



9.26 Township of New Hanover

This section presents the jurisdictional annex for the Township of New Hanover.

9.26.1 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
Pat Murphy, OEM Coordinator 2 Hockamick Road, Cookstown, NJ 08511 609.680.1857 murphypm@comcast.net	Kyle Tuliano, Deputy OEM 2 Hockamick Road, Cookstown, NJ 08511 609.724.4823 ktuliano@newhanovertwp.com

9.26.2 Municipal Profile

The Township of New Hanover is located in the eastern portion of Burlington County. The Township is bordered by Pemberton Township to the south and southwest, Hainesport to the west, Springfield to the northwest, Wrightstown to the north, and North Hanover to the north and northeast. In addition, the Township is bordered by the Ocean County municipality of Plumsted to the east. According to the 2010 Census, the community's population was 7,385. The Township has a total area of 22.395 square miles, including 22.175 square miles of land and 0.220 square miles of water.

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

Growth/Development Trends

The following table summarizes recent residential/commercial development since 2013 to present and any known or anticipated major residential/commercial development and major infrastructure development that has been identified in the next five years within the municipality. Refer to the map in 9.26.8 of this annex which illustrates the hazard areas along with the location of potential new development.

Table 9.26-1. Growth and Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or block/lot)	Known Hazard Zone(s)	Description/Status of Development
Recent Development from 2013 to present					
Cheddar Close	Res	52	Hillfield Rd, Keller Ave, Tweentown Close Laburnum Close	Wildfire: Very High	Complete
Bunting Bridge II	Res	8	Kate Ct	None	Complete
Known or Anticipated Development in the Next Five (5) Years					
None					

* Only location-specific hazard zones or vulnerabilities identified.



9.26.3 Natural Hazard Event History Specific to the Municipality

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

Table 9.26-2. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	Burlington County Designated?	Summary of Damages/Losses
April 30-May 1, 2014	Heavy Rain and Flooding	N/A	Heavy rain caused considerable poor drainage and creek flooding in the northern Burlington County. Rancoacas Creek was hit the hardest by flooding. Many roads were flooded and closed. Approximately \$1 million in property damage in the County.
June 23, 2015	Severe Storm (DR-4231)	Yes	\$10 million in property damage in the County (\$8 million in Medford, \$1 million in Mt Laurel and \$1 million in Medford Lakes)
January 22-24, 2016	Severe Winter Storm (DR-4264)	Yes	Heavy snow fell throughout the County; snowfall totals ranged from 12 inches to 16.4 inches.

Notes:

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

9.26.4 Hazard Vulnerabilities and Ranking

The hazard profiles in Section 5.0 of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the hazard vulnerabilities and their ranking in the Township of New Hanover. 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 New Hanover. During the review of the hazard/vulnerability risk ranking, the Township indicated the following:

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

Table 9.26-3. 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
Coastal Erosion	RCV Exposed to CE Hazard Area: \$0	Rare	6	Low
Drought	Damage estimate not available.	Frequent	36	High





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
Earthquake	100-Year GBS: \$0 500-Year GBS: \$2,109,701 2,500-Year GBS: \$31,577,803	Occasional	28	Medium
Flood*	1% Annual Chance: \$17,056,530	Frequent	18	Medium
Landslide	RCV Exposed to Landslide Hazard Area \$0	Rare	6	Low
Severe Storm	100-year MRP: \$274,549 500-year MRP: \$1,101,525 Annualized: \$41,619	Frequent	48	High
Severe Winter Weather	1% GBS: \$15,462,326 5% GBS: \$77,311,631	Frequent	51	High
Wildfire*	Estimated Value in the Extreme, Very High, and High Hazard Areas: \$36,558,890	Occasional	16	Medium

Notes:

- a. Building damage ratio estimates based on FEMA 386-2 (August 2001)
- b. The valuation of general building stock and loss estimates was based on custom inventory for the municipality.
High = Total hazard priority risk ranking score of 31 and above
Medium = Total hazard priority risk ranking of 20-30+
Low = Total hazard risk ranking below 20
- c. Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the value of contents.
- d. Loss estimates for the flood and earthquake hazards represent both structure and contents.
- e. The HAZUS-MH earthquake model results are reported by Census Tract.

