



9.16 Borough of Wildwood Crest

This section presents the jurisdictional annex for the Borough of Wildwood Crest.

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
Joseph McGrath, Captain of Police 6101 Pacific Avenue Wildwood Crest, NJ 08260 (609) 522-2456 jmcgrath@wildwoodcrestpolice.org	Eugene Taylor, Director of Public Safety 6101 Pacific Avenue Wildwood Crest, NJ 08260 (609) 522-2456 etaylor@wildwoodcrestpolice.org

9.16.2 Municipal Profile

The Borough of Wildwood Crest is located on a barrier island along the Atlantic Ocean coastline of Cape May County, New Jersey. It is bounded on the north-northeast by the Township of Lower and City of Wildwood, on the east-southeast by the Atlantic Ocean, on the south-southwest by the Township of Lower and the Atlantic Ocean, and the west by the Township of Lower. It is part of the Ocean City Metropolitan Statistical Area.

The Borough of Wildwood Crest and its neighboring communities of the City of Wildwood, City of North Wildwood, and the Borough of West Wildwood make up "The Wildwoods" resort, a popular vacation destination for those living in all parts of New Jersey as well as within the New York City and Philadelphia, Pennsylvania metropolitan areas.

According to the U.S. Census Bureau, the borough has a total area of 1.3 square miles, with 1.1 square miles of it land and 0.2 square miles of it (13.38-percent) water. The estimated resident population of the Borough is 3,198 as of July 1, 2014.

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 9.16.8 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	Address	Block / Lot	Known Hazard Zone(s)	Description/Status of Development
Recent Development from 2010 to Present						
None identified						
Known or Anticipated Development in the Next Five (5) Years						
None identified. The Borough of Wildwood Crest is a fully built-out municipality with few undeveloped or vacant parcels. There are no known or anticipated residential or commercial development or any anticipated infrastructure developed anticipated within the next five years. Anticipated development within the next five years will include the demolition and reconstruction of existing structures or the development of vacant in-fill parcels as permitted by the Borough Land Use Ordinance.						

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



9.16.3 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 9.16-2. Hazard Event History

Date(s) of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
February 10, 2008	High Winds	No	N/A	No losses were reported. Utility Complaints: Down wires
March 5, 2008	Thunderstorms and Strong Winds	No	N/A	No losses were reported. Utility Complaints: Down Wires
May 12, 2008	Coastal Flood	No	N/A	No losses were reported. Multiple Utility Complaints: Down Wires
October 28, 2008	High Wind	No	N/A	No losses were reported. Utility Complaints
February 12, 2009	Strong Wind	No	N/A	No losses were reported. Utility Complaints
November 12-13, 2009	Severe Weather and Flooding associated with Tropical Depression Ida and a Nor'Easter	DR-1867	Yes	Mandatory evacuations with an off-shore shelter available, severe beach and dune erosion, high winds and tidal flooding. Federal grant for beach replenishment was granted. Awarded \$1,078,889 plus \$5,000 in administrative costs.
February 5-6, 2010	Severe Winter Storm and Snowstorm (blizzard)	DR-1889	Yes	A record snow fall disrupted transportation and public safety systems. Schools were closed and road ways were compromised. \$17,723.93 granted for Labor, Equipment and materials used to clear streets and supplement the shelter.
February 9-10, 2010	Winter Storm / Blizzard	No	N/A	Continuation from DR-1889
December 26-27, 2010	Severe Winter Storm and Snowstorm	DR-1954	Yes	Severe snow storm disrupted transportation and compromised public safety. Wildwood Crest was eligible for snow removal assistance.
August 27-28, 2011	Hurricane Irene	DR-4021	Yes	Evacuations, Shelters, debris removal, roads closed. Grant awarded for Emergency protective measures. Other loss information includes Labor: \$21,665.78, Equipment: \$12,225.95, Supplies: \$1,453.75, Admin: \$255.92 Total: \$35,601.40
October 29, 2011	Severe Weather	DR-4048	Yes	Debris removal, and beach and public safety assistance.
October 28, 2012	Hurricane Sandy	DR-4086	Yes	Mandatory evacuations, shelters, severe beach and dune erosion. Emergency Protective Measures: \$92,860.38, Permeant Road Barriers \$49,891.80, Damaged Seawall \$822,207.00, Debris Removal : \$189,388.88, Out fall pipes: \$12,759.00, Wildwood Crest Beaches: \$477,092.22 Total: \$1,644,199.28



Date(s) of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
March 6-7, 2012	Nor'Easter	No	N/A	No losses were reported. Utility Complaints
March 12, 2014	Strong Winds	No	N/A	No losses were reported. Utility Complaints
February 14-15, 2015	High Winds	No	N/A	No losses were reported. Utility Complaints

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 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 Borough of Wildwood Crest. 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 Borough of Wildwood Crest.

