



## 9.16 Township of Florence

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

### 9.16.1 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
Philip Drangula, OEM 711 Broad Street, Florence, NJ 08518 609.847-1712 oem@florence-nj.gov	Richard Brook, Administrator 711 Broad Street, Florence, NJ 08518 609.209.6872 rbrook@florence-nj.gov

### 9.16.2 Municipal Profile

The Township of Florence is located in the north-central portion of Burlington County along the Delaware River. The Township is bordered by Mansfield to the east, Springfield to the south, and Burlington Township to the west. To the north, the Township lies directly on the Delaware River, across from Bristol and Levittown, Pennsylvania. According to the 2010 Census, the community's population was 12,109. The township has a total area of 10.177 square miles, including 9.780 square miles of land and 0.397 square miles of water.

Florence Township is governed under the provisions of the Mayor-Council Plan of the Faulkner Act. Under this form of government, the voters elect a Mayor for a four year term and two Council members At-Large and three Council members from three wards for over-lapping terms of four years. The legislative power is vested in the Council and the Executive power is vested in the Mayor. The Mayor appoints a professionally qualified Business Administrator with the advice and consent of Council.

### 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 9.16.8 of this annex which illustrates the hazard areas along with the location of potential new development.

**Table 9.16-1. 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>Recent Development from 2013 to present</b>					
McHugh Court	Res	7	Multiple; Blk 100	None	Complete
Estates at Oak Mill	Res	85	Multiple; Blks 156.05-156.10	Could not locate.	Complete
B&H Photo	Comm	1	400 Cedar Lane; Blk 148.06, Lot 2	Could not locate.	Complete
Amazon	Comm	1	400 Independence Rd; Blk 155.47, Lot 12.02	Could not locate.	Complete
Destination Maternity	Comm	1	1000 John Galt Way Blk 158, Lot 8	Flood: 1% Event: A-Zone; Wildfire: Extreme	Complete



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
QPSI	Comm	1	2030 US Rte 130; Blk 160.1, Lot 2.03	Could not locate.	Complete
Express Scripts	Comm	1	2040 US Rte 130; Blk 160.01, Lot 2.04	Could not locate.	Complete
Subaru, Phase 1 & 2	Comm	1	2020 US Rte 130; Blk 160.01, Lot 2.01	Flood: 1% Event: A-Zone; Wildfire: Extreme	Complete
Burlington Stores	Comm	1	2006 US Rte 130; Blk 160.01, Lot 1.01	Wildfire: High	Complete
<b>Known or Anticipated Development in the Next Five (5) Years</b>					
Roebbling Plant	Comm	2	Hornberger Avenue; Blk 139, Lot 1	Could not locate.	Conceptual
Weiss Properties	Res/Comm	240/2	Rte. 130 & Cedar Ln; Blk 160.01, L 4, 11.01, 11.02 & 24	Flood: 1% Event: A-Zone	Anticipate approval 2018
Lennar	Res	80	Florence-Columbus Rd.; Blk 165.04, Lot 63	None	Anticipate final approval Jan. 2018
Modern Store Equip.	Comm	1	Harkins Lane; Blk 159, Lots 5.01 & 5.04	None	Anticipate final approval Feb. 2018

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

### 9.16.3 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 9.16-2. Hazard Event History**

Dates of Event	Event Type (Disaster Declaration if applicable)	Burlington County Designated?	Summary of Damages/Losses
April 30-May 1, 2014	Heavy Rain and Flooding	N/A	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. While the event impacted the entire County, the Township did not experience significant losses or damages.
June 23, 2015	Severe Storm (DR-4231)	Yes	\$10 million in property damage in the County (\$8 million in Medford, \$1 million in Mt Laurel and \$1 million in Medford Lakes). While the event impacted the entire County, the Township did not experience significant losses or damages.
January 22-24, 2016	Severe Winter Storm	Yes	Heavy snow fell throughout the County; snowfall totals ranged from 12 inches to 16.4 inches. While the event impacted the entire



Dates of Event	Event Type (Disaster Declaration if applicable) (DR-4264)	Burlington County Designated?	Summary of Damages/Losses
			County, the Township did not experience significant losses or damages.

Notes:

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

### 9.16.4 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 Florence. 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 Florence. During the review of the hazard/vulnerability risk ranking, the Township indicated the following:

- Flood was changed from a low hazard to a medium hazard.

**Table 9.16-3. 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	Occasional	12	Low
Drought	Damage estimate not available.	Frequent	30	Medium
Earthquake	100-Year GBS: \$0 500-Year GBS: \$1,835,044 2,500-Year GBS: \$27,278,153	Occasional	28	Medium
Flood*	1% Annual Chance: \$73,215,203	Frequent	18	Medium
Landslide	RCV Exposed to Landslide Hazard Area \$1,745,962,584	Frequent	54	High
Severe Storm	100-year MRP: \$824,115 500-year MRP: \$7,802,946 Annualized: \$79,656	Frequent	48	High
Severe Winter Weather	1% GBS: \$16,739,824 5% GBS: \$83,699,120	Frequent	51	High
Wildfire	Estimated Value in the Extreme, Very High, and High Hazard Areas: \$80,818,969	Occasional	12	Low

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.
- \* The Township of Florence changed the risk ranking for flood from low to medium.

### National Flood Insurance Program (NFIP) Summary

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

**Table 9.16-4. 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 Florence	20	4	\$16,325.05	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 9.16-5. 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
Florence Sewerage Treatment Plant	Wastewater Treatment	X	X	-	-

Source: FEMA 2017, Burlington County

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

### Other Vulnerabilities Identified

The municipality has not identified any vulnerabilities within their community.