*The Township of New Hanover changed the risk ranking for flood from low to medium and wildfire from low to medium.

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Township of New Hanover.

Table 9.26-4. NFIP Summary

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 100-year Boundary (3)
Township of New Hanover	2	5	\$889.34	0	0	0

Source: FEMA Region 2 2017, 2018

- (1) Repetitive loss and severe repetitive loss statistics provided by FEMA Region 2 and are current as of 10/31/2017. Policy and claims statistics current as of 9/30/2018
Please note the total number of repetitive loss properties does not include the severe repetitive loss properties. The number of claims represents claims closed by 9/30/2018.
- (2) Total building and content losses from the claims file provided by FEMA Region 2.
- (3) The policies inside and outside of the flood zones are based on the addresses geocoded from the FEMA Region 2 policy file – 10/31/2017.

Notes: FEMA noted that where there is more than one entry for a property, there may be more than one policy in force or more than one GIS possibility.
A zero percentage denotes less than 1/100th percentage and not zero damages or vulnerability as may be the case.

Critical Facilities





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

Table 9.26-5. Potential Flood Losses to Critical Facilities

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

Source: FEMA 2017, Burlington County

Other Vulnerabilities Identified

The municipality has identified the following vulnerabilities within their community:

- Stream located at Bunting Bridge Rd and Eckley Ct.

9.26.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

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

Planning and Regulatory Capability

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

Table 9.26-6. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Planning Capability				
Master Plan	Yes	Local	Twp. Committee/Planning Board	-
Capital Improvements Plan	No	-	-	-
Floodplain Management / Basin Plan	No	-	-	-
Stormwater Management Plan	Yes	Local	Twp. Committee	-
Open Space Plan	Yes	Local	Twp. Committee/Planning Board	-
Stream Corridor Management Plan	No	-	-	-



Section 9.26: Township of New Hanover

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Watershed Management or Protection Plan	No	-	-	-
Economic Development Plan	Yes	Local	Twp. Committee	Ord. 2007-09
Comprehensive Emergency Management Plan	Yes (3/10/10)	Local	NH OEM	ERP
Emergency Operation Plan	Yes (3/10/10)	Local	NH OEM	ERP
Post-Disaster Recovery Plan	No	-	-	-
Transportation Plan	Yes	Local	Twp. Committee	Master Plan
Strategic Recovery Planning Report	No	-	-	-
Other Plans:	N/A	-	-	-
Regulatory Capability				
Building Code	Yes (1977/1988)	State & Local	NH Const. Office/ Twp. Committee	Chapt. 86, 100
Zoning Ordinance	Yes	Local	Twp. Committee/Planning Board	-
Subdivision Ordinance	Yes (2007)	Local	Twp. Committee/Planning Board	Ord. 2007-09
NFIP Flood Damage Prevention Ordinance	No	Federal, State, Local	-	-
NFIP: Cumulative Substantial Damages	No	-	-	-
NFIP: Freeboard	No	State, Local	-	-
Growth Management Ordinances	Yes (2007)	-	Twp. Committee	Ord. 2007-19
Site Plan Review Requirements	Yes	State, Local	Twp. Committee/Planning Board	-
Stormwater Management Ordinance	Yes (2006/2008)	Local	Twp. Committee	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Stormwater Program Ordinances <ul style="list-style-type: none"> • Pet waste • Litter Control • Improper Disposal of Waste • Wildlife Feeding • Yard Waste Collection • Illicit Connection • Private Storm Drain Retrofitting 	No	-	-	-





Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
• Refuse Container / Dumpster (optional)				
Natural Hazard Ordinance	No	-	-	-
Post-Disaster Recovery Ordinance	No	-	-	-
Real Estate Disclosure Requirement	Yes	State	-	-
Other (Special Purpose Ordinances [i.e., sensitive areas, steep slope])	Yes (2009)	Federal	Twp. Committee	2009-63 Joint Base Land Use Committee, McGuire AFB