Table 9.16-3. Hazard Risk/Vulnerability Risk Ranking

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{a, c}	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking ^b
Climate Change & Sea Level Rise	RCV in +3 feet: \$130,145,058	Frequent	18	Medium
Coastal Erosion	RCV in CEHA: \$790,982	Frequent	18	Medium
Flood	1% Annual Chance: \$2,036,503,105	Frequent	54	High
Hurricanes & Tropical Storms	Category 1 SLOSH: \$3,074,342,989 Category 2 SLOSH: \$3,110,077,813 Category 3 SLOSH: \$3,110,077,813 Category 4 SLOSH: \$3,110,077,813	Frequent	54	High
Nor'Easter	Damage estimate not available	Frequent	48	High
Severe Weather	100-Year MRP: \$8,306,513 500-year MRP: \$51,618,313 Annualized: \$745,645	Frequent	48	High
Severe Winter Weather	1% GBS: \$19,653,328 5% GBS: \$98,266,638	Frequent	51	High
Tsunami	Damage estimate not available	Rare	6	Low
Wildfire	Estimated Value Exposed to Extreme, Very High and High: \$0	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 Weather 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 Borough of Wildwood Crest.

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 1% Flood Boundary (3)
Wildwood Crest Borough	2,241	267	\$3,058,098	13	0	1,805

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 9.16-5. 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
Wildwood Crest Borough	0	4	0	1	0	0	1	0	2	0	0	0	1	0	0	1	0	0

Source: Cape May County

Note: EMS – Emergency Medical Services

Other Vulnerabilities Identified by Municipality

The Borough of Wildwood Crest is a barrier island located in a flood zone. Since the Borough is in a flood zone, the entire community is susceptible to flooding.

The majority of flooding occurs in the North West section of the Borough. This section of the Borough borders the bay and the principal damage occurs from Cresse Avenue south to Rambler Avenue. The tidal flooding frequently encompasses this area from the Park Boulevard corridor west to the street ends. In the event of a high water event, there are three areas of concern:

- Tidal water may rise above the bay front outfall pipes which will cause a reverse flow of the storm drains.
- Tidal water exceeding the capabilities of the street end barriers.
- The outdated storm drains do not have the capability to evacuate the tidal water once the water levels have subsided.



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
- 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 Borough of Wildwood Crest.

Table 9.16-6. 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.)
Planning Capability				
Master Plan	Yes	Local	Land Use Department	Original 2005/Re-Examination 3/2012
Capital Improvements Plan	Yes			
Floodplain Management/Basin Plan	Yes	Local	Land Use/Construction	Section 85-114 Of Borough Code
Stormwater Management Plan	Yes			
Open Space Plan	Yes	Local	Land Use Department	Part of master plan
Stream Corridor Management Plan	No			
Watershed Management or Protection Plan	No	Local and State	Sewer	
Economic Development Plan	No			
Comprehensive Emergency Management Plan	Yes	Local, State and Federal		
Emergency Response Plan	Yes	OEM Plan		
Post-Disaster Recovery Plan	No			
Transportation Plan	Yes			
Strategic Recovery Planning Report	Yes		County Planning	Countywide Plan (2015)
Other Plans:	No			
Regulatory Capability				
Building Code	Yes	State & Local	Construction Official	State Uniform Construction Code Act (N.J.S. 52:27D-119 Et Seq.)
Zoning Ordinance	Yes	Local	Zoning Official	Chapter 85 Of Borough Code
Subdivision Ordinance	Yes	Local	Zoning Official	Article XVII of chapter 85 Borough Code