## 9.16.5 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 Florence.

**Table 9.16-7. 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	Local	Zoning	Chapter 91, Article IX
Capital Improvements Plan	Yes	Local	Adm	91-38
Floodplain Management / Basin Plan	Yes	Local	Twp Eng	140 91
Stormwater Management Plan	Yes	Local	Twp. Eng.	91-75 140
Open Space Plan	Yes	Local	Adm	91-59
Stream Corridor Management Plan	No	-	-	-
Watershed Management or Protection Plan	No	-	-	-
Economic Development Plan	Yes	Local	Council	Chapter 5
Comprehensive Emergency Management Plan	Yes	Local	OEM	-
Emergency Operation Plan	Yes	Local	OEM	-
Post-Disaster Recovery Plan	No	-	-	-
Transportation Plan	Yes	Local	Adm	-
Strategic Recovery Planning Report	No	-	-	-
Other Plans:	No	-	-	-
<b>Regulatory Capability</b>				
Building Code	Yes	State & Local	Code Off	State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.)
Zoning Ordinance	Yes	State/Local	Adm	Chapter 91, Part 3
Subdivision Ordinance	Yes	State/Local	Land Use	Chapter 91, Part 2
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local	Adm	Chapter 79, Ordinance 2017-28
NFIP: Cumulative Substantial Damages	No	-	-	-
NFIP: Freeboard	Yes	Local	Adm	Ordinance 2017-28
Growth Management Ordinances	Yes	Local	Planning Bd	Chapter 56
Site Plan Review Requirements	Yes	Local	Twp Eng	91-40
Stormwater Management Ordinance	Yes	State/Local	Twp Eng	Chapter 91-75 140
Municipal Separate Storm Sewer System (MS4)	Yes	State/Local	Twp Eng	Chapter 123



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.)
Stormwater Program Ordinances <ul style="list-style-type: none"> <li>Pet waste</li> <li>Litter Control</li> <li>Improper Disposal of Waste</li> <li>Wildlife Feeding</li> <li>Yard Waste Collection</li> <li>Illicit Connection</li> <li>Private Storm Drain Retrofitting</li> <li>Refuse Container / Dumpster (optional)</li> </ul>	Yes	Local	-	Chapter 123-4: Littering, Chapter 123-15: Yard Waste Collection, Chapter 123-17: Pet Waste, Chapter 123-18: Wildlife Feeding, Chapter 123-19: Illicit Connections, Chapter 123-20 Improper Disposal of Waste, Chapter 123-21 Refuse Containers and Dumpsters, Chapter 123-22: Private Storm Drain Retrofitting
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 Florence.

**Table 9.16-8. Administrative and Technical Capabilities**

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
<b>Administrative Capability</b>		
Planning Board	Yes	Independent agency
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Administration
Open Space Board/Committee	Yes	Twp. Council
Economic Development Commission/Committee	Yes	Appointed Committee
Maintenance programs to reduce risk	Yes	Administration
Mutual aid agreements	Yes	Police
<b>Technical/Staffing Capability</b>		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Appointed Engineer – Maser Associates
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Appointed Engineer – Maser Associates
Planners or engineers with an understanding of natural hazards	Yes	Appointed Engineer – Maser Associates
NFIP Floodplain Administrator (FPA)	Yes	
Surveyor(s)	Yes	Appointed Engineer – Maser Associates



Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Appointed Engineer – Maser Associates
Scientist familiar with natural hazards	No	-
Emergency Manager	Yes	-
Grant writer(s)	Yes	-
Staff with expertise or training in benefit/cost analysis	Yes	-
Professionals trained in conducting damage assessments	No	-

### Fiscal Capability

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

**Table 9.16-9. Fiscal Capabilities**

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

### Community Classifications

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

**Table 9.16-10. 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)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Class 4	-
Storm Ready Certification	No	-	N/A
Firewise Communities classification	No	-	N/A
Natural disaster/safety programs in/for schools	Yes	-	-



Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
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	Yes	-	-

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 Florence’s capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

**Table 9.16-11. 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

### National Flood Insurance Program





## NFIP Floodplain Administrator (FPA)

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Thomas Layou, Code Enforcement Officer

## Flood Vulnerability Summary

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The Township of Florence does not maintain inventories of properties that have been damaged by flooding or identify property owners who are interested in mitigation. The FPA indicated that there are currently no residents interested in elevation or mitigation.

## Resources

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The FPA assumes the responsibilities of floodplain administration for the Township of Florence and uses additional staff and professionals when needed. The FPA indicated that the Township currently does not provide NFIP administration services and functions to residents. At this time, the Township does not provide any education or outreach to the community regarding flood hazards/risk and flood risk reductions through NFIP insurance, mitigation, etc. The FPA stated staffing and funding limitation are barriers to running an effective floodplain management program and feels additional training and professional support would allow him to better fulfill his 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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To the best of the FPA's knowledge, the Township is in good compliance with the NFIP. The most recent Community Assistance Visit is unknown.

## Regulatory

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The Township of Florence's floodplain management ordinance meets the minimum set by FEMA and the State of New Jersey. The FPA indicated that the Planning and Zoning Board review matters that support floodplain management. The FPA indicated that the Township has not considered joining the CRS program but would attend a CRS seminar if it was offered locally.

## 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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**Hazard Mitigation:** The Township of Florence actively participated in the 5-year update of the Burlington County Hazard Mitigation Plan. The Township continues to support the implementation, monitoring, maintenance, and updating of the plan.

**Master Plan:** The Township of Florence last reexamined the Master Plan in 2007. municipal Master Plan is a document which sets forth the policies for land use as envisioned by the municipality. The Plan forms the legal foundation for the Zoning Ordinance and Zoning Map. In order to remain valid, the Zoning Ordinance must be substantially consistent with the Master Plan. The 2007 reexamination notes increased development and the strain on Township resources. Preservation of farmland and wetlands are both noted in the reexamination. The FPA indicated that natural hazard risk/mitigation and smart growth practices are incorporated into the plan.



**Continuity of Operations (COOP) Plan:** The Township of Florence’s Continuity of Operations Plan integrates mitigation.

**Fire Plan:** The Township of Florence has a Fire Plan that includes a risk assessment/identifies vulnerable areas.

### **Regulatory and Enforcement (Ordinances)**

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The Township of Florence’s codebook can be found online at <https://ecode360.com/FL0864?needHash=true>.