Administrative and Technical Capability

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

Table 9.26-7. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Twp. Committee/Planning Board
Mitigation Planning Committee	Yes	Mayor, Deputy Mayor Planning Board
Environmental Board/Commission	Yes	Twp Committee
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Twp. Committee
Maintenance programs to reduce risk	Yes	Insurance Advisor
Mutual aid agreements	Yes	Twp Committee
Technical/Staffing Capability		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Environmental Resolutions./ Twp. Engineers Appointed Professionals
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Environmental Resolutions./ Twp. Engineers Appointed Professionals
Planners or engineers with an understanding of natural hazards	Yes	Environmental Resolutions./ Twp. Engineers Appointed Professionals
NFIP Floodplain Administrator (FPA)	Yes	N/A
Surveyor(s)	No	On Staff at Twp. Engineers Office
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	
Emergency Manager	Yes	New Hanover OEM
Grant writer(s)	Yes	Twp. Engineers/Police Dept.
Staff with expertise or training in benefit/cost analysis	Yes	Twp. Administration
Professionals trained in conducting damage assessments	Yes	Insurance Advisor



Fiscal Capability

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

Table 9.26-8. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes-No Local
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	Yes
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	Yes
Other	N/A

Community Classifications

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

Table 9.26-9. Community Classifications

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	N/A	N/A
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	9	11-2009
Public Protection (ISO Fire Protection Classes 1 to 10)	NP	-	-
Storm Ready Certification	No	N/A	N/A
Firewise Communities classification	No	N/A	N/A
Natural disaster/safety programs in/for schools	N/A	N/A	N/A
Organizations with mitigation focus (advocacy group, non-government)	No	N/A	N/A
Public education program/outreach (through website, social media)	No	N/A	N/A
Public-private partnership initiatives addressing disaster-related issues	No	N/A	N/A

Note:

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

The classifications listed above relate to the community’s ability to provide effective services to lessen its vulnerability to the hazards identified. These classifications can be viewed as a gauge of the community’s capabilities in all phases of emergency management (preparedness, response, recovery and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS class applies





to flood insurance while the BCEGS and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with class 1 being the best possible classification, and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1000 feet of a creditable fire hydrant and is within 5 road miles of a recognized Fire Station.

Criteria for classification credits are outlined in the following documents:

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

Self-Assessment of Capability

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

Table 9.26-10. Self-Assessment Capability for the Municipality

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

National Flood Insurance Program

NFIP Floodplain Administrator (FPA)

Joe Hirsh, Engineer

Flood Vulnerability Summary

The Township of New Hanover does not maintain lists or inventories of properties that have been flood damaged. There have been no structures damaged in the past 3 years. The Township does not make substantial damage estimates. The FPA indicated that there are currently no residents interested in elevation or mitigation.

Resources

The FPA assumes the responsibilities of floodplain administration for the Township of New Hanover. NFIP administration services and functions provided to residents of New Hanover include inspections and damage assessments. The Township does not provide education to the community regarding flood hazards/risk or flood risk reduction. The FPA stated there are currently no barriers to running an effective floodplain management program and feels adequately supported and trained to fulfill his responsibilities as the municipal floodplain





administrator. The FPA would consider attending continuing education and certification training on floodplain management if it were offered in the future.

Compliance History

The Township is in good compliance with the NFIP. The FPA did not know when the last Community Assistance Visit was conducted.

Regulatory

The Township of New Hanover's floodplain management ordinance meets the minimum set by FEMA and the State of New Jersey. The FPA indicated that grading/drainage is always reviewed to support floodplain management. The FPA was unsure if the Township had considered joining the CRS program in the past or if the Township would consider attending a local seminar on the 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.

Planning

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

Master Plan: The Master Plan for the Township of New Hanover was last updated in October of 2005. The Master Plan was passed in Township Ordinance 2007-8.

Stormwater Management Plan: The Stormwater Management Plan for the Township of New Hanover includes the following goals:

- Reduce flood damage, including damage to life and property
- Minimize any increase in stormwater runoff from new development
- Reduce soil erosion from any development or construction project
- Assure the adequacy of existing and proposed culvert and bridges, and other in-stream structures
- Maintain ground water re-charge
- Minimize any increase in nonpoint pollution
- Maintain integrity of stream channels for their biological functions, as well as for drainage
- Restore, protect, maintain and enhance the quality of the streams and water resources or the Township and the ecological character and quality of the Pinelands Area
- Minimize pollutants in stormwater runoff from new and existing development in order to restore, protect, enhance and maintain the chemical, physical and biological integrity of the surface and groundwaters or the Township, to protect public health and to enhance the domestic, municipal, recreational, industrial and other uses of water
- Protect public safety through the proper design and operation of stormwater management basins.



