



## 9.6 Township of Lower

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

### 9.6.1 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
Gary Douglass Public Works Superintendent/OEM Coordinator 2860 Bayshore Road Villas, New Jersey 08251 (609) 780-6049 <a href="mailto:gdouglass@townshipoflower.org">gdouglass@townshipoflower.org</a>	Rich Harron Lower Township OEM Coordinator 2600 Bayshore Road Villas, NJ 08251 609-600-7899 <a href="mailto:rharron@townshipoflower.org">rharron@townshipoflower.org</a>

### 9.6.2 Municipal Profile

The Township of Lower is located within the southern section of Cape May County, New Jersey. It is bounded on the north by the Township of Middle and the Delaware Bay, on the east by the Wildwoods and the Atlantic Ocean, on the south by the City of Cape May, Boroughs of West Cape May and Cape May Point and the Atlantic Ocean, and on the west by the Delaware Bay. It is part of the Ocean City Metropolitan Statistical Area. Diamond Beach, Erma, North Cape May and Villas are census-designated places and unincorporated areas located within Lower Township. Other communities in Lower Township include Cold Spring, Fishing Creek, Schellenger's Landing and Town Bank.

According to the U.S. Census Bureau, the township has a total area of 31.0 square miles, with 27.7 square miles of it land and 3.3 square miles of it (10.56-percent) water. As of 2010 there were 22,866 people in the Township.

### Growth/Development Trends

The following table summarizes recent residential/commercial development since 2010 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 Section 9.6.8 of this annex, which illustrates the hazard areas along with the location of potential new development.

**Table 9.6-1. Growth and Development**

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address	Block / Lot	Known Hazard Zone(s)	Description/Status of Development
<b>Recent Development from 2010 to Present</b>						
Achriavest	Res.	62 units	N/A	699/3-1401	AE-9	Not constructed
1804 Bayshore Rd, LLC	Commercial	4-5 units	N/A	263/8	N/A	Constructed
Storage Quest, LP	Commercial	60,000 sq. ft. Warehouse	N/A	410.01/85	N/A	Pending
Nancy McPherson	Res. Sub.	17 lots	N/A	752.01/10.01	N/A	Open Space/Development
<b>Known or Anticipated Development in the Next Five (5) Years</b>						
Macum Corp.	Commercial	1	N/A	749/6 & 1.07	N/A	Pending

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



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

Cape May 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 2010 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 9.6-2. Hazard Event History**

Date(s) of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
November 12-13, 2009	Severe Storms and Flooding associated with Tropical Depression Ida and a Nor'Easter	DR-1867	Yes	Loss of Service: Several roads were blocked due to heavy rains/ flooding: Roseanne Ave, Suzanne Ave, Deborah Ave, Holmes Ave. Closures lasted 6-8 hours, 500 households were affected Infrastructure Damage: Holmes Ave outfall was damaged. Beach Accesses were eroded. Public Assistance was requested (\$200K) Other Loss Information: Department of Public Works and Police overtime for road closures and street cleanups. Outfall pipes were cleaned.
February 5-6, 2010	Severe Winter Storm and Snowstorm (blizzard)	DR-1889	Yes	Life Safety: Shelters were opened. Loss of Service: Power outages and snow covered streets occurred throughout the entire township. Public Assistance was requested (\$48K) Other Loss Information: Vegetation debris removal was required for the entire Township (\$315K), Emergency protective DPW overtime to clean streets/ police rescue response (\$115K), Shelters (\$5K)
February 9-10, 2010	Winter Storm / Blizzard	No	N/A	Loss of Service: Minimum power outages were experienced. Public Assistance was requested (\$55K) Other Loss Information: Department of Public Works overtime was needed for clearing of roadways (\$7.5K)
December 26-27, 2010	Severe Winter Storm and Snowstorm	DR-1954	Yes	Loss of Service: Road closures due to snow coverage Township wide Public Assistance was requested (\$55K) Other Loss Information: Emergency protective measures for Police overtime (\$5K), DPW overtime for clearing roadways of snow (\$50K)
August 27-28, 2011	Hurricane Irene	DR-4021	Yes	Life Safety: Shelters were opened. Loss of Service: Short term power outages affected about 1,500. Public Assistance was requested (\$235K) Other Loss Information: Emergency protective measures for DPW and Police overtime (\$28K), Debris cleanup (\$175K), Donated services from volunteer fire companies (\$24K), Shelters (\$7K)
October 28, 2012	Hurricane Sandy	DR-4086	Yes	Life Safety: Evacuations and sheltering Loss of Service: Power outages and road closures Infrastructure Damage: Pedestrian walkway in Douglass Park was damaged Private Facility/Structural Damage: Minimal Public Assistance was requested (\$350K)



Date(s) of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
				Other Loss Information: Emergency protective measures for DPW and Police overtime (\$105K), Debris cleanup (\$170K), Donated services from volunteer fire companies (\$45K), Roadway restoration (\$45K), Pedestrian walkway repair (\$39K)
February 14-15, 2015	High Winds	No	N/A	Loss of Service: Minimum power outages Other Loss Information: DPW overtime to clear downed trees (6.5K)

### 9.6.4 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 risk ranking methodology is presented in Section 5.3. However, each municipality had the opportunity to adjust the final ranking based on municipal feedback. The following summarizes the hazard vulnerabilities and their ranking in the Township of Lower. 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 Lower.

