storm. On 23 June 2017 at 1855 the weather was clear and sunny. At 1905 after the passage of a 10-minute wind shear traveling south on RT 206 resulted a power outage that lasted five days and debris that took 3 months to clear. Initially the Response Companies of the Township executed total hasty damage assessment/rescue. The EOC opened and was staffed for the next six days. The two emergency services buildings were opened as respite shelters providing water, air conditioning, power to charge electronic devices and conversation. At the end of the week the CERT executed a complete damage assessment of the town and the rescue squad (EMS) surveyed all residents o on the New Jersey Register Ready.</p> <p>Roads were closed for 24 hours while initial clearing operations were carried out by Public Works and contractors.</p>
January 22-24, 2016	Severe Winter Storm (DR-4264)	Yes	<p>Heavy snow fell throughout the County; snowfall totals ranged from 12 inches to 16.4 inches, local EOC opened, emergency protective measures, emergency services buildings open to the public.</p> <p>The storm while serious followed the normal weather pattern of a Winter Storm. Roads were closed, power lines dropped, and</p>





Dates of Event	Event Type (Disaster Declaration if applicable)	Burlington County Designated?	Summary of Damages/Losses
			power was lost for 24-48 hours. The EOC was opened and the duty crews of the Fire Company and Rescue Squad were brought into the stations. Road closures and power outages.
March 12-14 2017	Winter Storm Stella	State and County	Local EOC opened, roads closed, emergency protective measures. While never a declared emergency, the Winter Storm of March 2017 again illustrates a common risk to the township.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

### 9.36.4 Hazard Vulnerabilities and Ranking

The hazard profiles in Section 5.0 of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the hazard vulnerabilities and their ranking in the Township of Tabernacle. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

#### Hazard Risk/Vulnerability Risk Ranking

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

Table 9.36-3. Hazard Risk/Vulnerability Risk Ranking

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard <sup>a, c</sup>	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking <sup>b</sup>
Coastal Erosion	RCV Exposed to CE Hazard Area: \$0	Rare	6	Low
Drought	Damage estimate not available.	Frequent	36	High
Earthquake	100-Year GBS: \$0 500-Year GBS: \$1,717,417 2,500-Year GBS: \$24,887,104	Occasional	28	Medium
Flood	1% Annual Chance: \$123,817,987	Frequent	18	Medium
Landslide	RCV Exposed to Landslide Hazard Area: \$0	Rare	6	Low
Severe Storm	100-year MRP: \$3,544,784 500-year MRP: \$6,655,568 Annualized: \$162,814	Frequent	48	High
Severe Winter Weather	1% GBS: \$21,757,943 5% GBS: \$108,789,713	Frequent	51	High
Wildfire	Estimated Value in the Extreme, Very High, and High Hazard Areas: \$94,730,791	Occasional	22	Medium

Notes:





- a. Building damage ratio estimates based on FEMA 386-2 (August 2001)
- b. The valuation of general building stock and loss estimates was based on custom inventory for the municipality.  
 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
- c. Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the value of contents.
- d. Loss estimates for the flood and earthquake hazards represent both structure and contents.
- e. The HAZUS-MH earthquake model results are reported by Census Tract.

### National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Township of Tabernacle.

**Table 9.36-4. NFIP Summary**

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 100-year Boundary (3)
Township of Tabernacle	12	1	\$6,406.91	0	0	1

Source: FEMA Region 2 2017, 2018

(1) Repetitive loss and severe repetitive loss statistics provided by FEMA Region 2 and are current as of 10/31/2017. Policy and claims statistics current as of 9/30/2018

Please note the total number of repetitive loss properties does not include the severe repetitive loss properties. The number of claims represents claims closed by 9/30/2018.

(2) Total building and content losses from the claims file provided by FEMA Region 2.

(3) The policies inside and outside of the flood zones are based on the addresses geocoded from the FEMA Region 2 policy file – 10/31/2017.

Notes: FEMA noted that where there is more than one entry for a property, there may be more than one policy in force or more than one GIS possibility.

A zero percentage denotes less than 1/100th percentage and not zero damages or vulnerability as may be the case.

### Critical Facilities

The table below presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities in the community as a result of a 1-percent annual chance flood event.