**Flood Damage Prevention:** The purpose of the flood damage prevention ordinance (Chapter 79 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 to:

- Protect human life and health.
- Minimize expenditure of public money for costly flood control projects.
- Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public.
- Minimize prolonged business interruptions.
- Minimize damage to public facilities and utilities, such as water and gas mains, electric, telephone and sewer lines, streets and bridges, located in areas of special flood hazard.
- Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas.
- Ensure that potential buyers are notified that property is in an area of special flood hazard.
- Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

**Land Development Ordinance:** The Township’s Land Development Ordinance (Chapter 91 of the municipal code), pursuant to the provisions of P.L. 1975, c. 291 (N.J.S.A. 40:55D-1 et seq.), has the following purpose:

- To encourage municipal action to guide the appropriate use or development of all lands in this Township in a manner which will promote the public health, safety, morals and general welfare.
- To secure safety from fire, flood, panic and other natural and man-made disasters.
- To provide adequate light, air and open space.
- To ensure that the development of the municipality does not conflict with the development and general welfare of neighboring municipalities, the county and the state as a whole.
- To promote the establishment of appropriate population densities and concentrations that will contribute to the well-being of persons, neighborhoods, communities and regions and the preservation of the environment.
- To provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational, commercial and industrial uses and open space, both public and private, according to their respective environmental requirements in order to meet the needs of all New Jersey citizens.
- To promote the conservation of open space and valuable natural resources and to prevent urban sprawl and degradation of the environment through improper use of land.

The ordinance covers land use, zoning, subdivisions, and capital improvements.

**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



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 [http://www.nj.gov/dep/dwq/msrp\\_home.htm](http://www.nj.gov/dep/dwq/msrp_home.htm).

**Stormwater Management:** Chapter 123 of the municipal code discusses stormwater management. The chapter is intended to regulate the feeding of wildlife, disposal of waste, including pet solid waste, yard waste collection, litter, and other waste and pollution that may find its way into stormwater runoff in order to improve, preserve and protect the water quality of waters and streams within the Township and surrounding communities that may be downstream from the Township so as to protect the health safety and welfare of the public. This chapter also regulates connections to the municipal separate storm sewer system (MS4) operated by the Township and establishes penalties for violations of the provisions of this chapter.

### Operational and Administration

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**Mutual Aid Agreements:** The Township maintains mutual aid agreements with neighboring communities for continuity of operations.

**Information Sharing:** The Township is working with Burlington County to improve municipal communications systems to include information sharing with the county and surrounding municipalities. The Township also utilizes Swift911 and Nixle to share information with residents.

**Floodplain Administrator:** The Township promotes the participation of the Floodplain Administrator within the hazard mitigation planning process and other plans and activities.

**Zoning Board of Adjustment:** The Florence Zoning Board of Adjustment handles the applications for variation to the land use regulations that are defined by the Township Committee and local laws. If individuals or developers wish to vary from the regulations, approval must be granted by the Board of Adjustment. Meetings are held on the first Monday at 7:30 PM in the Council Chambers of the Municipal Complex.

**Planning Board:** The Florence Township Planning Board meets in the Municipal Complex at 711 Broad Street. Meetings are held on the 4th Tuesday of each March 2019 at 7:30 PM in the Main Conference Room of the Municipal Complex. The Board has a full-time clerk and several appointed professionals. The Planning Board is responsible for the Township's Master Plan and controls the development and use of land within the Township in accordance with the Master Plan. This includes the selection of land for recreation, open space, residential and business development. The board determines the use of our unimproved land for now and in the future.

**Economic Development Committee:** The Florence Township Economic Development Committee is established by Chapter 5 of the municipal code. The Economic Development Committee have the duty to advise the Mayor and Council with regard to the following: to conduct research into potential economic development of the Township, in areas appropriate for such development; to develop and recommend to the Mayor and Council a marketing plan for the Township of Florence; within the limits of appropriations and subject to the approval of the Mayor and Council, to advertise, prepare, print and distribute materials to support the economic development of the Township; to perform such other acts as are reasonably related to and designed to carry out the purposes and objectives of the Committee as authorized by the Mayor and Council; and to keep records of the meetings and activities of the Committee and to make quarterly reports to the Mayor and Council. The Committee meets on the 1<sup>st</sup> Tuesday of each March 2019 in the Municipal Complex, 711 Broad Street, Florence New Jersey 08518-2323.

**Environmental Commission:** The Florence Township Environmental Commission is established by Chapter 12 of the municipal code. It is composed of seven persons appointed by the Mayor; which persons shall be



citizens and residents of the Township and one of those appointed shall also be a member of the Township Planning Board. One of those appointed shall be a member of the Township Council. The appointments shall include at least one person from each of the wards established in the Township. The Commission has the following powers: the promotion of the conservation and development of the natural resources of the Township; the planning, implementing and informing of the general public with respect to local conservation programs; the responsibility to compile and maintain an index of all open areas, publicly or privately owned, including marsh, swamps and other wetlands; the conduct of all appropriate research into the possible use or uses of open space in the Township; the submission of recommendations to the Planning Board of appropriate plans and programs for inclusion in the Township Master Plan and for the general development and use of such areas; preparation of advertisements, books, maps, charts and other appropriate material necessary to the discharge of its duties within the limits of funds appropriated to it for such purpose by the Township Council, and to act as coordinating agency in the community with respect to conservation matters and as a liaison between local conservation needs and the regional, state, and federal agencies responsible for administering to those needs. The Commission meets the 1<sup>st</sup> Thursday of each March 2019 at 8:00 PM in the Municipal Complex, 711 Broad Street, Florence New Jersey 08518-2323.

**Open Space Board/Committee:** The Florence Township Council also serves as the Township’s Open Space Board/Committee.

**Historic Preservation Committee:** The Florence Township Historic Preservation Committee meets on the 4<sup>th</sup> Tuesday of each March 2019 in the Municipal Complex, 711 Broad Street, Florence New Jersey 08518-2323.

**Recreation Committee:** The Florence Township Recreation Committee meets on the 1<sup>st</sup> Monday of each March 2019 in the Municipal Complex, 711 Broad Street, Florence New Jersey 08518-2323.

**Shade Tree Committee:** The Florence Township Shade Tree Committee meets as required in the Municipal Complex, 711 Broad Street, Florence New Jersey 08518-2323.

### **Funding**

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The Township of Florence plans to look at mitigation actions when allocating funding in the future. The Township currently does not have a line item for mitigation project.