**Table 9.6-3. 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>
Climate Change & Sea Level Rise	RCV in +3 feet: \$233,936,862	Frequent	18	Medium
Coastal Erosion	RCV in CEHA: \$8,085,436	Frequent	18	Medium
Flood	1% Annual Chance: \$1,429,339,971	Frequent	36	High
Hurricanes & Tropical Storms	Category 1 SLOSH: \$1,846,126,291 Category 2 SLOSH: \$5,154,052,963 Category 3 SLOSH: \$7,030,433,484 Category 4 SLOSH: \$8,863,865,251	Frequent	54	High
Nor'Easter	Damage estimate not available	Frequent	48	High
Severe Weather	100-Year MRP: \$20,824,985 500-year MRP: \$137,829,692 Annualized: \$1,888,411	Frequent	48	High
Severe Winter Weather	1% GBS: \$56,164,979 5% GBS: \$280,824,895	Frequent	51	High
Tsunami	Damage estimate not available	Rare	6	Low
Wildfire	Estimated Value Exposed to Extreme, Very High and High: \$82,641,594	Frequent	18	Medium

Notes: GBS = General building stock; MRP = Mean return period.

- a. The general building stock valuation is based on the custom inventory generated for the County utilizing improved value.
- b. 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. Refer to Section 5.1 for further details on the loss methodology. Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the estimated value of contents. Loss estimates for the flood and earthquake



hazards represent both structure and contents. Potential flood loss estimates were generated using Hazus-MH and the 2015 FEMA DFIRM for the 1-percent annual chance event. For the wildfire hazard, the improved value and estimated contents of buildings located within the identified hazard zones is provided.

### National Flood Insurance Program (NFIP) Summary

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

**Table 9.6-4. NFIP Summary**

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 1% Flood Boundary (3)
Lower Township	1,603	179	\$3,411,776	2	2	841

Source: FEMA, 2015

Note (1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA and are current as of July 31, 2015 and are summarized by Community Name. Please note the total number of repetitive loss properties excludes the severe repetitive loss properties. The number of claims represents claims closed by 7/31/2015.

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

Note (3) The policies inside and outside of the flood zones is based on the latitude and longitude provided by FEMA Region 2 in the policy file.

Note (4) 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.

Note (5) A zero percentage denotes less than 1/100th percentage and not zero damages or vulnerability as may be the case.

### Critical Facilities

**Table 9.6-5. Number of Critical Facilities Located in the 1-Percent Annual Chance Flood Zone**

Municipality	Facility Types																	
	Airport	Communication	County Office	EMS	Emergency Operation Center	Ferry	Fire Station	Library	Marina	Military	Municipal Hall	Place of Interest	Police Station	School	Senior Facility	Wastewater Pump	Wastewater Treatment	Well
Lower Township	0	1	0	0	0	1	0	0	15	0	0	1	0	0	1	1	0	3

Source: Cape May County

Note: EMS – Emergency Medical Services

### Other Vulnerabilities Identified by Municipality

Lower Township has several areas prone to roadway flooding: Roseann Ave (flash flooding), Schellengers Landing Area (tidal) and Diamond Beach Area (tidal).

### 9.6.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Education/Outreach and Community classification
- Self-Assessment of Capability
- 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 Lower.

**Table 9.6-6. Planning and Regulatory Tools**

Tool/Program (code, ordinance, plan)	Do you have this? (Yes/No)	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	12-30-14	Local	Planning	Land Use Development Plan
Capital Improvements Plan	Yes	Local	Planning Board	40:55 D-29 Chapter 44, section 71 of the municipal code includes info on a capital improvement program
Floodplain Management/Basin Plan	Yes	Local	Construction	ORD # 2014-04 Chapter 351 Of the Township Code Flood Damage Prevention Plan
Stormwater Management Plan	Yes	Local, State	Engineer	Chapter 575 Stormwater Management
Open Space Plan	Yes	Local, County	Planning Board; Environmental Commission	Green Acres, County open space
Stream Corridor Management Plan	No	N/A	N/A	N/A
Watershed Management or Protection Plan	No	N/A	N/A	N/A
Economic Development Plan	No	N/A	N/A	N/A
Comprehensive Emergency Management Plan	Yes	Local, County	OEM	Municipal Emergency Operations Plan 6/2/2000
Emergency Response Plan	Yes	Local, County	OEM	Municipal Emergency Operations Plan 6/2/2000
Post-Disaster Recovery Plan	No			
Transportation Plan	Yes	Local	OEM	Municipal Emergency Operations Plan 6/2/2000-Section F
Strategic Recovery Planning Report	Yes	County	Planning	Completed by June 2015
Other Plans:	Yes	Local	Recreation Advisory Board; Environmental Commission	Lower Township Department of Parks and Recreation Five Year Master Plan Update (2014-2018); Natural Resources Inventory (2000)
<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	Local	Planning	Land Dev. Ord. Chapter 4
Subdivision Ordinance	Yes	Local	Planning	Chapter 400
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local	Construction	Ordinance 2014-04, Chapter 351
NFIP: Cumulative Substantial Damages	No	N/A	N/A	N/A
NFIP: Freeboard	Yes	State, Local	Flood Plain Admin.	Chapter 351, Flood Prevention Ord. 2014-04
Growth Management Ordinances	No			
Site Plan Review Requirements	Yes	Local	Planning	Chapter 400