Table 9.16-6. 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.)
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local	Construction Official/Zoning Official	Chapter 36 of the Borough Code
NFIP: Cumulative Substantial Damages	No			
NFIP: Freeboard	Yes	State, Local	Construction Official/Zoning Official	Chapter 36 requires 2' freeboard (§ 36-17.)
Growth Management Ordinances	No			
Site Plan Review Requirements	Yes	Local	Zoning Official	Article XVII of Chapter 85 Borough Code
Stormwater Management Ordinance	Yes	Local	Borough	Chapter 66 – Stormwater Control
Municipal Separate Storm Sewer System (MS4)	Yes			
Natural Hazard Ordinance	No			
Post-Disaster Recovery Ordinance	No			
Real Estate Disclosure Requirement	Yes	Local	Zoning Official	Chapter 86 of the Borough Code
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 Borough of Wildwood Crest.

Table 9.16-7. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/Agency/Position
Administrative Capability		
Planning Board	Yes	Planning Board - Dept. of Public Safety
Mitigation Planning Committee	Yes	PPI committee as required by CRS
Environmental Board/Commission	Yes	Environmental Commission - Dept. of Public Safety
Open Space Board/Committee	No	
Economic Development Commission/Committee	Yes	Urban Enterprise Zone
Maintenance Programs to Reduce Risk	Yes	Dep't. of Public Works
Mutual Aid Agreements	Yes	Local and County
Technical/Staffing Capability		
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Yes	Planner and Engineer for particular boards
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	City Engineer
Planners or engineers with an understanding of natural hazards	Yes	Planner and Engineer



Table 9.16-7. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/Agency/Position
NFIP Floodplain Administrator	Yes	Zoning Official
Surveyor(s)	No	
Personnel skilled or trained in GIS and/or Hazus-MH applications	Yes	Engineer
Scientist familiar with natural hazards	No	
Emergency Manager	Yes	
Grant Writer(s)	No	
Staff with expertise or training in benefit/cost analysis	Yes	Zoning Official
Professionals trained in conducting damage assessments	Yes	Construction Official

Fiscal Capability

The table below summarizes financial resources available to the Borough of Wildwood Crest.

Table 9.16-8. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No/Don't Know)
Community Development Block Grants (CDBG, CDBG-DR)	Yes – ADA only
Capital Improvements Project Funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes – Sewer Only
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	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal or State Funding Programs	Yes
Open Space Acquisition Funding Programs	Yes
Other	

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 Borough of Wildwood Crest.

Table 9.16-9. 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)	Yes	Class 6	May 1, 2014
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Class 3	May 2012
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Class 4	



Table 9.16-9. Education/Outreach and Community Classifications

Program	Do you have/participate in this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Storm Ready	No	NP	N/A
Firewise	No	NP	N/A
Disaster/Safety Programs in/for Schools	No		
Organizations with Mitigation Focus (advocacy group, non-government)	Yes		
Public Education Program/Outreach (through website, social media)	Yes	Municipal website	
Public-Private Partnerships	No		

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

Table 9.16-10. 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	
Community Political Capability			X



Table 9.16-10. Self-Assessment of Capability

Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)	Moderate	High
Community Resiliency Capability			X
Capability to Integrate Mitigation into Municipal Processes and Activities			X

National Flood Insurance Program

NFIP Floodplain Administrator (FPA)

Patricia J. Malia, Construction Official/Zoning Official

Flood Vulnerability Summary

The Borough maintains inventory of substantially damaged and repetitive loss properties. A small number of properties both residential and commercial received minor damage during hurricane Sandy. The Floodplain Manager is responsible for making substantial damage assessments following weather events. There was one substantial damage determination following Hurricane Sandy or other events. There are many property owners interested in raising their homes. Funding source for these house raising projects is private or insurance related.

Resources

The Flood Damage Prevention Ordinance (FDPO) identifies the Construction Official/Zoning Official as the NFIP Floodplain Administrator. The floodplain administrator and her support staff assume responsibilities for floodplain administration. The Construction/Zoning Office is responsible for plan review and inspection for compliance with the local zoning and state construction requirements. This office is also responsible for damage assessment and outreach programs under the CRS program. The Borough developed a PPI committee to keep the public informed on Flood Hazard issues. The floodplain administrator is currently adequately trained for floodplain management responsibilities, although additional training would be welcome.