Regulatory and Enforcement (Ordinances)

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

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

Operational and Administration

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

Vegetation Management: The Township's DPW maintains a tree maintenance and clearing program along roadways in high hazard areas.

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

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

Planning Board: The Planning Board is made up of 9 members. The Planning Board meets on the 1st Tuesday of every month at the Township building.

Joint Base McGuire-Dix-Lakehurst Land Use Committee: The Joint Base McGuire-Dix-Lakehurst Land Use Committee is run by Joint Base McGuire-Dix-Lakehurst that includes outside Townships for land use.

Funding

The Township has identified various financial resources that are available including Community Development Block Grants, Capital Improvements Project Funding, authority to levy taxes for specific purposes, and incurring debt through general obligation and special tax bonds.



Education and Outreach

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

9.26.6 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 2013 Plan. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.26-11. Status of Previous Mitigation Actions

Action Number	2013 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Steps 1. Project to be included in 2019 HMP or Discontinue 2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
NeH-1	Evaluate benefits of participating in CRS program	Twp. Committee, Planning, OEM, Floodplain Adm.	In Progress	1. Twp is reviewing CRS program 2. 3.	1. Include in 2019 2. - 3. N/A
NeH-2	Conduct and facilitate community and public education and outreach for residents and businesses to promote natural hazard risk reduction to include: Disaster preparedness Hazard mitigation	Municipality with support from Planning Partners, County Planning, NJOEM, FEMA	No Progress	1. 0% 2. No Funding 3.	1. Include in 2019 as we are still looking at different ways to complete project 2. - 3. N/A
NeH-3	Improve municipal communications systems to include information sharing with county and surrounding municipalities.	OEM with support from County, NJOEM and FEMA	Complete	1. 100% complete 2. 3. Local Government Funding	1. Discontinue 2. N/A 3. Ongoing capability
NeH-4	Obtain and install backup power sources at all critical facilities to include shelters.	Municipality engineering, OEM with support from County, NJOEM and FEMA	No Progress	1. 0% 2. No Funding 3.	1. Include in 2019 as we are still looking at different ways to complete project. 2. - 3. N/A
NeH-5	Create/Enhance/Maintain Mutual Aid agreements with neighboring communities for continuity of operations	Municipal Government, OEM with support from County, NJOEM, FEMA and surrounding communities	In progress	1. In progress 2. 3.	1. Discontinue 2. N/A 3. Ongoing capability
NeH-6	Continue to support the implementation, monitoring, maintenance, and updating of this Plan through participating in the 5 year Plan Update	Municipal Government, OEM with support from	In Progress	1. Review Annually 2. 3.	1. Discontinue 2. N/A 3. Ongoing capability





Action Number	2013 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Steps 1. Project to be included in 2019 HMP or Discontinue 2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
		Planning Partners, County Planning, NJOEM, FEMA			
NeH-7	Continue to promote the participation of Floodplain Administrator within the planning process and other related activities.	Municipal Government with support from County, NJOEM and FEMA	In Progress	1. 100% Participation 2. 3.	1. Discontinue 2. N/A 3. Ongoing capability
NeH-8	Enhance resilience to severe storms by joining the NOAA "Storm Ready" program.	OEM with support from County, NJOEM and FEMA	In Progress	1. Going through steps to join 2. 3.	1. Include in 2019 2. N/A 3. N/A
NeH-9	Provide public education and outreach on proper installation and/or use of backup power	Municipal Clerk, OEM and government	No Progress	1. 0% 2. No funding 3.	1. Include in 2019 as we are still looking at different ways to complete project 2. N/A 3. N/A
NeH-10	Address dangerous trees threatening people and property through proactive tree-trimming (vegetation management) programs in conjunction with property owners and utility companies.	Municipal DPW	In Progress	1. 80% of Twp trees have been trimmed 2. 3.	1. Discontinue 2. N/A 3. Ongoing capability
NeH-11	Evaluate benefits of participating in the Firewise Program	Municipal OEM	In Progress	1. Twp is obtaining information about program 2. 3.	1. Include in 2019 as we are still looking at different ways to complete project 2. N/A 3. N/A



Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy

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

- None identified

Proposed Hazard Mitigation Initiatives for the Plan Update

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

Table 9.26-12 summarizes the comprehensive-range of specific mitigation initiatives the Township of New Hanover would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

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

Table 9.26-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.26-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
T. New Hanover-1 (former NeH-1)	Evaluate benefits of participating in CRS program	All	1, 2, 3, 4, 5	Twp. Committee, Planning, OEM, Floodplain Adm.	Medium	Low	Municipal Government, OEM and Floodplain Admin.	Short Term	Medium	LPR	PR
T. New Hanover-2 (former NeH-2)	Conduct and facilitate community and public education and outreach for residents and businesses to promote natural hazard risk reduction to include: <ul style="list-style-type: none"> Disaster preparedness Hazard mitigation 	All Hazards	5	Municipality with support from Planning Partners, County Planning, NJOEM, FEMA	Medium	Medium	Municipal Budget, HMA programs with local or county match	Short Term	High	EAP	PI
T. New Hanover-3 (former NeH-4)	Obtain and install backup power sources at all critical facilities to include shelters.	All Hazards	1, 3	Municipality engineering, OEM with support from County, NJOEM and FEMA	Medium	Medium	Municipal Budget	Short Term	Medium	SIP	ES
T. New Hanover-4 (former NeH-8)	Enhance resilience to severe storms by joining the NOAA “Storm Ready” program.	Severe Storm	1, 3	Municipal Government with support from County, NJOEM and FEMA	Medium	Low	Municipal Budget	Short Term DOF	Medium	EAP	PI
T. New Hanover-5 (former NeH-9)	Provide public education and outreach on proper installation and/or use of backup power	Severe Storm	1, 5	OEM with support from County, NJOEM and FEMA	Medium	Low	Municipal Budget	Short Term	High	LPR EAP	PR PI
T. New Hanover-6 (former NeH-11)	Evaluate benefits of participating in the Firewise Program	Wildfire	1, 2, 3, 4, 5	Municipal DPW	Medium	Low	Municipal Government, OEM	Short Term	Medium	LPR	PR
T. New Hanover-7	Conduct feasibility assessment to reduce flooding at stream located at Bunting Bridge Rd and Eckley Ct.	Flood	1, 2	Twp. Committee	Medium	Medium	Municipal budget for assessment, HMGP for	Long Term	Medium	SIP	PP





Initiative	Mitigation Initiative	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
							possible actions				
T. New Hanover-8	Conduct flood feasibility assessment of substation located at Vanderberg Avenue and East Main Street	Flood	1, 2	Twp. Committee	Medium	Medium	Municipal budget for assessment, HMGP for possible actions	Long Term	Medium	SIP	PP

Notes:

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

*Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure? Not applicable (N/A) is inserted if this does not apply.

Acronyms and Abbreviations:

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

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 PDM Pre-Disaster Mitigation Grant Program
 RFC Repetitive Flood Claims Grant Program (discontinued in 2015)
 SRL Severe Repetitive Loss Grant Program (discontinued in 2015)

Timeline:

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

Costs:

Where actual project costs have been reasonably estimated:

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

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

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

Benefits:

Where possible, an estimate of project benefits (per FEMA's benefit calculation methodology) has been evaluated against the project costs, and is presented as:

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

Where numerical project benefits cannot reasonably be established at this time:

Low Long-term benefits of the project are difficult to quantify in the short term.
 Medium Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.
 High Project will have an immediate impact on the reduction of risk exposure to life and property.