**Table 9.6-6. Planning and Regulatory Tools**

Tool/Program (code, ordinance, plan)	Do you have this? (Yes/No)	Authority (local, county, state, federal)	Dept./Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Stormwater Management Ordinance	Yes	Local, State	Engineer	Chapter 575
Municipal Separate Storm Sewer System (MS4)	Yes	Local, State	Engineer	Chapter 575
Natural Hazard Ordinance	No	N/A	N/A	N/A
Post-Disaster Recovery Ordinance	No	N/A	N/A	N/A
Real Estate Disclosure Requirement	No	N/A	N/A	N/A
Other [Special Purpose Ordinances (i.e., sensitive areas, steep slope)]	No	N/A	N/A	N/A

**Administrative and Technical Capability**

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

**Table 9.6-7. Administrative and Technical Capabilities**

Resources	Is this in place? (Yes or No)	Department/Agency/Position
<b>Administrative Capability</b>		
Planning Board	Yes	Planning Board; Zoning Board
Mitigation Planning Committee	Yes	OEM
Environmental Board/Commission	Yes	Environmental Commission; Council
Open Space Board/Committee	Yes	Open Space Review Board; County
Economic Development Commission/Committee	No	
Maintenance Programs to Reduce Risk	No	
Mutual Aid Agreements	Yes	Fire Districts, Fire Vol. Companies, Police
<b>Technical/Staffing Capability</b>		
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Yes	Planning, Engineer
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Engineer
Planners or engineers with an understanding of natural hazards	Yes	Planning, Engineer
NFIP Floodplain Administrator	Yes	Gary Playford, Construction Official
Surveyor(s)	No	
Personnel skilled or trained in GIS and/or Hazus-MH applications	No	
Scientist familiar with natural hazards	No	
Emergency Manager	Yes	OEM
Grant Writer(s)	Yes	Finance/ Grants
Staff with expertise or training in benefit/cost analysis	Yes	Finance/ CFO
Professionals trained in conducting damage assessments	Yes	OEM, Construction

**Fiscal Capability**

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



**Table 9.6-8. Fiscal Capabilities**

Financial Resources	Accessible or Eligible to Use (Yes/No/Don't Know)
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	No
Stormwater Utility Fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal or State Funding Programs	No
Open Space Acquisition Funding Programs	Yes
Other	No

**Education/Outreach and Community Classifications**

The table below summarizes education/outreach programs the community participates in and the classifications for community program available to the Township of Lower.

**Table 9.6-9. Education/Outreach and Community Classifications**

Program	Do you have/participate in 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	N/A	N/A
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	4-10	2015
Storm Ready	No	N/A	N/A
Firewise	No	N/A	N/A
Disaster/Safety Programs in/for Schools	Yes		
Organizations with Mitigation Focus (advocacy group, non-government)	No	N/A	N/A
Public Education Program/Outreach (through website, social media)	Yes		
Public-Private Partnerships	No	N/A	N/A

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 Community Rating System (CRS) class applies to flood insurance while the Building Code Effectiveness Grading Schedule (BCEGS) and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with class 1 being the best possible classification, and class 10 representing no classification



benefit. Firewise classifications include a higher classification when the subject property is located beyond 1,000 feet of a creditable fire hydrant and is within five road miles of a recognized fire station.

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule
- The ISO Mitigation online ISO’s Public Protection website at <http://www.isomitigation.com/ppc/0000/ppc0001.html>
- The National Weather Service Storm Ready website at <http://www.weather.gov/stormready/howto.htm>
- The National Firewise Communities website at <http://firewise.org/>

### Self-Assessment of Capability

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

Table 9.6-10. Self-Assessment of Capability

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 (Limited Funds Available)		
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)

Gary Playford, Construction Official

#### Flood Vulnerability Summary

The Township maintains a list of properties that have been flood damaged. This list identifies property owners interested in elevation. Five residential structures were damaged in Hurricane Sandy and/or other recent storms. Of these, four were declared to be substantially damaged. All five properties are interested in or in the process of being elevated. The elevations are being funded by grants.

#### Resources

The Flood Damage Prevention Ordinance (FDPO) identifies the Construction Official as the NFIP Floodplain Administrator. The floodplain administrator is the sole person assuming responsibilities for floodplain administration including, permit review, inspections, damage assessments, record-keeping, GIS, education and outreach. The Township is presently pursuing entry into the CRS program.







There are no identified barriers to running an effective floodplain management program in the Township. The floodplain administrator is adequately trained for floodplain management responsibilities, although additional training would be welcome.

### Compliance History

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The Township is currently in good standing with the NFIP. The most recent Community Assistance Visit was in 2014.

As of August 31, 2015 there are 2,657 policies in force, insuring over \$658.4 million of property with total annual insurance premiums of \$1,541,457. Since 1978, 179 claims have been paid totaling \$3,411,776 (268 claims total have been submitted; however, 89 claims were closed without pay).