Compliance History

The Borough is currently in good standing with the NFIP. The most recent Community Assistance Visit ended in May 2014.

Regulatory

The Borough of Wildwood Crest’s floodplain regulations exceed the minimum State and FEMA requirements.

Community Rating System

The Borough of Wildwood Crest is currently a Class 6 community in the Community Rating System (CRS) program.

Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

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.

Regulatory and Enforcement (Ordinances)

The Borough has multiple chapters pertaining to the mitigation of hazards. The municipal zoning regulation takes into account the presence of floodplain and erosion areas. The Zoning and Planning Boards are aware of the potential problems associated with the floodplain and are updated annually concerning new mapping and mitigation efforts. The zoning code requires the developer to take into account the elevation requirements and drainage requirements for all construction projects. The zoning code requires additional freeboard above the state mandated requirements. Zoning code also has provisions regarding drainage concerns and limited non permeable site coverage.

Operational and Administration

Land Use Planning: The Planning and Zoning boards are updated on a regular basis with respect to flood damage prevention and mitigation efforts. The Zoning Board of Adjustments is the appeal board for all Flood related code issues.

Floodplain Management: NFIP Floodplain Management issues are performed by the Floodplain Administrator, Patrick J. Malia who is the Construction Official and Zoning Official and CRS coordinator.

Technical Resources: Substantial Damage Estimates are performed by the Construction Official and Municipal Engineer.

Funding

Operating Budget: The Borough's operating budget does not contain line items for mitigation project/activities. Capital Improvements are submitted as part of each year's budget requests.

Grants: The Borough applies for available grant funding.

Education and Outreach

The Borough of Wildwood Crest has many outreach programs including: informational letters, pamphlets, and social media web-sites to promote flood awareness and protective measures. In addition, our web-site links to related topics on flood and natural hazard awareness.

9.16.6 Mitigation Strategy and Prioritization

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

Past Mitigation Initiative Status

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 9.16-11. Past Mitigation Initiative Status

2010 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 Step (Include in 2016 HMP? or Discontinue)	Describe Next Step 1. If including action in the 2016 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
WC-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.	Borough (likely through NFIP Floodplain Administrator)	In Progress	1. Some progress. Some non-compliant structures were demolished and compliant structures built. Some substantially improved structures were raised to compliant elevations.	Include in 2016 HMP	1. Re-evaluate based on revised flood maps. Additional funding may be available through post-Sandy mitigation funding.
WC-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.	Borough	No Progress	1. 0% progress. No funding has been available for purchase for demolition or relocation. 2. Obstacles to progress are lack of funding for obtaining property. 3. Some properties have been demolished or raised through private funding sources.	Include in 2016 HMP	1. Re-evaluate based on revised flood maps and areas damaged by recent storms. 2. Additional post-Sandy mitigation funding sources may be available.
WC-2: Continue active participation in incentive-based program CRS.	Borough	In Progress	1. Approximately 30% 2. Achieved a Class 6 in CRS rating. 3. Challenges exist in staffing and funding	Include in 2016 HMP	1. Provide additional outreach programs 2. Possibly partner with adjacent municipality for public outreach.
WC-3: Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0	Borough (through mitigation planning point of contacts)	In Progress	1. 20% complete 2. Some progress has been achieved on plan 3. Staffing and funding provide obstacles to the plan implementation.	Include in 2016 HMP	1. Provide updates for new items in plan based on observations during recent storms.