Mitigation Category:

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

CRS Category:

- *Preventative Measures (PR)* - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)* - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)* - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)* - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)* - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)* - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.26-13. 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	Total	High / Medium / Low
T. New Hanover-1 (former NeH-1)	Evaluate benefits of participating in CRS program	1	1	1	1	1	1	-1	1	1	-1	1	1	0	1	9	Medium
T. New Hanover-2 (former NeH-2)	Conduct and facilitate community and public education and outreach for residents and businesses to promote natural hazard risk reduction to include: <ul style="list-style-type: none"> • Disaster preparedness • Hazard mitigation 	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
T. New Hanover-3 (former NeH-4)	Obtain and install backup power sources at all critical facilities to include shelters.	1	0	1	1	1	1	-1	0	1	0	1	1	1	0	8	Medium
T. New Hanover-4 (former NeH-8)	Enhance resilience to severe storms by joining the NOAA “Storm Ready” program.	1	1	1	1	1	1	-1	1	1	-1	1	1	0	1	9	Medium
T. New Hanover-5 (former NeH-9)	Provide public education and outreach on proper installation and/or use of backup power	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
T. New Hanover-6 (former NeH-11)	Evaluate benefits of participating in the Firewise Program	1	1	1	1	1	1	-1	1	1	-1	1	1	0	1	9	Medium
T. New Hanover-7	Conduct feasibility assessment to reduce flooding at stream located at Bunting Bridge Rd and Eckley Ct.	1	1	0	0	1	1	1	1	1	1	0	0	1	1	10	Medium
T. New Hanover-8	Conduct flood feasibility assessment	1	1	0	0	1	0	1	1	1	1	0	0	1	1	9	Medium





Table 9.26-13. 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	Total	High / Medium / Low
	of substation located at Vanderberg Avenue and East Main Street																

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



9.26.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.26.8 Hazard Area Extent and Location

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

9.26.9 Additional Comments

None at this time.