**Table 9.36-6. Potential Flood Losses to Critical Facilities**

Name	Type	Exposure		Potential Loss from 1% Flood Event	
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage
None identified.					

Source: FEMA 2017, Burlington County

Note: - = Damages not calculated by HAZUS-MH v4.0

### Other Vulnerabilities Identified

The municipality has not identified additional vulnerabilities within their community.

## 9.36.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability





- Administrative and technical capability
- Fiscal capability
- Community classification
- National Flood Insurance Program
- Integration of mitigation planning into existing and future planning mechanisms

**Planning and Regulatory Capability**

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

**Table 9.36-7. Planning and Regulatory Tools**

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
<b>Planning Capability</b>				
Master Plan	Yes/2012	Local	Construction Office	Twp Master Plan
Capital Improvements Plan	Yes/2-17	Local	Twp administrator	
Floodplain Management / Basin Plan	No			
Stormwater Management Plan	Yes/2017	Local	Twp Administrator	
Open Space Plan	Yes	Local	Twp Administrator	Twp Master Plan
Stream Corridor Management Plan	No			
Watershed Management or Protection Plan	No			
Economic Development Plan	Yes/1999	Local	Twp Administrator	
Comprehensive Emergency Management Plan	Yes/2016	Local	OEM	NJSA Annex A
Emergency Operation Plan	Yes/2016	Local	OEM	
Post-Disaster Recovery Plan	No			
Transportation Plan	No			
Strategic Recovery Planning Report	No			
Other Plans:	No			
<b>Regulatory Capability</b>				
Building Code	Yes	State & Local	Construction Office	State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.)
Zoning Ordinance	Yes/annually	Local	Construction office/ Zoning Board	
Subdivision Ordinance	Yes	Local	Zoning Board	Part of Zoning Ordinance
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local		Part of Zoning Ordinance





Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
NFIP: Cumulative Substantial Damages	No			
NFIP: Freeboard	No	State, Local		
Growth Management Ordinances	Yes	Local	LDB/Zoning Board	
Site Plan Review Requirements	yes	local	LDB/Zoning Board	
Stormwater Management Ordinance	yes	local	Twp Administrator	
Municipal Separate Storm Sewer System (MS4)	No			
Natural Hazard Ordinance	No			
Post-Disaster Recovery Ordinance	No			
Real Estate Disclosure Requirement	No			
Other (Special Purpose Ordinances [i.e., sensitive areas, steep slope])	No			

### Administrative and Technical Capability

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

**Table 9.36-8. Administrative and Technical Capabilities**

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
<b>Administrative Capability</b>		
Planning Board	Yes	LDB/Construction Office
Mitigation Planning Committee	Yes	OEM/LEPC
Environmental Board/Commission	No	
Open Space Board/Committee	Yes	LDB
Economic Development Commission/Committee	No	
Maintenance programs to reduce risk	Yes	Twp Administrator/Safety Coordinator/Risk Mgt
Mutual aid agreements	yes	Twp Administrator/OEM
<b>Technical/Staffing Capability</b>		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Twp Engr
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Twp Engr
Planners or engineers with an understanding of natural hazards	Y	Twp Engr
NFIP Floodplain Administrator (FPA)	Y	Construction Office





Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Surveyor(s)	Y	Contract
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Y	Contract
Scientist familiar with natural hazards	Y	Contract
Emergency Manager	Y	OEM
Grant writer(s)	Y	Administrator/OEM Coordinator
Staff with expertise or training in benefit/cost analysis	Y	Administrator/OEM Coordinator
Professionals trained in conducting damage assessments	Y	Construction Code Official/OEM

### Fiscal Capability

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

**Table 9.36-9. Fiscal Capabilities**

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	Limited
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other	

### Community Classifications

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

**Table 9.36-10. Community Classifications**

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	N/A	N/A
Building Code Effectiveness Grading Schedule (BCEGS)	Yes		
Public Protection (ISO Fire Protection Classes 1 to 10)	No		
Storm Ready Certification	No	N/A	N/A
Firewise Communities classification	No	N/A	N/A





Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Natural disaster/safety programs in/for schools	No		
Organizations with mitigation focus (advocacy group, non-government)	No		
Public education program/outreach (through website, social media)	Yes		
Public-private partnership initiatives addressing disaster-related issues	No		

Note:

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

The classifications listed above relate to the community’s ability to provide effective services to lessen its vulnerability to the 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 1000 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 <https://www.isomitigation.com/ppc/>
- The National Weather Service Storm Ready website at <http://www.stormready.noaa.gov/index.html>
- The National Firewise Communities website at <http://firewise.org/>

### Self-Assessment of Capability

The table below provides an approximate measure of the Township of Tabernacle’s capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

**Table 9.36-11. Self-Assessment Capability for the Municipality**

Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?) *	Moderate	High
Planning and regulatory capability	X		
Administrative and technical capability		X	
Fiscal capability		X	
Community political capability		X	
Community resiliency capability		X	
Capability to integrate mitigation into municipal processes and activities			X





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## National Flood Insurance Program

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### NFIP Floodplain Administrator (FPA)

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William C. Lowe, Emergency Management Coordinator and Tom Boyd, Tabernacle Code Official/Floodplain Manager

### Flood Vulnerability Summary

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The Township of Tabernacle has no flood damaged properties.

### Resources

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The Township Emergency Management Coordinator and Township Floodplain Manager assume the responsibilities of floodplain administration and they have other staff if needed. NFIP administration services and functions provided to residents of Tabernacle include permit review, inspections, damage assessment and record keeping are all available in the event of need in both the Township Construction Office and the Office of Emergency Management. At this time, it has not been necessary to provide education or outreach programs to the community regarding flood hazards/risk as the Township has not had any flood damage. The FPA stated that there are currently no barriers to running an effective floodplain management program that they do feel adequately supported and trained to fulfill the responsibilities as the municipal floodplain administrator. The FPA would consider attending continuing education and certification training on floodplain management if it were offered in the future.

### Compliance History

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The Township is currently in good standing with the NFIP.

### Regulatory

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The Township of Tabernacle's floodplain ordinance meets the minimum set by FEMA and the State of New Jersey. There are no additional ordinances that support floodplain management within the Township. The Land Development Review Board (Zoning Board) would consider floodplain issues if they came up but to date this has not been an issue. The Township is currently not considering joining the CRS program; however, they have would attend a seminar if offered by the county.

## Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

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For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, each community was surveyed to obtain a better understanding of their community's progress in plan integration. A summary is provided below. In addition, the community identified specific integration activities that will be incorporated into municipal procedures.

### Planning

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**Pinelands Comprehensive Management Plan:** The New Jersey Pinelands Commission protects the Pinelands through its implementation of the Comprehensive Management Plan (CMP). The CMP contains the rules that guide land-use, development and natural resource protection programs in the state Pinelands Area. The regulations and standards contained in the CMP are designed to promote orderly development by channeling growth toward appropriate areas while safeguarding the region's unique natural, ecological, agricultural, archaeological, historical, scenic, cultural and recreational resources.





The Pinelands Comprehensive Management Plan provides general provisions, interpretations and definitions, certification of County, Municipal and Federal Installation Plans, development review, minimum standards for land uses and intensities, management programs and minimum standards, amendments to the comprehensive management plan, enforcement, acquisition of properties with limited practical use, and pilot programs.

### Regulatory and Enforcement (Ordinances)

**NJDEP Municipal Stormwater Regulation Program:** New Jersey Department of Environmental Protection issued the statewide municipal stormwater permits that became effective January 1, 2018 and authorizes stormwater discharges from municipal separate storm sewer systems (MS4s) to the waters of the state. Municipalities that have been issued a Notice of Authorization (NOA) to discharge under the Tier A (urban and coastal municipalities) or Tier B (more rural municipalities) master general permit must develop and implement a stormwater program. The first New Jersey Pollutant Discharge Elimination System (NJPDES) permit authorizing discharges from MS4 municipalities became effective in 2004 (subsequently renewed in 2009 and now in 2018), so most municipalities have developed stormwater programs; however, the 2018 permit requires the municipalities to maintain a stormwater management plan and enforce stormwater ordinances to address development and redevelopment consistent with the Stormwater Management rules at N.J.A.C 7:8, as well as implementation of additional requirements. For more information on the municipal stormwater regulation program, see [www.nj.gov/dep/dwq/msrp\\_home.htm](http://www.nj.gov/dep/dwq/msrp_home.htm). Tabernacle is Tier A municipality.