### Regulatory

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The Township of Lower's floodplain regulations meet the minimum State and FEMA requirements. The Township has additional ordinances, plans and programs that support floodplain management such as Flood Damage Prevention Ordinance 2014-04 Chapter 351.

### Community Rating System

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The Township of Lower does not currently participate in the Community Rating System (CRS) program.

### 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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**Land Use Planning:** The Township has a Master Plan that was most recently revised in 2014, the Lower Township Land Use Development Plan. The Master Plan considers flood prone areas, but does not currently refer to the hazard mitigation plan.

**Open Space and Recreation Master Plan:** The Master plan contains information regarding open space acquisitions.

**Stormwater Management:** The Township is a MS4 Regulated Community and has a stormwater management plan that identifies projects, actions or initiatives to mitigate stormwater flooding.

**Continuity of Operations:** The Township Office of Emergency Management Operating Plan that will serve to protect the local government and operations from natural hazard disruptions.

### Regulatory and Enforcement (Ordinances)

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The Township has multiple chapters pertaining to the mitigation of hazards. These ordinances include the Flood Damage Prevention Chapter, Stormwater Control Chapter, Building Code and others. The Planning Board and Zoning Board of Adjustments uses planning staff and a contract engineer to guide their decisions with respect to natural hazard risk management. Developers in the Township are required to take additional actions to mitigate hazard risk including abiding by the adopted flood zone maps plus 1 foot freeboard.



### Operational and Administration

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**Land Use Planning:** The Township has a staff planner and contract engineer responsible for preparing documents that address natural hazard risk reduction, such as the Stormwater Management Plan. The Planning Board and Zoning Board of Appeals are compliant with New Jersey Municipal Land Use Law.

**Stormwater Management:** Stormwater Management functions in the community are performed by Gary Douglass, the Department of Public Works Superintendent.

**Floodplain Management:** Gary Playford, the Construction Official and Floodplain Manager, performs the NFIP Floodplain Management functions.

**Technical Resources:** The Township has staff that have experience with Benefit-Cost analysis. Substantial Damage estimates are performed by the Construction Office. Township staff has experience with grant application preparation, which is supplemented with contract support. Staff would benefit from additional training / certification in Benefit-Cost Analysis and Damage estimating.

**Other Programs:** The Planning Department has other hazard management programs in place including Stormwater Management Plan and Floodplain Management and guidelines.

**Administration:** The Department Heads all have job descriptions that specifically include identifying and/or implementing efforts to reduce natural hazard risk.

### Funding

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**Operating Budget:** The Township's operating budget does not contain line items for mitigation projects/activities.

**Capital Improvements Budget:** The Township's capital improvements budget contains mitigation-related projects.

**Grants:** The Township has received grant funding for purchasing a generator.

### Education and Outreach

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The Township's website posts information regarding natural hazards. Additionally, the Township participates in the Nixel Alert system.

## 9.6.6 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 2010 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 9.6-11. Past Mitigation Initiative Status**

Description	Status	Review Comments
<p>TL-1a: Where appropriate, support retrofitting of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Identify facilities that are viable candidates for retrofitting based on cost-effectiveness versus relocation. Where retrofitting is determined to be a viable option, consider implementation of that action based on available funding.</p>	<p>Ongoing.</p>	<p>Include in 2016 HMP Update.</p>
<p>TL-1b: Where appropriate, support purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Identify facilities that are viable candidates for relocation based on cost-effectiveness versus retrofitting. Where relocation is determined to be a viable option, consider implementation of that action based on available funding.</p>	<p>Ongoing.</p>	<p>Include in 2016 HMP Update.</p>
<p>TL-2 (CMC-2): Consider participation in the incentive-based program CRS.</p>	<p>In progress. The Township has a designated CRS representative and is currently pursuing entry into the CRS program.</p>	<p>Include in 2016 HMP Update.</p>
<p>TL-3: Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0</p>	<p>Ongoing. The Township has participated in the implementation and monitoring of the plan over the past 5 years and is participating in the plan update.</p>	<p>This initiative is being removed from the updated mitigation strategy as it refers to activities that are a now an ongoing and normal part of municipal operations.</p>
<p>TL-4: Strive to maintain compliance with, and good-standing in the National Flood Insurance program.</p>	<p>Ongoing. The Township is currently in good standing with the NFIP and will continue to adhere to NFIP requirements for maintaining good standing.</p>	<p>This initiative is being removed from the updated mitigation strategy as it refers to activities that are a now an ongoing and normal part of municipal operations.</p>
<p>TL-5: Continue to develop, enhance, and implement existing emergency plans.</p>	<p>In progress. The Township continually works to improve existing emergency plans.</p>	<p>A modified version of this initiative is being included in the 2016 HMP update, specifically identifying that updates will be completed in 2016.</p>
<p>TL-6: Create/enhance/ maintain mutual aid agreements with neighboring communities.</p>	<p>In progress. Fire Protection/Funded through Fire Districts.</p>	<p>Include in 2016 HMP Update.</p>
<p>TL-7: Support County-wide initiatives identified in Section 9.1 of the County Annex. Support county-wide initiatives identified in the Cape May County Hazard Mitigation Plan</p>	<p>In progress. The Township has supported County-wide mitigation initiatives over the course of the performance period of the plan and will</p>	<p>Include in 2016 HMP Update.</p>