Figure 9.26-1. Township of New Hanover Hazard Area Extent and Location Map 1

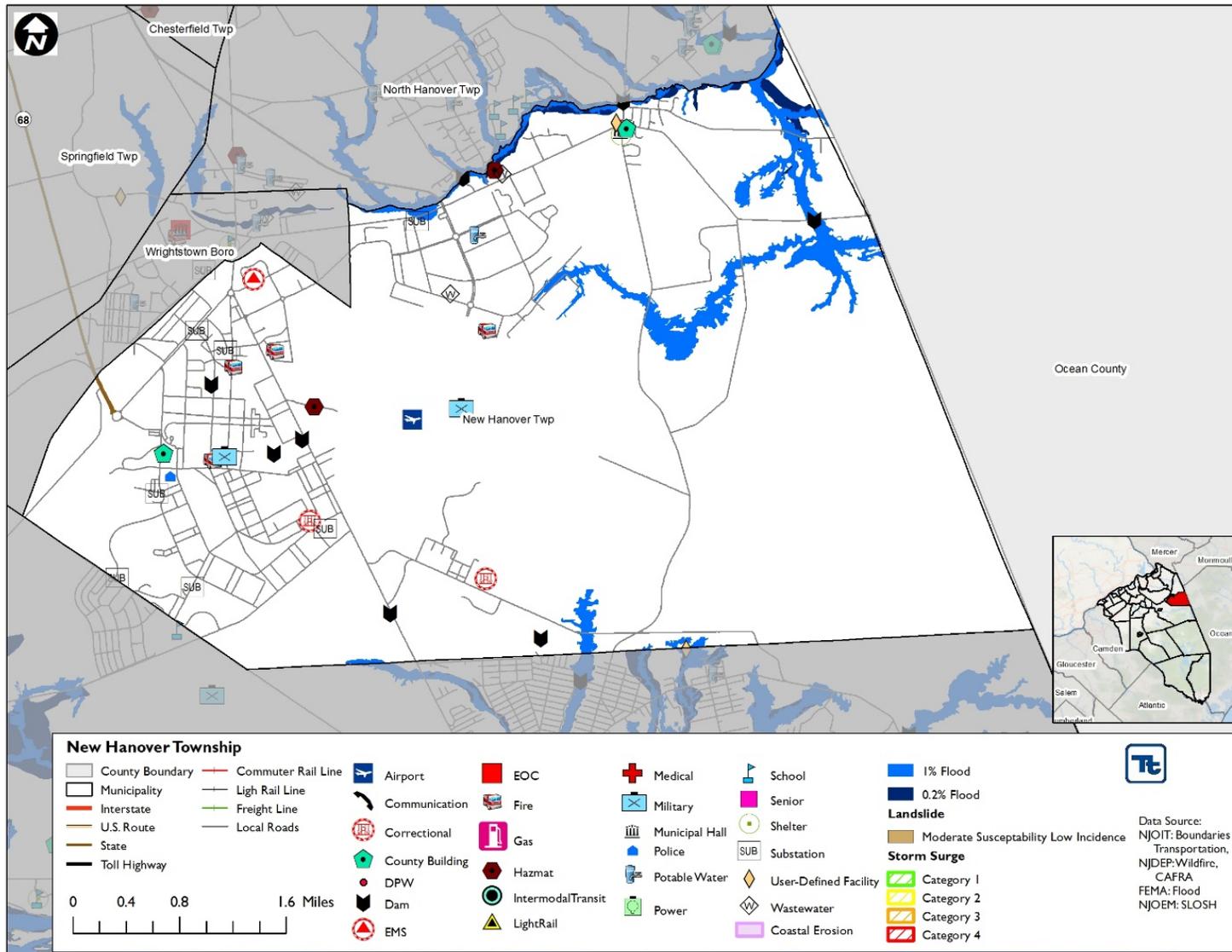
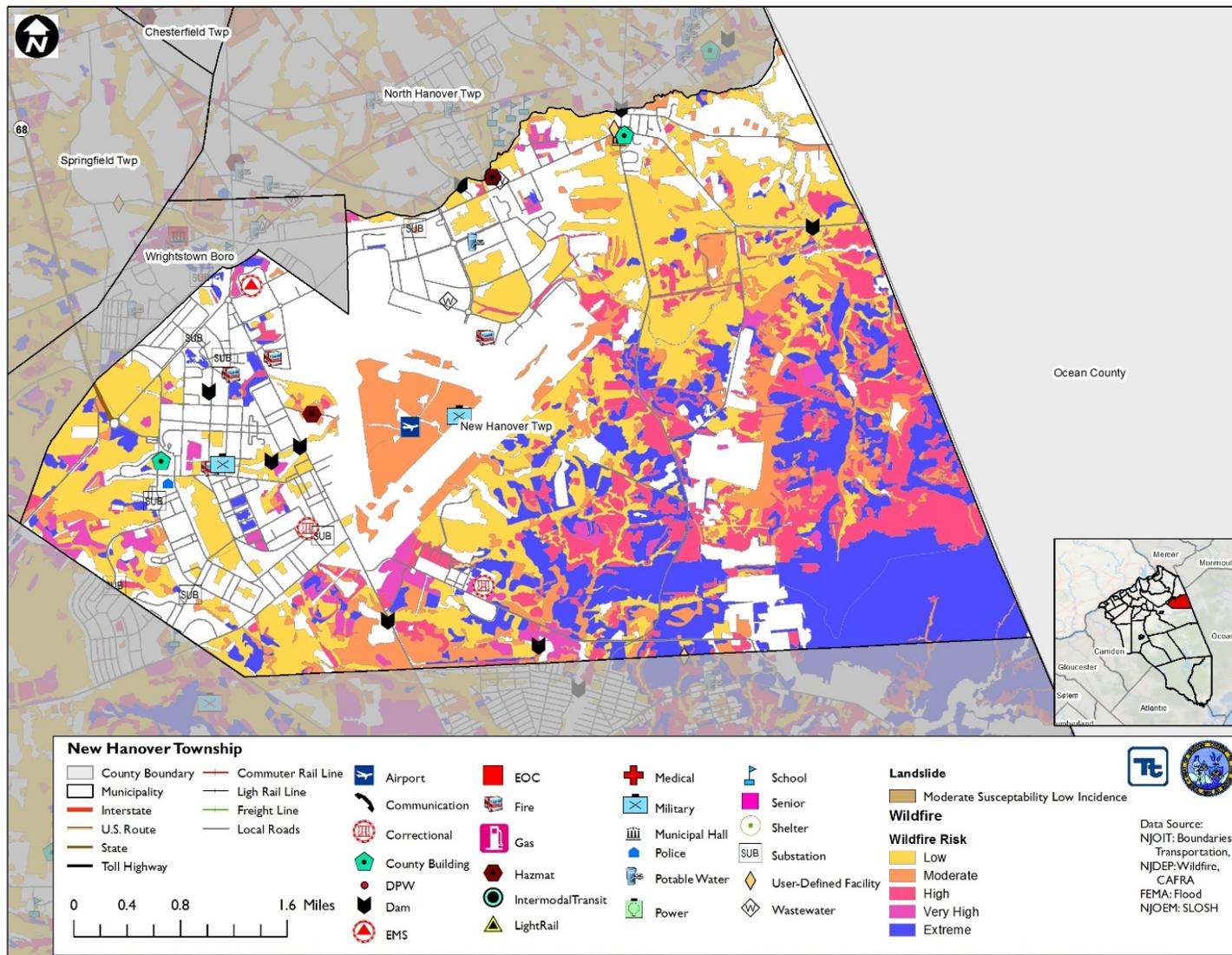