**Stormwater Management:** Chapter 20 of the municipal code discusses stormwater control. The chapter establishes the following goals:

1. To reduce flood damage, including damage to life and property;
2. To minimize any increase in stormwater runoff from new development;
3. To reduce soil erosion from any development or construction project;
4. To assure the adequacy of existing and proposed culverts and bridges, and other in-stream structures;
5. To maintain groundwater recharge;
6. To minimize any increase in nonpoint pollution;
7. To maintain the integrity of stream channels for their biological functions, as well as for drainage;
8. To restore, protect, maintain and enhance the quality of the streams and water resources of Tabernacle Township and the ecological character and quality of the Pinelands Area;
9. To minimize pollutants in stormwater runoff from new and existing development in order to restore, protect, enhance and maintain the chemical, physical and biological integrity of the surface and groundwaters of Tabernacle Township, to protect public health and to enhance the domestic, municipal, recreational, industrial and other uses of water; and
10. To protect public safety through the proper design and operation of stormwater management basins.

**Flood Damage Prevention:** The purpose of the flood damage prevention ordinance (Chapter 8 of the municipal code) is to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

- a. To protect human life and health;
- b. To minimize expenditure of public money for costly flood control projects;
- c. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- d. To minimize prolonged business interruptions;



- e. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, bridges located in areas of special flood hazard;
- f. To help maintain a stable tax base by providing for the second use and development of areas of special flood hazard so as to minimize future flood blight areas;
- g. To ensure that potential buyers are notified that property is in an area of special flood hazard; and
- h. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

### Operational and Administration

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The Township of Tabernacle has the following Departments:

- Administrator
- Building Inspections
- Municipal Clerk
- Code Enforcement
- Emergency Management
- Financial Office
- Land Development Board
- Municipal Court
- Public Works
- Registrar
- Tax Assessor
- Tax Collector
- Township Committee

The Land Development Board performs the function of the Planning Board and the Zoning Board of Adjustment.

### Funding

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The Township of Tabernacle has mutual aid agreements with the Township Administrator and the Office of Emergency Management. Financial resources the Township has access to or are eligible to use include capital improvements project funding, the ability to incur debt through general obligation bonds, the ability to withhold public expenditures in hazard-prone areas, other Federal or State funding programs, and open space acquisition funding programs.

### Education and Outreach

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The Township of Tabernacle has a website where one can access information about Township Departments, services, residents, agendas and minutes, documents and forms, municipal budgets/audits, maps, and ordinances. Visitors can also see the latest township news. On the Township Emergency Management page there is information about the Township's Community Emergency Response Team (CERT), the CODE RED program, the Ready Communities program, natural gas safety, disaster preparedness, and wildfire preparedness. OEM and the various offices of the Township participate in community days informing residents of programs and actions.

### 9.36.6 Mitigation Strategy and Prioritization

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

### Past Mitigation Initiative Status

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The following table indicates progress on the community’s mitigation strategy identified in the 2013 Plan. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.

DRAFT



Table 9.36-12. Status of Previous Mitigation Actions

Action Number	2013 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Steps 1. Project to be included in 2019 HMP or Discontinue 2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
TB-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"> <li>• Provide and maintain links to mitigation and emergency planning website, and regularly post notices on the County/municipal homepage(s).</li> <li>• 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.</li> <li>• Use email notification systems and newsletters to better educate the public on hazards and mitigation strategies, and personal natural hazard risk reduction measures</li> </ul>	Tabernacle OEM	Complete	<p>OEM and the township us social media to advise and inform the public of ongoing actions and maintains a website for the same purpose.</p> <p>OEM and the various offices of the township participate in community days informing residents of programs and actions. OEM utilizes mailings and public meetings to inform residents.</p>	<p>1. Discontinue</p> <p>2. Continue efforts to inform residents and assist them with mitigation and preparedness actions. This is an ongoing capability.</p>
TB-2	Improve municipal communications systems to include information sharing	Municipality with support from County, NJOEM and FEMA	Complete	Tabernacle participates in all county and state efforts to improve communications, this includes use of the Swift 911 system.	<p>1. Discontinue</p> <p>2. Ongoing capability</p>