2010 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 Step (Include in 2016 HMP? or Discontinue)	Describe Next Step 1. If including action in the 2016 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
WC-4: Strive to maintain compliance with, and good-standing in the National Flood Insurance program.	Municipality (likely through NFIP Floodplain Administrator)	In Progress	1. Some progress. Maintaining a positive active relationship in the NFIP through participation in the CRS program, Association for Floodplain Managers, and other seminars and conferences. 2. Staffing is an obstacle as there is a significant amount of work and paperwork.	Include in 2016 HMP	1. Maintain participation in CRS program. Continue involvement in NJAFM and attending seminars and conferences. 2. Continue to enforce Building Codes, Zoning Codes and elevation requirements to mitigate possibility of flood damage.
WC-5: Continue to develop, enhance, and implement existing emergency plans.	Municipal Emergency Manager with support from County OEM and NJ OEM	In Progress	1. Ongoing. The Borough continually works to improve existing emergency plans. 2. 3.	Discontinue	1. 2. 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.
WC-6: Create/enhance/ maintain mutual aid agreements with neighboring communities.	Borough	In Progress	1. Ongoing. The Borough continually works to improve or establish mutual aid agreements as appropriate. 2. 3.	Discontinue	1. 2. 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.
WC-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	Local departments (as applicable for specific initiative)	In Progress	1. In progress / ongoing. The Borough has supported County-wide mitigation initiatives over the course of the performance period of the plan and will continue to do so after the plan update. 2. 3.	Include in 2016 HMP	1. 2.
WC-8 (CMC-19): Upgrade stormwater drainage system along CR-621 and arterials in the Wildwoods (Wildwood Crest, Wildwood and North Wildwood). These are inadequate to even a 2-year storm.	County Engineering with municipalities	In Progress	1. Paving entire street in Wildwood (New Jersey Avenue). 2. 3.	Include in 2016 HMP	1. 2.



2010 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 Step (Include in 2016 HMP? or Discontinue)	Describe Next Step 1. If including action in the 2016 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
WC-9: Stormwater drainage improvement of the Borough's streets – ongoing project	Borough	In Progress	1. Joe Vernick VNH to provide. 2. 3.	Include in 2016 HMP	1. 2.
WC-10: Increase the size of stormwater outfalls to permit faster drainage and mitigate flooding	Borough	In Progress	1. General outfall programs. 2. 3.	Include in 2016 HMP	1. 2.
WC-11: Sunset Lake bank stabilization (bayside)– ongoing project	Borough	In Progress	1. Tile walls damaged during Sandy. PA and 406 ongoing. ~8-9 blocks (project) not all damaged. 2. 3.	Include in 2016 HMP	1. 2.
WC-12: Dune construction along the beachfront – ongoing project	Borough and State	In Progress	1. ACOE project 2. 3.	Include in 2016 HMP	1. 2.
WC-13: Replacement of bay-front street-end bulkheads	Borough	Complete	1. The bulkheads were replaced on the northern end of the Borough; all damaged ones have been replaced.	Include in 2016 HMP	1. 2.
WC-14: Ocean stormwater outfalls to be extended in the fall of 2009 (third extension of the outfalls since 2001)	Borough	In Progress	1. Combine into a single initiative 2. 3.	Include in 2016 HMP	1. 2.



Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy

The Borough 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:

- None identified to date.

Proposed Hazard Mitigation Initiatives for the Plan Update

Table 9.16-12 summarizes the comprehensive-range of specific mitigation initiatives the Borough 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 9.16-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.16-12. 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
BWC-1 (former WC-1a,b)	<p>Where appropriate, support retrofitting (e.g. elevation), 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 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>Some non-compliant structures were demolished and compliant structures built. Some substantially improved structures were raised to compliant elevations. Some properties have been demolished or raised through private funding sources. No funding has been available for purchase for demolition or relocation.</p> <p>Re-evaluate based on revised flood maps and areas damaged by recent storms. Additional funding may be available through post-Sandy mitigation funding.</p> <p>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.</p>											
	See above.	Existing	Coastal Storm, Flood, Severe Weather	1, 2, 4, 6	Borough (through NFIP Floodplain Administrator)	High	High	See above.	Long-term DOF	M-H**	EAP, SIP	PI, PP
BWC-2 (former WC-4)	<p>Continue to strive to maintain compliance with, and good-standing in the National Flood Insurance program, specifically through the following activities:</p> <ul style="list-style-type: none"> Maintain participation in CRS program. Continue involvement in NJAFM and attending seminars and conferences. Continue to enforce Building Codes, Zoning Codes and elevation requirements to mitigate possibility of flood damage. 											
	See above.	New & Existing	Coastal Storm, Flood, Severe Weather	1, 2, 4, 5, 6	Borough (through NFIP Floodplain Administrator)	Medium - High	Low - Medium	Local Budget	Ongoing	H	All	All
BWC-3 (former WC-7)	Continue to support County-wide initiatives identified in Section 9.1 of the County Annex.	New & Existing	All Hazards	1 through 6	Local departments (as applicable for specific initiative)	Medium - High	Low - High	Existing programs and grant funding where applicable	Ongoing – Long-term depending on initiative	M-H (dependent)	All	All
BWC-4 (former WC-8 (CMC-19)	<p>Upgrade stormwater drainage system along CR-621 and arterials in the Wildwoods (Wildwood Crest, Wildwood and North Wildwood). These are inadequate to even a 2-year storm. Activity in the Wildwoods has been on Jersey Avenue, Wildwood Avenue.</p>											
	See above.	Existing	Coastal Storms, Flooding	1, 3	County Engineering with municipalities	High	High	HMA grants and local match	Long-term DOF	Medium	SIP	PP
BWC-5 (former WC-9, 10)	<p>Stormwater drainage improvement of the Borough's streets – Increase the size of stormwater outfalls to permit faster drainage and mitigate flooding.</p>											
	See above.	Existing	Coastal Storms, Severe Weather, Flooding	1, 3	Municipal Engineering and DPW	High	High	Local and grant as applicable	Ongoing	Medium - High	SIP	PP