Figure 9.26-2. Township of New Hanover Hazard Area Extent and Location Map 2





Action Number:

T. New Hanover-7

Mitigation Action Name:

Conduct feasibility assessment to reduce flooding at stream located at Bunting Bridge Road and Eckley Court.

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	The area near Bunting Bridge Road and Eckley Court is vulnerable to flooding.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Buyout impacted properties – costly, may not be necessary Elevate impacted properties – costly, may not be necessary
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Township will conduct a feasibility assessment to determine the best way to control flooding issues that have taken place at Bunting Bridge Road and
Mitigation Action Type	SIP
Goals Met	1, 2
Critical Facility (Y/N)	No
Benefits (losses avoided)	Medium
Estimated Cost	Medium
Priority*	Medium
Plan for Implementation	
Responsible Organization	Township Committee
Local Planning Mechanism	Hazard Mitigation Planning
Potential Funding Sources	Municipal budget for assessment, HMGP for possible actions
Timeline for Completion	Long term
Reporting on Progress	
Date of Status Report/ Report of Progress	



Action Number:

T. New Hanover-7

Mitigation Action Name:

Conduct feasibility assessment to reduce flooding at stream located at Bunting Bridge Road and Eckley Court.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect life from flood risk
Property Protection	1	Project will protect roadways and properties from flooding
Cost-Effectiveness	0	
Technical	0	
Political	1	
Legal	1	The Township has the legal authority to complete the project
Fiscal	1	Municipal budget for assessment, HMGP for possible actions
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	Long Term
Agency Champion	1	Township Committee
Other Community Objectives	1	
Total	10	
Priority (H/M/L)	Medium	



Action Number:

T. New Hanover-8

Mitigation Action Name:

Conduct flood feasibility assessment of substation located at Vanderberg Avenue and East Main Street

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	The substation located at Vanderberg Avenue and East Main Street is on the edge of the 100-year floodplain. While the substation is outside the 100-year floodplain, its location at the edge of the floodplain may mean that slightly larger events may expose the substation to damages.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Relocate substation – costly, may not be necessary Build floodwall around substation – costly, may not be necessary
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Township will conduct a feasibility assessment to determine the flood exposure of the substation located at Vanderberg Avenue and East Main Street. Depending on the level of exposure the Township will then determine the most cost effective and appropriate mitigation actions and implement them.
Mitigation Action Type	SIP
Goals Met	1, 2
Critical Facility (Y/N)	No
Benefits (losses avoided)	Medium
Estimated Cost	Medium
Priority*	Medium
Plan for Implementation	
Responsible Organization	Township Committee
Local Planning Mechanism	Hazard Mitigation Planning
Potential Funding Sources	Municipal budget for assessment, HMGP for possible actions
Timeline for Completion	Long term
Reporting on Progress	
Date of Status Report/ Report of Progress	



Action Number:

T. New Hanover-8

Mitigation Action Name:

Conduct flood feasibility assessment of substation located at Vanderberg Avenue and East Main Street

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect substation from flood risk, preserving vital power source
Property Protection	1	Project will protect substation from flooding
Cost-Effectiveness	0	
Technical	0	
Political	1	
Legal	0	Actions would require the cooperation of the power company which owns the substation.
Fiscal	1	Municipal budget for assessment, HMGP for possible actions
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	Long Term
Agency Champion	1	Township Committee
Other Community Objectives	1	
Total	9	
Priority (H/M/L)	Medium	