Action Number	2013 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Steps 1. Project to be included in 2019 HMP or Discontinue 2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	with county and surrounding municipalities.				
TB-3	Create/Enhance/Maintain Mutual Aid agreements with neighboring communities for continuity of operations	Tabernacle with support from County OEM., NJOEM, FEMA and surrounding communities	Complete	Tabernacle is part of the County emergency mutual aide system. Tabernacle OEM networks on a consistent basis with the surrounding municipalities as well as the county. Tabernacle is an active member of the Regional CERT	1. Discontinue 2. Ongoing capability
TB-4	Work with Burlington County OEM to help develop damage assessment capabilities at the local level to include training and certification programs (e.g. code officials, engineers and CERT).	Tabernacle OEM; Pinelands Regional CERT	Complete	Tabernacle lead efforts to train and exercise the Pinelands Regional CERT in damage assessment and actively utilizes the capabilities of the ORION damage assessment software.	1. Discontinue 2. Ongoing capability; If the county discontinues the use of the ORION system, consider a local contract with the company for damage assessment
TB-5	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0	Tabernacle with support from County OEM, NJOEM, FEMA	Complete	The Tabernacle EOP is current and approved by the county and state as of March 2016. OEM will monitor the plan and update it annually as necessary.	1. Discontinue 2. Ongoing capability
TB-6	Plan and carry out a community awareness day/event to educate and inform residents regarding hazard mitigation and preparedness	Tabernacle with support from County OEM, NJOEM, FEMA	Complete	Complete	1. Discontinue 2. Ongoing capability
TB-7	Enhance resilience to severe storms by joining the NOAA "Storm Ready" program. "Storm Ready" program shall include providing information on the "Storm Ready" program, facilitating public outreach and awareness programs, and supporting	Tabernacle OEM, Public Works, Fire and EMS	Complete	Tabernacle is part of the "Storm Ready Program"	1. Discontinue 2. Ongoing capability





Action Number	2013 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Steps 1. Project to be included in 2019 HMP or Discontinue 2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	community storm risk reduction activities as appropriate.				
TB-8	Provide public education and outreach on proper installation and/or use of backup power	Tabernacle OEM	No Progress		1. Include in 2019 HMP 2. Pursue action
TB-9	Implement, review, and enforce municipal policies and programs to prevent trees from threatening lives and impacting power availability/interruption.	Municipal Code Enforcement; Tabernacle OEM, Tabernacle Public Works	Complete	Tabernacle is part of the state Wildfire protection plan and has joined with other municipalities in adopting the FEMA "Ready, Set, Go" program to the region.	1. Discontinue 2. Ongoing capability
TB-10	Evaluate benefits of participating in CRS program	Twp. Committee; Planning	No Progress	Tabernacle has not had a floodplain issue.	1. Discontinue 2. No longer a priority
TB-11	Obtain and install backup power sources at critical facilities.	Municipality with support from County, NJOEM and FEMA	In Progress	The two emergency services buildings have enhanced back-up power capability. The town hall does not. Efforts are underway to obtain a mobile generation capability utilizing a surplus vehicle from the fire company that will added to the townships power generation capabilities.	1. Include in 2019 HMP Pursue efforts to obtain mobile generation capability for the Town Hall and other facilities
TB-12	Promote the participation of Floodplain Administrator within the planning process and other related activities.	Municipality with support from County, NJOEM and FEMA	Complete	FPA integrated into planning	1. Discontinue 2. Complete
TB-13	Evaluate relocating or floodproofing critical facility Section B3 outside of a floodplain	Municipality with support from County, NJOEM and FEMA	Complete	Complete	1. Discontinue 2. Complete





### Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Township of Tabernacle has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2013 Plan:

- None identified by municipality.