Table 9.16-12. 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
BWC-6 (former WC-14)	Ocean Stormwater Outfall Mitigation: The Borough accretes sand, which has caused their outflow pipes to continually be buried/blocked. The entire downtown floods during heavy rains as a result. Ocean stormwater outfalls have been extended three times since 2001, and again need to be extended. This project has been submitted for grant funding, including FEMA mitigation grant funding, however no response on this application has been received by the Borough.											
	See above.	Existing	Coastal Storms, Severe Weather, Flooding	1, 3	Borough with support from County	High	High	TBD	Ongoing	High	SIP	PP
BWC-7 (former WC-11)	Sunset Lake bank stabilization (bayside) – ongoing project. Tile walls damaged during Sandy. PA and 406 ongoing. ~8-9 blocks (project) not all damaged. The caps have been damaged.	Existing	Coastal Storms, Coastal Erosion, Severe Weather, Flooding	1, 5	Borough with support from County	High	High	TBD	Ongoing	High	SIP	PP
BWC-8 (former WC-12)	Dune construction along the beachfront – ongoing ACOE statewide dune project.	Existing	Coastal Storms, Coastal Erosion, Flooding	1, 5	ACOE and NJDEP	High	High	TBD	Ongoing	High	SIP, NSP	PP, NR
BWC-9 (former WC-13)	Replacement of bay-front street-end bulkheads. They replaced those that were damaged on the northern end of Borough – all cement now.											
	See above.	Existing	Coastal Storms, Coastal Erosion, Flooding	1, 5	Borough with support from County	High	High	Federal grants where applicable and local match	DOF	Medium	SIP	PP
BWC-10	Backup Power for Crest Memorial School. The Borough lacks a shelter. They Borough has received grant funding (~\$75k) for a backup generator, and they are currently sizing it so that they can operate necessary parts of the school as a shelter facility.											
	See above.	Existing	All hazards resulting in power outages	1, 4, 5	Borough and School Administration	High	Medium	FEMA Grant funding received	Ongoing	High - Ongoing	SIP, EM*	PP, ES

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
HMGF	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 9.16-13. 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
BWC-1 (former WC-1a,b)	Support retrofitting (e.g. elevation), purchase, or relocation of structures located in hazard-prone areas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M-H*
BWC-2 (former WC-4)	Continue to strive to maintain compliance with, and good-standing in the National Flood Insurance Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	H
BWC-3 (former WC-7)	Continue to 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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M-H (dependent)
BWC-4 (former WC-8 (CMC-19))	Upgrade stormwater drainage system along CR-621 and arterials in the Wildwoods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
BWC-5 (former WC-9, 10)	Stormwater drainage improvement of the Borough’s streets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium - High
BWC-6 (former WC-14)	Ocean Stormwater Outfall Mitigation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High
BWC-7 (former WC-11)	Sunset Lake bank stabilization (bayside)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High
BWC-8 (former WC-12)	Dune construction along the beachfront – ongoing ACOE statewide dune project.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High
BWC-9 (former WC-13)	Replacement of bay-front street-end bulkheads.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
BWC-10	Backup Power for Crest Memorial School	1	1	1	1	0	0	1	0	1	1	1	1	0	0	9	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.