### **Education and Outreach**

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The Township of Florence conducts outreach on hazards through various methods and offers training on hazard identification and conducts outreach related to hazards.

The Township maintains a municipal website (<http://florence-nj.gov/>) where they post information regarding upcoming community events, important municipal decisions, and information about the municipality. Residents can sign up for an email list that is used to send email notices about Florence Township website updates or other official Township notices such as meeting agendas, event notices, cancellations or supplemental emergency information. The Township also maintains a Facebook page and Twitter account with similar information. The Township’s Police Department also maintains a Facebook page.

Burlington County utilizes the Swift911 Emergency Notification system. Swift911 is used in order to keep residents informed during fires, outages, floods, hurricanes, evacuations, road closures and more. All notifications are delivered for the sole purpose of delivering emergency messages and public notifications that are time sensitive in order to increase the safety and security. This service is also extended to the 40 municipalities within Burlington County, including the Township of Florence.



Similar to Swift911, the Township also utilizes Nixle. Nixle is a messaging service that residents can register for that allows messages to be sent by government agencies to local residents via phone, email, and web. Nixle can be used for emergency or non-emergency situations.

### **9.16.6 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.



**Table 9.16-12. 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.
FL-1	Purchase and demolish residential structures located at 1740 and 1790 Hornberger Avenue	Lead: Twp. Engineer Support: Twp. Construction and Public Works Depts.	Complete	1. 100% 2. N/A 3. N/A	1. Discontinue 2. N/A 3. Complete
FL-2	Identify repetitive flood areas	Lead: Construction Support: Public Works	In Progress	1. Areas are changing due to new construction, which is also mitigating the hazard 2. N/A 3. N/A	1. Include in 2019 HMP 2. See table 9.16-13 3. N/A
FL-3	Map repetitive flood areas using GIS	Fire Department	No Progress	1. No Progress 2. Due to changing areas due to construction. 3.	1. Discontinue. 2. N/A 3. This can be integrated once construction and expansion is completed.
FL-4	Identify landslide potential areas	Lead: Twp Administrator Support: Twp Engineer	Complete	1. Study completed and 2 homes purchased on Front Street due to landslide. Purchase was made by the county. 2. N/A 3. N/A	1. Discontinue 2. N/A 3. Complete
FL-5	Photograph and document landslide areas to have a historical reference.	Lead: Administrator Support: Public Works	Complete	1. Completed by county Engineer 2. N/A 3. N/A	1. Discontinue 2. N/A 3. Complete
FL-6	Identify structures in potential landslide area	Lead: Construction Support: Administrator	Complete	1. Completed by County. 2. N/A 3. N/A	1. Discontinue 2. N/A 3. Complete
FL-7	Post information on township website about hazard mitigation and preparedness tips.	Lead: OEM Support: Twp Administrator	Complete	1. Plan was added to Twp website 2. N/A 3. N/A	1. Include in 2019 plan. Will post update 2. See table 9.16-13 3. N/A
FL-8	Identify debris management areas throughout town.	Lead: Public Works Support: Twp Engineer	No Progress	1. 0% 2. Personnel planning 3. N/A	1. Include in 2019 plan 2. See table 9.16-13 3. N/A 4.



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 HMPG 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.
FL-9	Identify areas for snow pile placement to open streets	Lead: Public Works Support: Twp Engineer	Complete	1. 100% Completed 2. N/A 3. N/A	1. Discontinue 2. N/A 3. Complete
FL-10	Identify strategic reception areas for residents to stage in the event of severe storm	Lead: OEM	Complete	1. Single facility identified as community center. Can open county shelter if needed. 2. N/A 3. N/A	1. Discontinue 2. N/A. 3. Complete
FL-11	Test mass alerting and notification systems for residents, Global connect Nixle Facebook & Twitter	Lead: OEM Support: Police	Complete	1. Nixle and County provided reverse 911 & Social media tested annually 2. N/A 3. N/A	1. Discontinue 2. N/A 3. Complete
FL-12	Advertise social media accounts on Township Website	Lead: OEM Support: Administrator	Complete	1. Social Media sites and Nixle sign up on Twp website 2. N/A 3. N/A	1. Discontinue 2. N/A 3. Complete
FL-13	Install Generators to power strategic reception areas during severe storms	Lead: OEM Support: Construction	No Progress	1. 0% 2. Lack of funding 3. N/A	1. Include in 2019 plan. 2. See table 9.16-13 3. N/A
FL-14	Evaluate benefits of participating in CRS program	Twp. Committee; Planning	In Progress	1. 0% 2. Staff time 3. N/A	1. Include in 2019 plan. 2. See table 9.16-13 3. N/A
FL-15	Where appropriate, seek to retrofit critical facilities in hazard prone areas to protect structures from future damage and retrofit with emergency generators for critical facilities including firehouses and shelters	Twp. Committee	In Progress	1. In Progress. Facilities had generator connections installed on specific facilities. To accept temporary generators. 2. N/A 3. N/A	1. Include in 2019 plan. 2. See table 9.16-13 3. N/A
FL-16	Conduct and facilitate community and public education and outreach for residents and businesses to promote natural hazard risk reduction to include: • Disaster preparedness • Hazard mitigation	Municipality with support from Planning Partners, County Planning, NJOEM, FEMA	No Progress	1. 0% 2. Lack of funding 3. N/A	1. Include in 2019 plan. 2. See table 9.16-13 3. N/A