### Proposed Hazard Mitigation Initiatives for the Plan Update

The municipality participated in a mitigation action workshop in March 2018 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

Table 9.36-13 summarizes the comprehensive-range of specific mitigation initiatives the Township of Tabernacle would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives 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. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.36-14 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.36-13. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Critical Facility (Yes / No)	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
TB-1 (Former TB-8)	Provide public education and outreach on proper installation and/or use of backup power	No	Severe Storm	1, 2, 5	Tabernacle OEM	Medium	Low	Tabernacle Municipal Budget, Volunteer	Short	High	EAP	PI
TB-2 (Former TB-11)	Obtain and install backup power sources at critical facilities.	Yes	All Hazards	1, 2, 6	Municipality with support from County, NJOEM and FEMA	Medium	Medium	Municipal Budget	Short	Medium	SIP	PP
TB-3	During future updates of the Master Plan, Stormwater Management Plan, Economic Development Plan, or other plans, work to integrate hazard mitigation principles and recommendations into the plans. Additionally, use these hazard mitigation principles and plan recommendations to update local building and zoning codes to create a more resilient community.	No	All Hazards	All	Municipality	High	Low	Municipal Budget	Short Term, Depending on update schedule	High	LPR	PR, PI

Notes:

Not all acronyms and abbreviations defined below are included in the table.

\*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:

CAV Community Assistance Visit  
 CRS Community Rating System  
 DPW Department of Public Works  
 FEMA Federal Emergency Management Agency  
 FPA Floodplain Administrator  
 HMA Hazard Mitigation Assistance  
 N/A Not applicable  
 NFIP National Flood Insurance Program  
 OEM Office of Emergency Management

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 (discontinued in 2015)  
 SRL Severe Repetitive Loss Grant Program (discontinued in 2015)

Timeline:

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





Costs:

Where actual project costs have been reasonably estimated:

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

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

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

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - 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.
- Public Information (PI) - 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.
- Natural Resource Protection (NR) - 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.
- Structural Flood Control Projects (SP) - 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.
- Emergency Services (ES) - 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

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.



Table 9.36-14. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community	Total	High / Medium / Low
TB-1 (Former TB-8)	Provide public education and outreach on proper installation and/or use of backup power	1	1	1	1	1	0	0	0	1	1	1	0	1	0	9	High
TB-2 (Former TB-11)	Obtain and install backup power sources at critical facilities.	1	1	1	1	1	1	-1	0	0	1	1	1	1	0	9	Medium
TB-3	During future updates of the Master Plan, Stormwater Management Plan, Economic Development Plan, or other plans, work to integrate hazard mitigation principles and recommendations into the plans. Additionally, use these hazard mitigation principles and plan recommendations to update local building and zoning codes to create a more resilient community.	1	1	1	1	1	1	1	0	0	1	1	0	1	0	10	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions.





### **9.36.7 Future Needs to Better Understand Risk/Vulnerability**

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None at this time.

### **9.36.8 Hazard Area Extent and Location**

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Hazard area extent and location maps have been generated for the Township of Tabernacle that illustrate the probable areas impacted within the municipality. These maps are based on the best available data at the time of the preparation of this plan and are 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. These maps are illustrated in the hazard profiles within Section 5.4, Volume I of this Plan.

### **9.36.9 Additional Comments**

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None at this time.