**Table 9.6-11. Past Mitigation Initiative Status**

Description	Status	Review Comments
	continue to do so after the plan update.	
TL-8: Fire Station – Diamond Beach Section (new) sub-station	No progress due to lack of resources.	Include in 2016 HMP Update.
TL-9: Road/railroad crossing improvements: Sally Marshall / Breakwater Crossing (new) to mitigate flooding	Complete.	
TL-10: Road/railroad crossing improvements: Bennet Crossing/Tabernacle Crossing (new) to mitigate flooding	Complete.	
TL-11: Bayshore Estates (drainage system, pump station) to mitigate flooding in this area	In progress. Approved funding through township funds	Include project completion in 2016 HMP Update.
TL-12: New Water Tower (January 2010) to provide adequate public water supply and for emergency response purposes	Complete.	
TL-13: Dune beach replenishment	In Progress	Include in 2016 HMP Update
TL-14 (CMC-7): Support the replacement of three bridges and elevate 2.7 miles of County Route 621 in Lower Township. This project is currently in the scoping phase.	TBD. This is a county project.	Determination of the continued viability of this project will be provided by County DPW/Engineering.
TL-15 (CMC-8 and WCM-12): Elevate ~1.5 miles of CR-606 (Sunset Boulevard) through the South Cape May Meadows (Lower and WCM).	TBD. This is a county project.	Determination of the continued viability of this project will be provided by County DPW/Engineering.
TL-16 (CMC-17 and TM-22): Elevate CR-603 through Lower and Middle Township through Fishing Creek Swamp.	TBD. This is a county project.	Determination of the continued viability of this project will be provided by County DPW/Engineering.
TL-17 (CMC-44): Conduct an engineering study to understand flooding issues and evaluate possible solutions along Fishing Creek/Academy Road (CR639) in Lower Township	TBD. This is a county project.	Determination of the continued viability of this project will be provided by County DPW/Engineering.
TL-18 (CMC-46): Conduct an engineering study to understand flooding issues and evaluate possible solutions at low areas along Tabernacle Road (CR647) in Lower Township	TBD. This is a county project.	Determination of the continued viability of this project will be provided by County DPW/Engineering.
TL-19 (CMC-49): Conduct an engineering study to understand flooding issues and evaluate possible solutions along Shunpike Road (CR644) in Lower Township	TBD. This is a county project.	Determination of the continued viability of this project will be provided by County DPW/Engineering.
TL-20 (CMC-52): Conduct an engineering study to understand flooding issues and evaluate possible solutions along Seashore Road (CR626) in Lower Township	TBD. This is a county project.	Determination of the continued viability of this project will be provided by County DPW/Engineering.
TL-21 (CMC-69): Become a National Fire Protection Association (NFPA) “Firewise” community. Participation in the NFPA “Firewise” program shall be supported by countywide and regional resources including the Cape May County Fire Chiefs Association and the New Jersey State Forest Fire Service (Firewise Community Liaison) by providing information on the “Firewise” program, facilitating public outreach and awareness	No progress.	Include in 2016 updated strategy.



**Table 9.6-11. Past Mitigation Initiative Status**

Description	Status	Review Comments
programs, and supporting community fire risk reduction activities as appropriate (see County Initiative CMC-69).		
TL-22: Through attendance at the regular meetings of the Cape May County Fire Chiefs Association, and in partnership with the New Jersey Division of Fire Safety and the New Jersey State Forest Fire Service, expand and enhance public awareness and education programs that support wildfire mitigation at the property owner level; and expand local wildfire preparedness and response capabilities through participation in seminars and training, and the implementation of recommendations and initiatives offered by these agencies, as resources permit.	In progress. Education through local schools in cooperation with Lower Township Fire Bureau who provided funding.	Include in 2016 updated strategy.

**Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy**

The Township has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2010 Plan:

- Bulkhead and Dune restoration at Wildwood Ave and the Delaware Bay

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

The Township participated in a mitigation action workshop in February 2016 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 9.6-12 summarizes the comprehensive-range of specific mitigation initiatives the Township 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, fourteen 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 9.6-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