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.
FL-17	Improve municipal communication systems to include information sharing with county and surrounding municipalities	Municipality with support from County, NJOEM and FEMA	Complete	1. 100%. Through use of nixle and integration of reverse 911 communications has been improved. 2. N/A 3. N/A	1. Discontinue 2. N/A 3. Ongoing capability
FL-18	Obtain and install backup power sources at critical facilities.	Municipality with support from County, NJOEM and FEMA	No Progress	1. 0% 2. Lack of funding 3. N/A	1. Include in 2019 HMP 2. See table 9.16-13 3. N/A
FL-19	Create/Enhance/Maintain Mutual Aid agreements with neighboring communities for continuity of operations	Municipality with support from County, NJOEM, FEMA and surrounding communities	In Progress	1. Need funding to draft formal plan 2. N/A 3. N/A	1. Discontinue 2. N/A 3. Ongoing capability
FL-20	Continue to support the implementation, monitoring, maintenance, and updating of this Plan through participating in the 5 year Plan Update	Municipality with support from Planning Partners, County Planning, NJOEM, FEMA	In Progress	1. Ongoing 2. N/A 3. N/A	1. Discontinue 2. N/A 3. Ongoing capability
FL-21	Promote the participation of Floodplain Administrator within the planning process and other related activities.	Municipality with support from County, NJOEM and FEMA	In Progress	1. Ongoing 2. N/A 3. N/A	1. Discontinue 2. N/A 3. Ongoing capability
FL-22	Enhance resilience to severe storms by joining the NOAA "Storm Ready" program.	Municipality with support from County, NJOEM and FEMA	No Progress	1. 0%. 2. Did not move on project 3. N/A	1. Include in 2019 HMP 2. See table 9.16-13 3. N/A
FL-23	Provide public education and outreach on proper installation and/or use of backup power	Municipal Clerk	No Progress	1. 0% 2. Lack of funding. Will integrate social media and website for education 3. N/A	1. Include in 2019 HMP 2. See table 9.16-13 3. N/A



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.
FL-24	Address dangerous trees threatening people and property through proactive tree-trimming (vegetation management) programs in conjunction with property owners and utility companies.	Municipal DPW	In Progress	<ol style="list-style-type: none"> <li>Ongoing</li> <li>N/A</li> <li>Shade tree commission budgets funding for tree management and maintenance</li> </ol>	<ol style="list-style-type: none"> <li>Discontinue</li> <li>N/A</li> <li>Ongoing capability</li> </ol>
FL-25	Relocate or elevate Hornberger Ave and Norman Ave Pump Stations to minimize or eliminate damage due to flooding	Lead: Twp Engineer Support: Twp Water & Sewer	No Progress	<ol style="list-style-type: none"> <li>0%</li> <li>Lack of funding</li> <li>N/A</li> </ol>	<ol style="list-style-type: none"> <li>Include in 2019 HMP</li> <li>See table 9.16-13</li> <li>N/A</li> </ol>



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

The Township of Florence 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.

### **Proposed Hazard Mitigation Initiatives for the Plan Update**

The Township of Florence 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 9.16-13 summarizes the comprehensive-range of specific mitigation initiatives the Township of Florence 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 9.16-14 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.16-13. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
T. Florence – 1 (former FL-2)	Identify repetitive flood areas	Flood	1	Lead: Construction Support: Public Works	High	Low	Operating Budget	Short	High	LPR	PR
T. Florence – 2 (former FL-7)	Post information on township website about hazard mitigation and preparedness tips.	Severe Storms	5	Lead: OEM Support: Twp Administrator	High	Low	Operating Budget	Short	High	EAP	PI
T. Florence – 3 (former FL-8)	Identify debris management areas throughout town.	Severe Storm	1, 2, 6	Lead: Public Works Support: Twp Engineer	Medium	Low	Operating Budget	Short Term	Low	LPR	PR ES
T. Florence – 4 (former FL-13)	Install Generators to power strategic reception areas during severe storms	Severe Storms	1, 6	Lead: OEM Support: Construction	Medium	High	HMA programs with local or county match	Short Term DOF	Medium	SIP	PP
T. Florence – 5 (former FL-15)	Where appropriate, seek to retrofit critical facilities in hazard prone areas to protect structures from future damage and retrofit with emergency generators for critical facilities including firehouses and shelters	All	5, 6	Twp. Committee	High	Medium	HMA programs with local or county match	Short Term	Medium	SIP	PP SP
T. Florence – 6 (former FL-16)	Conduct and facilitate community and public education and outreach for residents and businesses to promote natural hazard risk reduction to include: •Disaster preparedness Hazard mitigation	All Hazards	3, 5	Municipality with support from Planning Partners, County Planning, NJOEM, FEMA	Medium	Medium	Municipal Budget, HMA programs with local or county match	Short Term	High	EAP	PI
T. Florence – 7 (former FL-18)	Obtain and install backup power sources at critical facilities.	All Hazards	1, 6	Municipality with support from County, NJOEM and FEMA	Medium	Medium	Municipal Budget	Short	Medium	SIP	PP





Initiative	Mitigation Initiative	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
T. Florence - 8 (former FL-22)	Enhance resilience to severe storms by joining the NOAA "Storm Ready" program.	Severe Storm	1, 5	Municipality with support from County, NJOEM and FEMA	Medium	Low	Municipal Budget	Short Term DOF	Medium	LPR EAP	PR PI
T. Florence - 9 (former FL-23)	Provide public education and outreach on proper installation and/or use of backup power	Severe Storm	1, 4	Municipal Clerk	Medium	Low	Municipal Budget	Short	High	EAP	PI
T. Florence - 10 (former FL-25)	Relocate or elevate Hornberger Ave and Norman Ave Pump Stations to minimize or eliminate damage due to flooding	Severe Storm Flooding	2, 3	Lead: Twp Engineer	Medium	Medium/High	PDM, HMGP	Short Term DOF	Medium	SIP	SP
T. Florence - 11	Coordinate with the facility manager at the Florence Sewerage Treatment Plant to support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or relocation to protect structures from future damage. Phase 1: Identify most cost-effective mitigation option Phase 2: Work with facility manager to implement selected action based on available funding and local match ability.	All Hazards	1, 2, 4, 6	Lead: Municipality Support: Florence Sewerage Treatment Plant	High	High	HMA Grants, Municipal Budget	Short Term DOF	Medium	SIP	SP, PP
T. Florence - 12	Require new developments to provide mitigation to insure that the cumulative rate of peak runoff is maintained at pre-development levels	All Hazards	1, 2	Municipality	High	Low	Municipal Budget	Short Term DOF	High	LPR	PR

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

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program  
HMGP Hazard Mitigation Grant Program

Timeline:

Short 1 to 5 years  
Long Term 5 years or greater





DPW	Department of Public Works	PDM	Pre-Disaster Mitigation Grant Program	OG	On-going program
FEMA	Federal Emergency Management Agency	RFC	Repetitive Flood Claims Grant Program (discontinued in 2015)	DOF	Depending on funding
FPA	Floodplain Administrator				
HMA	Hazard Mitigation Assistance	SRL	Severe Repetitive Loss Grant Program (discontinued in 2015)		
N/A	Not applicable				
NFIP	National Flood Insurance Program				
OEM	Office of Emergency Management				

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.