DRAFT



Figure 9.36-1. Township of Tabernacle Hazard Area Extent and Location Map 1

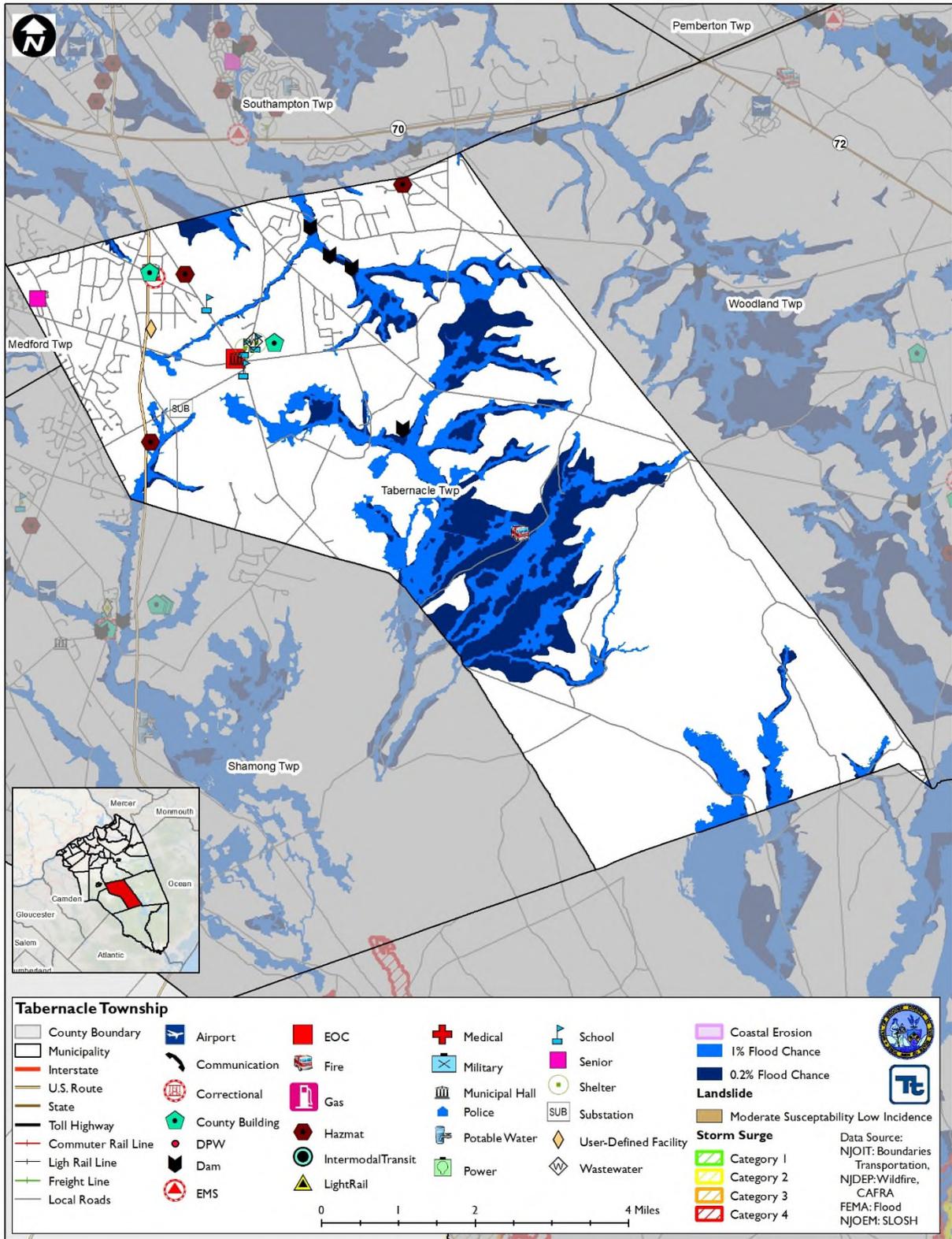
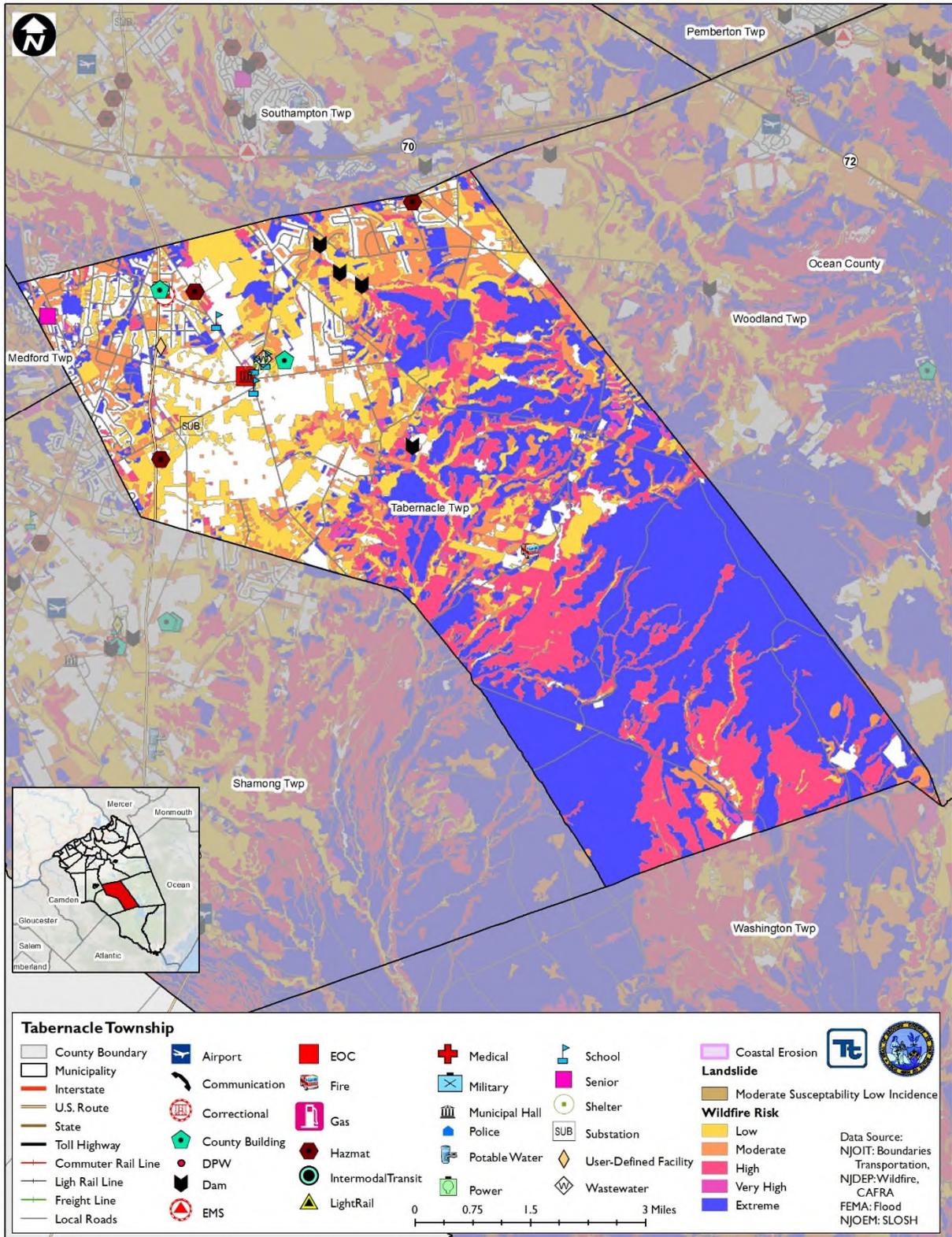