**Table 9.6-12. Proposed Hazard Mitigation Initiatives**

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures (1)	Hazard(s) Mitigated (2)	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
TL-1a (former TL-1a)	Property Mitigation Support – Retrofit: Where appropriate, support retrofitting (e.g. elevation) of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Identify facilities that are viable candidates for retrofitting based on cost-effectiveness versus relocation. Where retrofitting is determined to be a viable option, consider implementation of that action based on available funding.											
	Funding sources: FEMA Mitigation Grant Programs (primarily HMGP and FMA); local property owner for match as supported by ICC and other non-Federal match sources as available.											
	See above.	Existing	Coastal Storm, Flood, Severe Storm	1, 2, 4, 6	Township (likely through NFIP Floodplain Administrator); State OEM, County OEM	High - Reduced risk of property damage from flooding	High	See above.	Long-term DOF	M-H	SIP, EAP	PP, NR
TL- 1b (former TL-1b)	Property Mitigation Support – Acquisition/Relocation: Where appropriate, support acquisition and/or relocation of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Identify facilities that are viable candidates for acquisition/relocation based on cost-effectiveness versus retrofitting. Where acquisition/relocation is determined to be a viable option, consider implementation of that action based on available funding.											
	Funding sources: Green Acres/Blue Acres Grant(s) and local share Open Space Fund; FEMA Mitigation Grant Programs (primarily HMGP and FMA); local property owner for match as supported by ICC and other non-Federal match sources as available.											
	See above.	Existing	Coastal Storm, Flood, Severe Storm	1, 2, 4, 6	Township (likely through NFIP Floodplain Administrator); State OEM, County OEM	High - Eliminate risk of property damage from flooding	High	See above.	Long-term DOF	M-H	SIP, EAP	PP, NR
TL- 2 (former TL-2 (CMC-2))	Continue to evaluate the community benefits vs. costs of participation in the incentive-based program CRS.	New & Existing	Flood	1, 2, 6	Township	Medium	Low - Medium	Local Budget	Short	High	All	All
TL- 3 (former TL-5)	Complete updates to emergency management plans in 2016.	New & Existing	All Hazards	1, 3, 4, 6	Municipal Emergency Manager with support from County OEM and NJOEM	Improved emergency management capabilities; life-safety	Low - Medium	Local Budget	Ongoing	Medium	LPR, EM*	ES
TL- 4 (former TL-6)	Create/enhance/maintain mutual aid agreements	New & Existing	All Hazards	1, 3, 4, 6	Township OEM	Improved EM capabilities (response, recovery)	Low - Medium	Local Budget	Ongoing	Medium	EM*	ES



Table 9.6-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures (1)	Hazard(s) Mitigated (2)	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
	with neighboring communities.											
TL- 5 (former TL-7)	Support County-wide initiatives identified in Section 9.1 of the County Annex. Support county-wide initiatives identified in the Cape May County Hazard Mitigation Plan	New & Existing	All Hazards	1 through 6	Local departments (as applicable for specific initiative)	High	Low - High	Existing programs and grant funding where applicable	Ongoing – Long-term depending on initiative	M-H (dependent)	All	All
TL- 6 (former TL-8)	Fire Station – Diamond Beach Section (new) sub-station	N/A	Wildfire	1, 4	Fire Dist. # 3 Lower Twp.	High (public safety)	Pending (High)	Local Budget & DHS Grant Funding where applicable	DOF	High	EM*, SIP	ES, PP
TL- 7 (former TL-11)	Bayshore Estates (drainage system, pump station) to mitigate flooding in this area. Approved funding through township funds	New	Flood	1, 3, 4	Lower Township	Medium – reduced local flooding	Pending	Approved funding through township funds	In progress (locally funded)	High (in progress)	SIP	PP
TL- 8 (former TL-13)	Dune beach replenishment	Existing	Coastal Erosion, Coastal Storm, Severe Storm, Tsunami, Public Protection	1, 3, 5	Lower Township	High	Pending (High)	Local Budget & Grant Funding where applicable	DOF	High	SIP, NSP	PP, NR
TL-9 (former)	Support the replacement of three bridges and	N/A	Coastal Storms, Flooding,	1, 3, 4	County Engineering	Reduced vulnerability of critical	High (est. ~300M)	TIGER (economic stimulus)	Longterm DOF	Medium	SIP	PP





Table 9.6-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures (1)	Hazard(s) Mitigated (2)	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
TL-14 (CMC-7)	elevate 2.7 miles of County Route 621 in Lower Township. This project is currently in the scoping phase.		Severe Storms			transportation infrastructure to flooding; potential life-safety (evacuation)		funding) and other Federal funding sources				
TL- 10 (former TL-15 (CMC-8 and WCM-12)	Elevate ~1.5 miles of CR-606 (Sunset Boulevard) through the South Cape May Meadows (Lower and WCM).	N/A	Coastal Storms, Flooding, Severe Storms	1, 3, 4	County Engineering	Reduced vulnerability of critical transportation infrastructure to flooding; potential life-safety (evacuation)	High	Various, incl. federal grant funding	Longterm DOF (lower priority project – area is not as floodprone as many other areas)	L-M	SIP	PP
TL- 11 (former TL-16 (CMC-17 and TM-22)	Elevate CR-603 through Lower and Middle Township through Fishing Creek Swamp.	N/A	Coastal Storms, Flooding, Severe Storms	1, 3, 4	County Engineering	Reduced vulnerability of critical transportation infrastructure to flooding; potential life-safety (evacuation)	High	TBD	Longterm DOF	Medium	SIP	PP
TL- 12 (former TL-17 through 20; (CMC-44, 46, 49, 52)	Continue to support County-led efforts to conduct an engineering study to understand flooding issues and evaluate possible solutions: <ul style="list-style-type: none"> <li>• along Fishing Creek/Academy Road (CR639) in Lower Township</li> <li>• at low areas along Tabernacle Road (CR647) in Lower Township</li> <li>• along Shunpike Road (CR644) in Lower Township</li> <li>• along Seashore Road (CR626) in Lower Township</li> </ul>											
	See above.	Existing	Severe Storms, Flooding	1, 3, 4, 6	County Engineering with municipal support	Reduced vulnerability of critical transportation infrastructure to flooding; potential life-safety (evacuation)	Medium	County and Local Funding	Dependent on County schedule	High	SIP	PP