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*



Table 9.16-14. 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
T. Florence – 1 (former FL-2)	Identify repetitive flood areas	1	1	1	1	1	1	1	0	1	1	1	0	1	1	12	High
T. Florence – 2 (former FL-7)	Post information on township website about hazard mitigation and preparedness tips.	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
T. Florence – 3 (former FL-8)	Identify debris management areas throughout town.	0	0	0	0	1	1	0	1	0	0	1	0	0	1	5	Low
T. Florence – 4 (former FL-13)	Install Generators to power strategic reception areas during severe storms	1	0	0	1	1	1	0	0	1	1	1	0	1	0	8	Medium
T. Florence – 5 (former FL-15)	Where appropriate, seek to retrofit critical facilities in hazard prone areas to protect structures from future damage and retrofit with emergency generators for critical facilities including firehouses and shelters	0	1	1	1	1	1	-1	0	1	1	0	0	1	0	7	Medium
T. Florence – 6 (former FL-16)	Conduct and facilitate community and public education and outreach for residents and businesses to promote natural hazard risk reduction to include: <ul style="list-style-type: none"> <li>Disaster preparedness</li> <li>Hazard mitigation</li> </ul>	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
T. Florence – 7 (former FL-18)	Obtain and install backup power sources at critical facilities.	1	0	0	1	1	1	0	0	1	1	1	0	1	0	8	Medium
T. Florence – 8 (former FL-22)	Enhance resilience to severe storms by joining the NOAA “Storm Ready” program.	1	0	0	1	1	1	0	0	1	1	1	0	1	0	8	Medium
T. Florence – 9 (former FL-23)	Provide public education and outreach on proper installation and/or use of backup power	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High





Table 9.16-14. 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
T. Florence - 10 (former FL-25)	Relocate or elevate Hornberger Ave and Norman Ave Pump Stations to minimize or eliminate damage due to flooding	1	1	1	1	1	1	-1	0	1	1	0	0	1	0	8	Medium
T. Florence - 11	Coordinate with the facility manager at the Florence Sewerage Treatment Plant to support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or relocation to protect structures from future damage. Phase 1: Identify most cost-effective mitigation option Phase 2: Work with facility manager to implement selected action based on available funding and local match ability.	0	1	1	1	1	1	-1	0	1	1	0	0	1	0	7	Medium
T. Florence - 12	Require new developments to provide mitigation to ensure that the cumulative rate of peak runoff is maintained at pre-development levels	0	1	0	1	1	1	-1	0	1	1	1	0	1	0	6	Medium

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





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

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None at this time.

### **9.16.8 Hazard Area Extent and Location**

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Hazard area extent and location maps have been generated for the Township of Florence 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 Florence has significant exposure. These maps are illustrated in the hazard profiles within Section 5.4, Volume I of this Plan.

### **9.16.9 Additional Comments**

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None at this time.