9.16.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.16.8 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Borough of Wildwood Crest 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 Borough of Wildwood Crest 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

None at this time.



Figure 9.16-1. Borough of Wildwood Crest Hazard Area Extent and Location Map 1

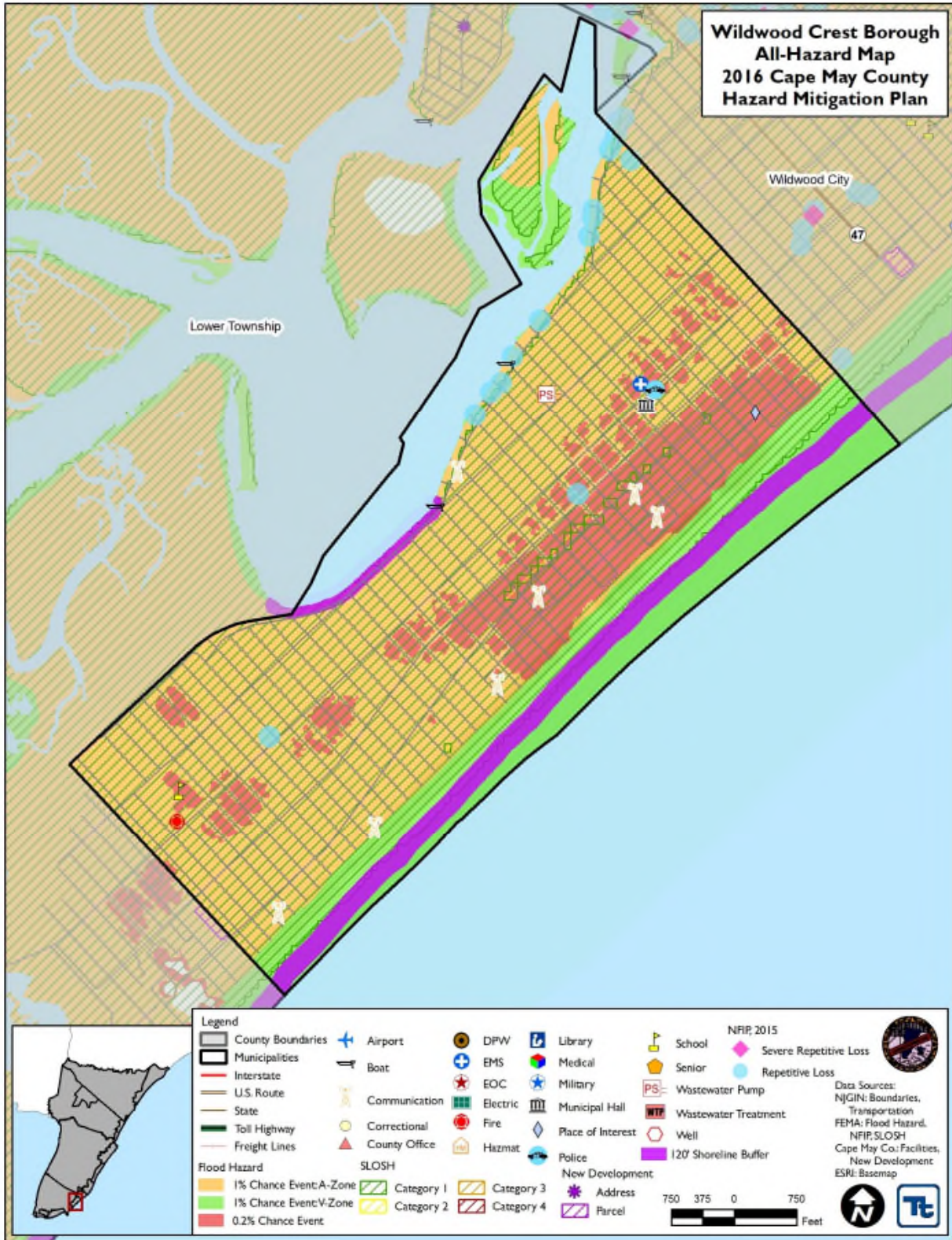




Figure 9.16-2. Borough of Wildwood Crest Hazard Area Extent and Location Map 1

