9.7 Township of Burlington

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

9.7.1 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
Stephen Fazekas, EMC 851 Old York Road, Burlington, NJ 08016 609.239.5909 sfazekas@twp.burlington.nj.us	Scott Hatfield, Township Engineer 851 Old York Road, Burlington, NJ 08016 609.239.5891 shatfield@twp.burlington.nj.us

9.7.2 Municipal Profile

Burlington Township is centrally located in the northern portion of Burlington County along the Delaware River. The Township is bordered by Florence to the east, Springfield to the southeast, Westampton to the south, Willingboro to the west, and Edgewater Park to the northwest. In addition, the Township is bordered by Bristol Pennsylvania across the Delaware River to the north. According to the 2010 Census, the community's population was 22,594. The township has a total area of 13.98 square miles, including 13.415 square miles of land and 0.565 square miles of water.

The government within the Township of Burlington consists of a Mayor and Council, authorized under the Faulkner Act. Under this form, the mayor is the chief executive of the municipality and has the enforcement responsibility for all ordinances, charter provisions and prepares the budget of the municipality. The mayor, with the advice and consent of the council, appoints and removes department heads, including a business administrator. The mayor has the right to speak at council meeting but has no vote and does not need to attend.

The council is the legislative body of the municipality and consists of seven members. The council is generally limited to legislative functions, but has investigative power and may remove municipal officers for cause. The council can reduce items in the mayor's budget by a majority vote, but it needs a two-thirds majority to increase any item in the budget.

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

Table 9.7-1. Growth and Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development
Recent Development from 2013 to present					
Walmart	Retail	1	Rt. 541, 119/1.01, 1.02, 1.03, 1.04	Wetlands	Complete
River Walk	Residential	250	Beverly Road, 98/8	Site remediation; wetlands. The River Walk was unable to be	95% complete

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development
				located so no additional hazards were identified.	
Lion, FGC	Commercial	4	Neck Road, 150/3; 151/1; 153.01/1; 153.02/2; 153.02/3	Flood: 1% Event: A-Zone; Wildfire: Very High; SLOSH: Category 1; Sea-Level Rise:2 ft. SLR Site remediation; flood mitigation	90% complete
Shop Rite	Retail	1	Rt. 541	None	Complete
Known or Anticipated Development in the Next Five (5) Years					
DCT Industrial	Commercial	2	Rt. 30, 147/1.04; 147/1.05	Could not locate.	Civil Litigation
Matrix Realty	Commercial	1	River Road, 150/1; 10/1.01; 150/2; 150/2.01	Flood: 1% Event: A-Zone; Wildfire: High; SLOSH: Category 1; Sea-Level Rise:2 ft. SLR Site remediation; flood mitigation	Designed and approved
Masonic Village	Residential	68	Jacksonville Road, 133/1.01; 133/1.02; 134/3.03	Wetlands	Under construction
Wilson Surf	Residential	20	Columbus Road, 142/2	Flood: 1% Event: A-Zone; Wildfire: High; SLOSH: Category 3; Sea-Level Rise:2 ft. SLR Flood mitigation; wetlands	Under construction

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

9.7.3 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 9.7-2. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	Burlington County Designated?	Summary of Damages/Losses
April 30-May 1, 2014	Heavy Rain and Flooding	N/A	Heavy rain caused considerable poor drainage and creek flooding in the northern Burlington County. Rancocas Creek was hit the hardest by flooding. Many roads were flooded and closed. Approximately $1 million in property damage in the County. While the event impacted the entire County, the Township did not experience significant losses or damages.
June 23, 2015	Severe Storm (DR-4231)	Yes	$10 million in property damage in the County ($8 million in Medford, $1 million in Mt Laurel and $1 million in Medford Lakes). While the event impacted the entire County, the Township did not experience significant losses or damages.
January 22-24, 2016	Severe Winter Storm (DR-4264)	Yes	Heavy snow fell throughout the County; snowfall totals ranged from 12 inches to 16.4 inches. While the event impacted the entire County, the Township did not experience significant losses or damages.