Figure 9.16-1. Township of Florence Hazard Area Extent and Location Map 1

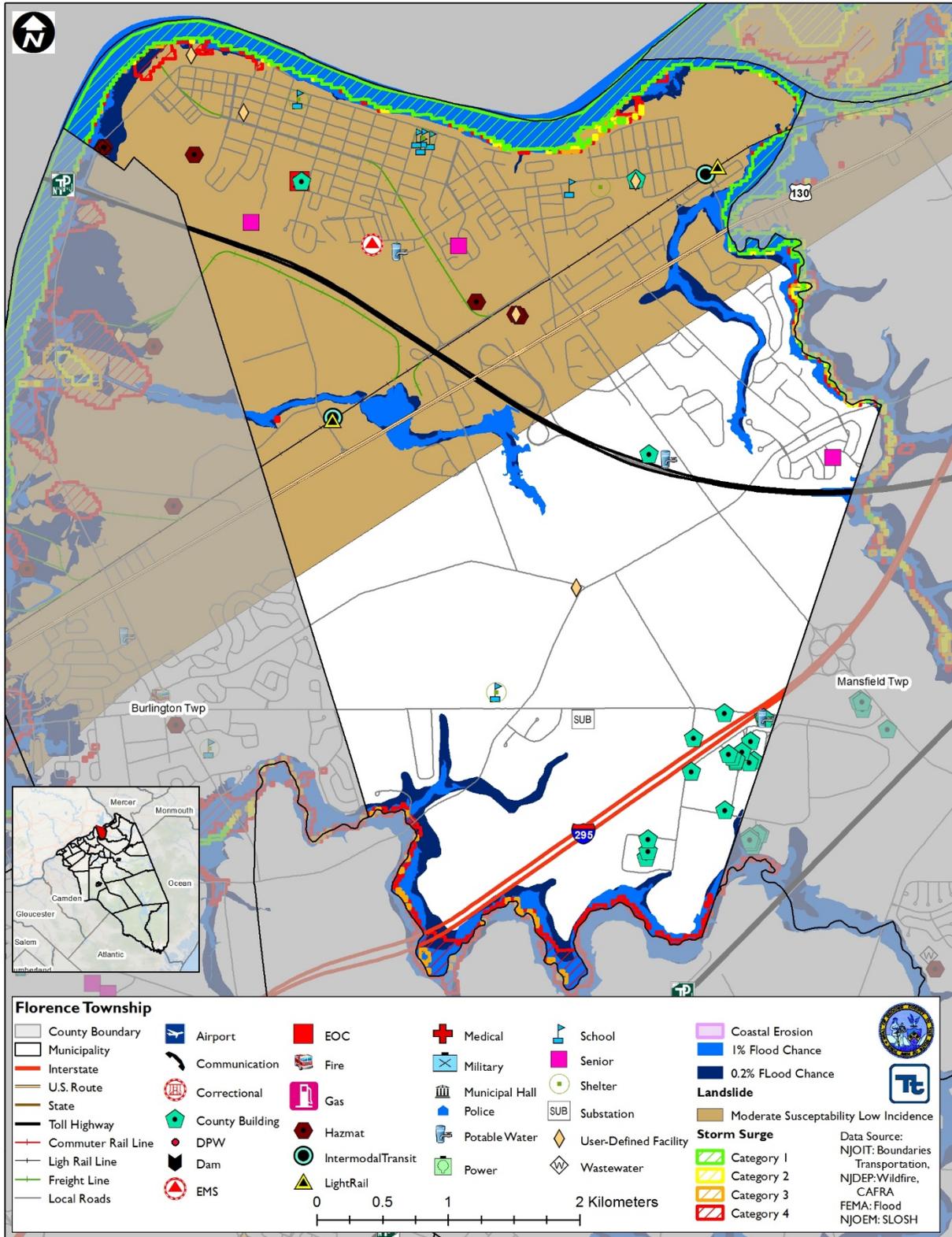
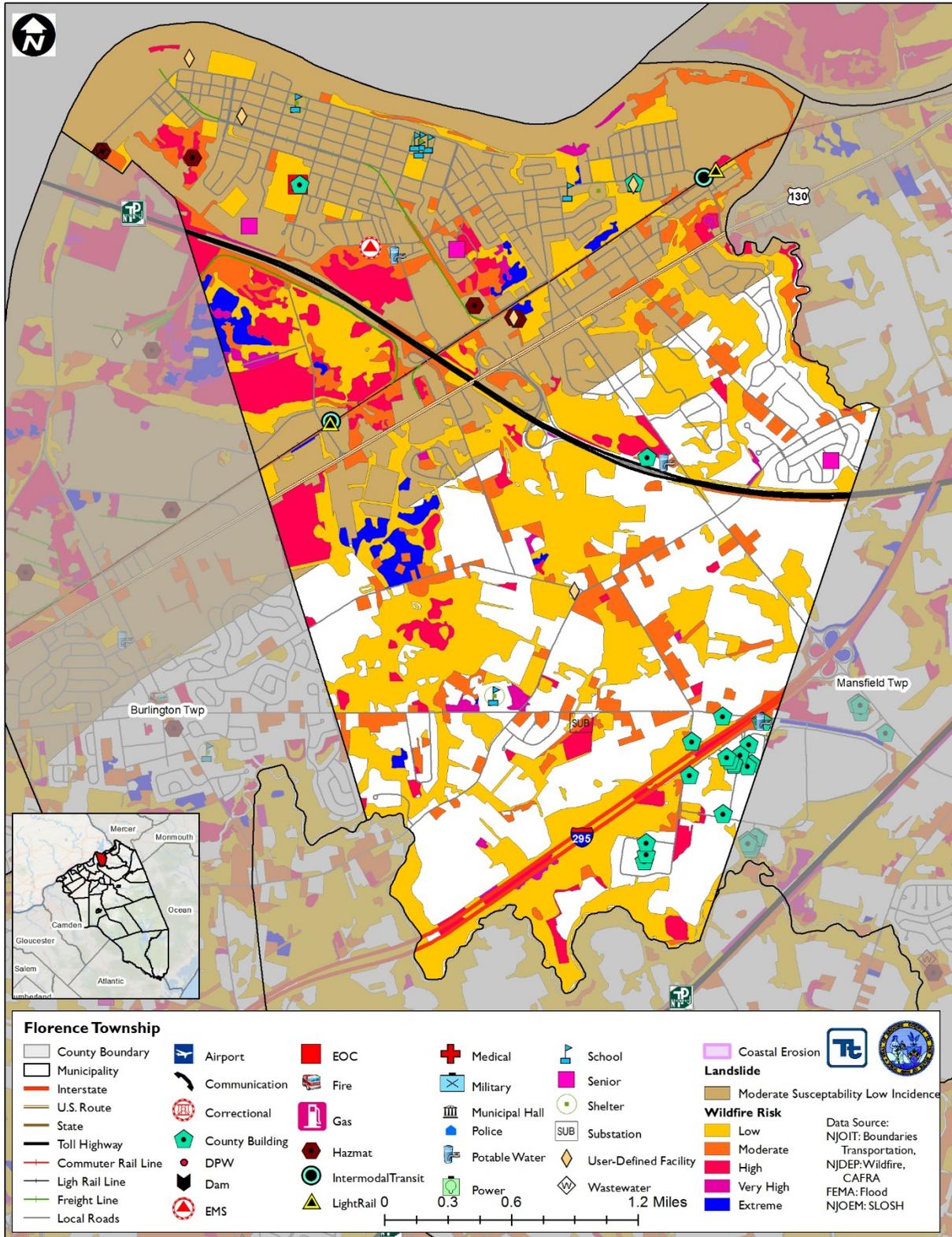




Figure 9.16-2. Township of Florence Hazard Area Extent and Location Map 2





**Action Number:** T. Florence - 4  
**Mitigation Action/Initiative:** Install Generators to power strategic reception areas during severe storms

Assessing the Risk	
<b>Hazard(s) addressed:</b>	Severe Storms
<b>Specific problem being mitigated:</b>	Reception areas lack back up power
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	<ol style="list-style-type: none"> <li>1. No action: Current problem continues</li> <li>2. Solar Panels: Weather dependent, costly.</li> <li>3. Mobile Generator – May lack electrical capacity and have inadequate run time.</li> </ol>
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	The Township will install generators for backup power at strategic reception areas to ensure continued critical functions during power outages caused by severe weather.
<b>Action/Project Category</b>	SIP
<b>Goals Met</b>	1, 6
<b>Applies to existing and or new development, or not applicable</b>	Existing
<b>Benefits (losses avoided)</b>	Medium
<b>Estimated Cost</b>	High
<b>Priority*</b>	Medium
Plan for Implementation	
<b>Responsible Organization</b>	Lead: OEM Support: Construction
<b>Local Planning Mechanism</b>	Hazard mitigation planning, emergency management planning
<b>Potential Funding Sources</b>	HMA programs with local or county match
<b>Timeline for Completion</b>	Short Term DOF
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	



**Action Number:** T. Florence - 4

**Mitigation Action/Initiative:** Install Generators to power strategic reception areas during severe storms

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	0	
Cost-Effectiveness	0	
Technical	1	
Political	1	Political support for project
Legal	1	Township has the legal authority to complete project
Fiscal	0	Need funding to complete project
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	0	
Agency Champion	1	
Other Community Objectives	0	
<b>Total</b>	<b>8</b>	
<b>Priority (High/Med/Low)</b>	<b>Medium</b>	



**Action Number:**

T. Florence – 5 (former FL-15)

**Mitigation Action/Initiative:**

Where appropriate, seek to retrofit critical facilities in hazard prone areas to protect structures from future damage and retrofit with emergency generators for critical facilities including firehouses and shelters.