**Table 9.6-12. Proposed Hazard Mitigation Initiatives**

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures (1)	Hazard(s) Mitigated (2)	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
TL- 13 (former TL-21 (CMC-69))	Become a National Fire Protection Association (NFPA) “Firewise” community. Participation in the NFPA “Firewise” program shall be supported by countywide and regional resources including the Cape May County Fire Chiefs Association and the New Jersey State Forest Fire Service (Firewise Community Liaison) by providing information on the “Firewise” program, facilitating public outreach and awareness programs, and supporting community fire risk reduction activities as appropriate (see County Initiative CMC-69).											
	See above.	N/A	Wildfire	1, 2, 4, 6	Local Fire Chiefs working with County Fire Coordinator	Improved local capabilities to manage wildfire risk	L-M	Existing Budgets	Short-term	High	EM*, EAP	ES, PI
TL- 14 (former TL-22)	Through attendance at the regular meetings of the Cape May County Fire Chiefs Association, and in partnership with the New Jersey Division of Fire Safety and the New Jersey State Forest Fire Service, expand and enhance public awareness and education programs that support wildfire mitigation at the property owner level; and expand local wildfire preparedness and response capabilities through participation in seminars and training, and the implementation of recommendations and initiatives offered by these agencies, as resources permit.											
	See above.	N/A	Wildfire	1, 2, 4, 6	Local Fire Chiefs	Improved local capabilities to manage wildfire risk	L-M	Existing Budgets	Short-term	High	EM*, EAP	ES, PI
TL-15	Include natural hazard risk reduction strategies in the Township open space acquisition strategy.	N/A	All, primarily Flood	3, 5	Planning and Zoning Department, Planning Board, Environmental Commission	Improved local capabilities to implement permanent risk reduction in high hazard areas	M-H	Open Space Funds	Ongoing	High	LPR, SIP, NRP	PR, PP, NR

**Notes:**

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

(1) 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.

(2) While Climate Change and Sea Level rise are not specifically identified as “hazards mitigated” in this table, it is recognized that climate change and sea level rise may exacerbate/amplify the risk of the following identified hazards: Climate Change – Coastal Erosion, Flood Coastal Storms (hurricane, tropical storms, Nor’Easters), Severe Weather, Severe Winter Weather, Wildfire; Sea Level Rise – Coastal Erosion, Flood Coastal Storms (hurricane, tropical storms, Nor’Easters), Tsunami.

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)  
 SRL Severe Repetitive Loss Grant Program (discontinued)

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.

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
- Emergency Management (EM) – These actions are identified as an emergency management activity; however, they are not necessarily “mitigation”

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 9.6-13. 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 Objectives	Total	High / Medium / Low
TL-1a (former TL-1a)	Property Mitigation Support – Retrofit	1	1	1	1	1	0	0	0	1	1	1	1	1	0	10	Medium-High*
TL- 1b (former TL-1b)	Property Mitigation Support – Acquisition/Relocation	1	1	1	1	0	0	0	0	1	1	1	1	1	0	9	Medium-High*
TL- 2 (former TL-2 (CMC-2)	Continue to evaluate the community benefits vs. costs of participation in the incentive-based program CRS.	0	1	1	1	1	1	0	0	1	1	1	1	1	1	11	High
TL- 3 (former TL-5)	Complete updates to emergency management plans in 2016.	1	1	1	1	1	1	0	0	1	0	1	1	1	1	11	Medium
TL- 4 (former TL-6)	Create/enhance/ maintain mutual aid agreements with neighboring communities.	1	1	1	1	1	1	0	0	1	0	1	1	1	1	11	Medium
TL- 5 (former TL-7)	Support County-wide initiatives identified in Section 9.1 of the County Annex. Support county-wide initiatives identified in the Cape May County Hazard Mitigation Plan	1	1	0	1	0	1	0	0	1	0	1	1	1	1	9	M-H (dependent)
TL- 6 (former TL-8)	Fire Station – Diamond Beach Section (new) sub-station	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High
TL- 7 (former TL-11)	Bayshore Estates (drainage system, pump station) to mitigate flooding in this area. Approved funding through township funds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High (in progress)
TL- 8 (former TL-13)	Dune beach replenishment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High
TL-9 (former TL-14 (CMC-7)	Support the replacement of three bridges and elevate 2.7 miles of County Route 621 in Lower Township. This project is currently in the scoping phase.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
TL- 10 (former TL-15 (CMC-8 and WCM-12)	Elevate ~1.5 miles of CR-606 (Sunset Boulevard) through the South Cape May Meadows (Lower and WCM).	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	L-M
TL- 11 (former TL-16 (CMC-17 and TM-22)	Elevate CR-603 through Lower and Middle Township through Fishing Creek Swamp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
TL- 12 (former TL-17 through 20; (CMC-44, 46, 49, 52)	Continue to support County-led efforts to conduct an engineering study to understand flooding issues and evaluate possible solutions (multiple locations).	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High
TL- 13 (former TL-21 (CMC-69)	Become a National Fire Protection Association (NFPA) “Firewise” community.	1	1	1	1	1	1	0	0	1	0	0	1	1	1	10	High