Figure 9.36-2. Township of Tabernacle Hazard Area Extent and Location Map 2





**Action Number:**

TB-2 (Former TB-11)

**Mitigation Action Name:**

Obtain and install backup power sources at critical facilities.

Assessing the Risk	
<b>Hazard(s) addressed:</b>	All Hazards
<b>Specific problem being mitigated:</b>	Backup power to essential facilities is critical during an emergency event
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	No Action - current problem continues
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	Installation of generators and backup power required to ensure the building's ability to remain functional during an event.
<b>Mitigation Action Type</b>	SIP
<b>Goals Met</b>	1, 2, 6
<b>Critical Facility (Y/N)</b>	Yes
<b>Benefits (losses avoided)</b>	Medium
<b>Estimated Cost</b>	Medium
<b>Priority*</b>	Medium
Plan for Implementation	
<b>Responsible Organization</b>	Municipality with support from County, NJOEM and FEMA
<b>Local Planning Mechanism</b>	PP
<b>Potential Funding Sources</b>	Municipal Budget
<b>Timeline for Completion</b>	Short
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	Date: 1/31/18 Status: The two emergency services buildings have enhanced back-up power capability. The town hall does not. Efforts are underway to obtain a mobile generation capability utilizing a surplus vehicle from the fire company that will added to the townships power generation capabilities.





**Action Number:**

TB-2 (Former TB-11)

**Mitigation Action Name:**

Obtain and install backup power sources at critical facilities.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	-1	
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
<b>Total</b>	9	
<b>Priority (H/M/L)</b>	Medium	