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

9.7.4 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 Burlington. 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 Burlington. During the review of the hazard/vulnerability risk ranking, the Township indicated the following:

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

Table 9.7-3. 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: $30,258,039	Occasional	12	Low
Drought	Damage estimate not available.	Frequent	30	Medium
Earthquake	100-Year GBS: $0 500-Year GBS: $4,851,686 2,500-Year GBS: $72,052,936	Occasional	28	Medium
Flood*	1% Annual Chance: $217,856,658	Frequent	18	Medium
Landslide	RCV Exposed to Landslide Hazard Area $3,101,983,117	Occasional	36	High
Severe Storm	100-year MRP: $3,366,026	Frequent	48	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]
	500-year MRP: $29,584,190 Annualized: $246,204			
Severe Winter Weather	1% GBS: $50,001,553 5% GBS: $250,007,765	Frequent	51	High
Wildfire	Estimated Value in the Extreme, Very High, and High Hazard Areas: $81,719,940	Occasional	12	Low

Notes:

a. Building damage ratio estimates based on FEMA 386-2 (August 2001)

b. The valuation of general building stock and loss estimates was based on custom inventory for the municipality.
High = Total hazard priority risk ranking score of 31 and above
Medium = Total hazard priority risk ranking of 20-30+
Low = Total hazard risk ranking below 20

c. Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the value of contents.

d Loss estimates for the flood and earthquake hazards represent both structure and contents.

e. The HAZUS-MH earthquake model results are reported by Census Tract.

** The Township of Burlington changed the risk ranking for flood from low to medium*

National Flood Insurance Program (NFIP) Summary

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

Table 9.7-4. 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 Burlington	95	38	$254,785.12	3	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 9.7-5. 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
Central Avenue Sewerage Treatment Plant	Wastewater Treatment	X	X	-	-
Colorite Polymers	Business/Industry	-	X	-	-
Colorite Polymers - Burlington Plant	Tier Facility	-	X	-	-
Farkas Inc	Hazmat	-	X	-	-
PSEG Burlington Generation Station	Power	-	X	-	-
Rimtec Corporation	Chemical	-	X	-	-

Source: FEMA 2017, Burlington County
Note: - = Damages not calculated by HAZUS-MH v4.0

Other Vulnerabilities Identified

The municipality has identified the following vulnerabilities within their community:

The Township's Master Plan notes that flooding is of greatest concern when precipitation and high tide are concurrent. The majority of flood prone areas are located along the Delaware River and Assicunk Creek. The Natural Resources Conservation Plan element notes ground and surface water contamination can occur through the improper use and disposal of household hazardous water.

9.7.5 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 Burlington.

Table 9.7-6. 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 (under review)	Local	Engineering	Chapter 330-127

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.)
Capital Improvements Plan	Yes (6/17)	Local	Administrator	Chapter 330-91, Chapter 282
Floodplain Management / Basin Plan	Yes (2017)	Local	L&I; Engineering	Chapter 330-87, Chapter 517
Stormwater Management Plan	Yes (2017)		Engineering	Chapter 330-127 and Master Plan
Open Space Plan	Yes (12/26/78)	Local	Planning Board	Chapter 330-94 and Master Plan
Stream Corridor Management Plan	Yes (12/26/78)	Local	L&I; Engineering	Chapter 330-87
Watershed Management or Protection Plan	Yes (12/26/78)	Local	Engineering	Chapter 330-127
Economic Development Plan	Yes (2017)	Local	Planning Board	-
Comprehensive Emergency Management Plan	Yes (2015)	Local	NJSP; BT OEM	-
Emergency Operation Plan	Yes (2017)	Local	BT OEM	-
Post-Disaster Recovery Plan	No	-	-	-
Transportation Plan	No	-	-	-
Strategic Recovery Planning Report	No	-	-	-
Other Plans:	Yes	Local	DVRPC	Burlington Township Coastal Vulnerability Assessment Report 2017
Regulatory Capability				
Building Code	Yes (3/24/76)	State & Local	L&I	State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.); 318
Zoning Ordinance	Yes (12/27/78)	Local	L&I; Zoning Officer; Engineering	Chapter 330
Subdivision Ordinance	Yes (12/26/78)	Local	Engineering	Chapter 330-71
NFIP Flood Damage Prevention Ordinance	Yes (11/14/17)	Federal, State, Local	L&I; Engineering	Chapter 282
NFIP: Cumulative Substantial Damages	No	-	-	-
NFIP: Freeboard	Yes (11/14/17)	State, Local	L&I	Chapter 282
Growth Management Ordinances	Yes (12/26/78)	Local	Engineering	Chapter 330-67
Site Plan Review Requirements	Yes (2017)	Local	Planning & Zoning Boards	Chapter 330-127
Stormwater Management Ordinance	Yes (2017)	Local	Engineering	Chapter 330-87, Chapter 517
Municipal Separate Storm Sewer System (MS4)	Yes (2017)	Local	Engineering	-
Stormwater Program Ordinances •Pet waste •Litter Control •Improper Disposal of Waste •Wildlife Feeding •Yard Waste Collection	Yes	Local	-	Chapter 337: Littering; Chapter 467, Article IV: Improper Disposal of Waste; Chapter 122 Article IV Feeding Wildlife; Chapter 467 Article V: Illicit Connections; Chapter 517 Art 1:

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.)
•Illicit Connection •Private Storm Drain Retrofitting •Refuse Container / Dumpster (optional)				Retrofitting of Storm Drains on Private Property; Chapter 224: Dumpsters and Refuse Containers
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])	No	-	-	-

Administrative and Technical Capability

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

Table 9.7-7. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Planning/Zoning Officer
Mitigation Planning Committee	Yes	Planning/Zoning Officer
Environmental Board/Commission	Yes	Planning/Zoning Officer
Open Space Board/Committee	Yes	Planning/Zoning Officer
Economic Development Commission/Committee	Yes	Administrator
Maintenance programs to reduce risk	Yes	Administrator
Mutual aid agreements	Yes	Twp. Clerk
Technical/Staffing Capability		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Engineering
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	L&I
Planners or engineers with an understanding of natural hazards	Yes	Engineering
NFIP Floodplain Administrator (FPA)	Yes	L&I
Surveyor(s)	Yes	Engineering/Consultant
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Engineering
Scientist familiar with natural hazards	No	-
Emergency Manager	Yes	BT OEM
Grant writer(s)	Yes	Engineering; Police
Staff with expertise or training in benefit/cost analysis	Yes	Engineering

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Professionals trained in conducting damage assessments	Yes	Engineering

Fiscal Capability

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

Table 9.7-8. 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
User fees for water, sewer, gas or electric service	Yes
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	Yes
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other	Unknown

Community Classifications

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

Table 9.7-9. 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)	No	NP	No
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Class 3	Yes
Storm Ready Certification	No	N/A	N/A
Firewise Communities classification	No	N/A	N/A
Natural disaster/safety programs in/for schools	Yes	-	-
Organizations with mitigation focus (advocacy group, non-government)	No	-	-
Public education program/outreach (through website, social media)	Yes	-	-
Public-private partnership initiatives addressing disaster-related issues	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*

- *Unavailable*

The classifications listed above relate to the community's ability to provide effective services to lessen its vulnerability to the hazards identified. These classifications can be viewed as a gauge of the community's capabilities in all phases of emergency management (preparedness, response, recovery and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS class applies to flood insurance while the BCEGS and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with class 1 being the best possible classification, and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1000 feet of a creditable fire hydrant and is within 5 road miles of a recognized Fire Station.

Criteria for classification credits are outlined in the following documents:

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

Self-Assessment of Capability

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

Table 9.7-10. 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)

Michael Wright, Construction Official

Flood Vulnerability Summary

The Township of Burlington maintains does not maintain inventories of properties that have been damaged by flooding or identify property owners who are interested in mitigation. The Township makes substantial estimates after disaster events. 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 Burlington, utilizing in-house engineering staff when necessary. NFIP administration services and functions provided to residents of Cinnaminson include permit review, inspections, damage assessments, and record keeping. The Township provides education to the community regarding flood hazards/risk or flood risk reduction. The Township hosted an open house on June 28, 2016 for the new floodplain maps which affected property owners. 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 most recent Community Assistance Visit was May 1, 2017.

Regulatory

The Township of Burlington's floodplain management ordinance exceeds the standard set by FEMA and the State of New Jersey. The FPA indicated that there are other local ordinances, plans, or programs that support floodplain management. The Township has considered joining the CRS program in the past but have decided it was not warranted.

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

Master Plan: The Township's Comprehensive Master Plan was written in 2008 in order to provide for the following urgent community needs:

- Maintain strong, sustainable, equitable and balanced tax based community economics.
- Contain municipal service needs.
- Preserve and protect natural resources and appropriate remaining open space areas including wetlands, floodplains, aesthetic vistas, forests, stream corridors, wildlife habitats, special soils, groundwater supplies and aquifer recharge areas.
- Simplify municipal land use and zoning regulations and processes.

The Master Plan includes the Land Use Plan, Housing Element & Fair Share Plan, Community Design Plan, Community Facilities Plan, Circulation Plan, Open Space and Recreation Plan, Natural Resources Conservation Plan, Utility Infrastructure and Service Plan, and Recycling and Energy Conservation Plan.