Table 9.6-13. 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 Objectives	Total	High / Medium / Low
TL- 14 (former TL-22)	Expand wildfire public awareness, and local preparedness and response capabilities	1	1	1	1	1	1	1	0	1	0	0	1	1	1	11	High
TL-15	Include natural hazard risk reduction strategies in the Township open space acquisition strategy.	1	1	1	1	0	1	1	1	0	1	1	1	0	0	10	High

Note: Refer to Section 6 which contains the guidance on conducting the prioritization of mitigation actions. Where the community has determined that the original priority ranking for “carry forward” initiatives remains valid, the earlier priority ranking is indicated on the prioritization table, however the 2016 criteria ratings are indicated with a null “-” marking.

\* The municipality recognizes that the mitigation of RL/SRL priorities is a Federal and State priority despite the fact that limited local resources and authority limit the municipality’s ability to implement this project.



### **9.6.7 Future Needs To Better Understand Risk/Vulnerability**

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None at this time.

### **9.6.8 Hazard Area Extent and Location**

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

### **9.6.9 Additional Comments**

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None at this time.



Figure 9.6-1. Township of Lower Hazard Area Extent and Location Map 1

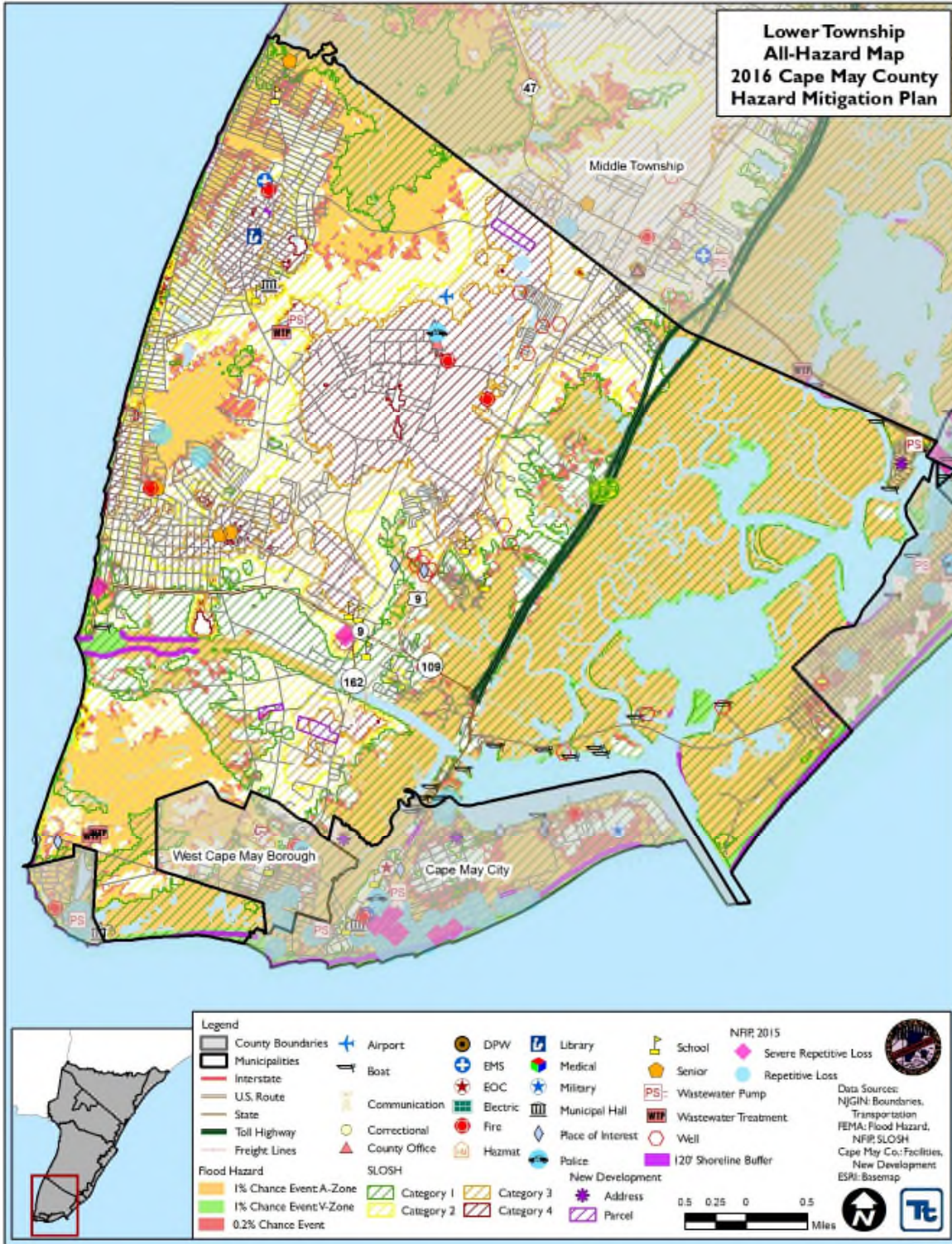




Figure 9.6-2. Township of Lower Hazard Area Extent and Location Map 2