Assessing the Risk	
<b>Hazard(s) addressed:</b>	All
<b>Specific problem being mitigated:</b>	Critical facilities are in need of additional protection and backup power
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	<ol style="list-style-type: none"> <li>1. No action: Current problem continues</li> <li>2. Build new updated critical facilities: Costly</li> <li>3. Construct floodwalls around all critical facilities – Cost prohibitive, not technically feasible</li> </ol>
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	Critical facilities in hazard prone areas, including firehouses and shelters, will be retrofitted to protect from hazards. Emergency generators will be installed to maintain critical functions during power outages.
<b>Action/Project Category</b>	SIP
<b>Goals Met</b>	5, 6
<b>Critical Facility (Y/N)</b>	Yes
<b>Benefits (losses avoided)</b>	High
<b>Estimated Cost</b>	Medium
<b>Priority*</b>	Medium
Plan for Implementation	
<b>Responsible Organization</b>	Township Committee
<b>Local Planning Mechanism</b>	Hazard mitigation planning
<b>Potential Funding Sources</b>	HMA programs with local or county match
<b>Timeline for Completion</b>	Short Term
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	



**Action Number:** T. Florence – 5 (former FL-15)

**Mitigation Action/Initiative:** Where appropriate, seek to retrofit critical facilities in hazard prone areas to protect structures from future damage and retrofit with emergency generators for critical facilities including firehouses and shelters.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Protect structures from flood damage
Cost-Effectiveness	1	Project is cost effective – benefits outweigh the costs
Technical	1	
Political	1	
Legal	1	
Fiscal	-1	Need funding to complete
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	
Agency Champion	1	
Other Community Objectives	0	
<b>Total</b>	<b>7</b>	
<b>Priority (High/Med/Low)</b>	<b>Medium</b>	



**Action Number:** T. Florence – 7 (former FL-18)  
**Mitigation Action/Initiative:** 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>	Critical facilities lack backup power source
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	<ol style="list-style-type: none"> <li>1. No action: Current problem continues</li> <li>2. Solar Panels: Weather dependent, costly.</li> <li>3. Mobile generator – May lack electrical capacity and have inadequate run time.</li> </ol>
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	Backup power sources (generators) will be purchased and installed at critical facilities to ensure sustained critical function during power outages.
<b>Action/Project Category</b>	SIP
<b>Goals Met</b>	1, 5
<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>	Hazard mitigation planning
<b>Potential Funding Sources</b>	Municipal Budget
<b>Timeline for Completion</b>	Short Term
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	



**Action Number:** T. Florence – 7 (former FL-18)

**Mitigation Action/Initiative:** 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	0	
Cost-Effectiveness	0	
Technical	1	
Political	1	Political support for project
Legal	1	Township has the legal authority to complete project
Fiscal	0	Need funding to complete project
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	0	
Agency Champion	1	
Other Community Objectives	0	
<b>Total</b>	<b>8</b>	
<b>Priority (High/Med/Low)</b>	<b>Medium</b>	



**Action Number:**

T. Florence – 10 (former FL-25)

**Mitigation Action/Initiative:**

Relocate or elevate Hornberger Ave and Norman Ave Pump Stations to minimize or eliminate damage due to flooding

Assessing the Risk	
<b>Hazard(s) addressed:</b>	Severe Storm, Flood
<b>Specific problem being mitigated:</b>	Hornberger Avenue and Norman Avenue pump stations are at risk for flooding damages.
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	No action: Current problem continues Replace pump stations with mobile pump stations: Locations require permanent pump stations
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	The pump stations at Hornberger Avenue and Norman Avenue are at risk for flooding damages. Each site will be investigated to determine if there is a suitable nearby relocation location that is outside of the hazard prone area. If not, the pump station will be elevated above the 500 year floodplain to reduce flooding risk.
<b>Action/Project Category</b>	SIP
<b>Goals Met</b>	2, 3
<b>Critical Facility (Y/N)</b>	Yes
<b>Benefits (losses avoided)</b>	High
<b>Estimated Cost</b>	High
<b>Priority*</b>	Medium
Plan for Implementation	
<b>Responsible Organization</b>	Lead: Municipality Support: Florence Sewerage Treatment Plant
<b>Local Planning Mechanism</b>	Hazard Mitigation
<b>Potential Funding Sources</b>	PDM, HMGP
<b>Timeline for Completion</b>	Short Term DOF
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	



**Action Number:** T. Florence – 10 (former FL-25)

**Mitigation Action/Initiative:** Relocate or elevate Hornberger Ave and Norman Ave Pump Stations to minimize or eliminate damage due to flooding

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
<b>Life Safety</b>	1	
<b>Property Protection</b>	1	Prevent future flood damage to pump station and allow continuity of operations during a flood event
<b>Cost-Effectiveness</b>	1	
<b>Technical</b>	1	
<b>Political</b>	1	
<b>Legal</b>	1	
<b>Fiscal</b>	-1	Need funding to complete
<b>Environmental</b>	0	
<b>Social</b>	1	
<b>Administrative</b>	1	
<b>Multi-Hazard</b>	0	Flood
<b>Timeline</b>	0	
<b>Agency Champion</b>	1	
<b>Other Community Objectives</b>	0	
<b>Total</b>	7	
<b>Priority (High/Med/Low)</b>	Medium	