Stormwater Management Plan: The Municipal Stormwater Management Plan documents the Township's strategy to manage the impact of stormwater and do its part to advance this goal for the region and state. Specifically, it addresses groundwater recharge, stormwater quantity, and stormwater quality impacts by incorporating design and performance standards for new development that disturb one or more acre of land. The plan describes long-term operation and maintenance measures for existing and future stormwater facilities by stressing best management practices. The goals of the Stormwater Management Plan are to:

- Reduce flood damage, including damage to life and property.
- Minimize, to the greatest extent feasible, any increase in stormwater runoff from any new development.
- Reduce soil erosion from any development or construction project and consequent silting from total suspended solids.
- Maintain groundwater recharge
- Prevent, to the greatest extent feasible, an increase in nonpoint pollution.
- Maintain the integrity of stream channels for their biological functions, as well as for drainage.
- Minimize pollutants in stormwater runoff from new and existing development in order to restore, enhance, and maintain the chemical, physical, and biological integrity of the waters of the state, to protect public health, to safeguard fish and aquatic life and scenic and ecological values, and to enhance the domestic, municipal, recreational, industrial, and other uses of water.
- Protect public safety through the proper design and operation of stormwater basins.

Open Space and Recreation Plan: The Open Space and Recreation Plan (OSRP) examines existing municipal open space and recreation facilities, resources, infrastructure, service level and suitability. The Plan proposes recommendations and presents findings, which in turn further guide the development of a balanced open space and recreation network tailored to the public open space and recreation needs of Burlington Township and area residents.

Regulatory and Enforcement (Ordinances)

The Township of Burlington's codebook is available online at https://ecode360.com/BU2696?needHash=true.

Flood Damage Prevention: The purpose of the flood damage prevention ordinance (Chapter 282 of the municipal code) is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

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

The ordinance was amended in 2017 to include a one foot freeboard requirement.

Land Development Ordinance: The Land Development Ordinance (Chapter 330) is enacted for the following purposes:

- Preserve the quality of the community.
- Protect the environmental systems in existence within the community.
- Promote the open space nature of life within the community.
- Ensure a balance of housing types and values in the community which will accommodate a variety of families including families of moderate income and older families on limited, fixed incomes.
- Provide for the orderly staged development of the community only with its governmental systems, which will provide for a stabilization of tax requirements.

The ordinance covers land use, stormwater management, stream corridors, zoning, open space, subdivision, environmental impacts, growth management, floodplain regulations, and the establishment of the planning board.

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 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. Burlington Township is a Tier A municipality.

Stormwater Management: Chapter 517 of the municipal code discusses stormwater management. The chapter is intended to regulate the feeding of wildlife, disposal of waste, including pet solid waste, yard waste collection, litter, and other waste and pollution that may find its way into stormwater runoff in order to improve, preserve and protect the water quality of waters and streams within the Township and surrounding communities that may be downstream from the Township so as to protect the health safety and welfare of the public. This chapter also regulates connections to the municipal separate storm sewer system (MS4) operated by the Township and establishes penalties for violations of the provisions of this chapter.

Operational and Administration

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

Vegetation Management: The Township maintains a tree maintenance and clearing program along roadways in high hazard areas. This is funded through PSEG.

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

Floodplain Administrator: The Township continues to promote the participation of the Floodplain Administrator within the planning process and other related activities.

Planning Board and Zoning Board: Burlington Township has a Planning Board and Zoning Board of Adjustment, each meet once a March 2019. Meetings are held in the Municipal Complex at 851 Old York Road.

A Screening Committee meeting is also held to allow applicants to informally discuss their projects with the Board's professionals prior to submitting their application. All meetings are open to the public.

Sustainable Jersey: Burlington Township is bronze certified in the Sustainable Jersey program. Sustainable Jersey certification is a prestigious designation for municipal governments in New Jersey. Municipalities that achieve the certification are considered by their peers, by state government and by the experts and civic organizations in New Jersey, to be among the leading municipalities. All actions taken by municipalities to score points toward certification must be accompanied by documentary evidence and is reviewed. The certification is free and completely voluntary.

Funding

The Township of Burlington plans to look at mitigation actions when allocating funding in the future. The Township has provided funding for mitigations projects that have been identified in the hazard mitigation plan and protection for buildings and infrastructure in high hazard areas.

Education and Outreach

The Township of Burlington conducts outreach on hazards through various methods.

The Township maintains a municipal website (http://twp.burlington.nj.us/) where they post information regarding upcoming community events, important municipal decisions, and information about the municipality. Residents can sign up to join the Township email mailing list as well. The City's Police Department also maintains a Facebook page.

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

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

9.7.6 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 9.7-11. 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.
BTT-1	Work With PSE&G to keep trees and limbs cut back on the west end of township where the areas is prone to Wind shear and bad storms	DPW	In Progress	1. 50% complete 2. N/A 3. Funded through PSEG	1. Discontinue 2. N/A 3. Ongoing capability
BTT-2	Change ordinance to increase the height of building in the flood plains.	L&I	Complete	1. 100% completed 2. N/A 3. N/A	1. Discontinue 2. N/A 3. Complete
BTT-3	Conduct Clean Out of the Assiscunk Creek from Township Line to Delaware River	Engineering	No Progress	1. 0% 2. N/A Burlington City project 3. N/A	1. Discontinue 2. N/A 3. Not a Township action
BTT-4	Provide alternate funding for Private residence along Tanners Run	Engineering	No Progress	1. 0% 2. No longer in floodplain. 3. N/A	1. Discontinue 2. N/A 3. No longer in floodplain
BTT-5	Prepare and Conduct Drills for Emergency Operations Plan of Upper and Lower Sylvan Lakes Damns	BT-OEM	Complete	1. Tabletop exercise was conducted on 1/13/17; 100% completed. 2. N/A. 3. Exercise was funded through local budget.	1. Include in 2019 HMP 2. BT OEM will endeavor to conduct drills when feasible. 3. N/A.
BTT-6	Purchase Generators for all critical facilities, including sewer and water pump stations. Township Garage, and shelter areas.	DPW & Engineering	Complete	1. 100% completed 2. N/A 3. N/A	1. Discontinue 2. N/A 3. Complete
BTT-7	Evaluate benefits of participating in CRS program	Twp. Committee, Planning, OEM, Floodplain Adm.	No Progress	1. 0% 2. Not warranted at this time. 3. N/A	1. Include in 2019 HMP 2. Will be reevaluated every 2 years. 3. N/A
BTT-8	Conduct and facilitate community and public education and outreach for residents and businesses to promote natural hazard risk reduction to include: • Disaster preparedness	Municipality with support from Planning Partners, County Planning,	In Progress	1. 50% competed 2. N/A 3. Municipal budget.	1. Include in 2019 HMP 2. Add more links to website with more information. 3. N/A

Action Number	2013 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Steps 1. Project to be included in 2019 HMP or Discontinue 2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	• Hazard mitigation	NJOEM, FEMA			
BTT-9	Improve municipal communications systems to include information sharing with county and surrounding municipalities.	OEM with support from County, NJOEM and FEMA	Complete	1. 100% completed; local and county budgets 2. N/A 3. Swift 911; Nixle; constant contact and website	1. Discontinue 2. N/A 3. Ongoing capability
BTT-10	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	Complete	1. 100% completed 2. N/A 3. Municipal budget.	1. Discontinue 2. N/A 3.Ongoing capability
BTT-11	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 Planning Partners, County Planning, NJOEM, FEMA	Complete	1. 100% completed; 2. N/A 3. County and municipal budget	1. Discontinue 2. N/A 3. Operational capability
BTT-12	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	Complete	1. 100% completed; 2. N/A 3. Municipal budget	1. Discontinue 2. N/A 3. Operational capability
BTT-13	Enhance resilience to severe storms by joining the NOAA "Storm Ready" program.	OEM with support from County, NJOEM and FEMA	No Progress	1. 0% 2. No progress; rely on NWS for storm information. 3. N/A	1. Discontinue 2. N/A 3. Rely on NWS for storm information

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.
BTT-14	Provide public education and outreach on proper installation and/or use of backup power	Municipal Clerk, OEM and government	No Progress	1. 0% 2. Did not implement program 3. N/A	1. Discontinue 2. N/A 3. No longer a priority

Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy

The Township of Burlington 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:

Mitigation Action	Lead Agency	How is/was it funded (e.g., local, FEMA HMGP grant)? What is the % complete?
Replace storm water infrastructure	Engineering	1. Municipal capital budget. 2. 25% complete.
NJDEP storm water permit	Engineering; Public Works	1. Municipal operating budget. 2. 100% complete.
Replacing emergency generator at Wyngate pump station	Engineering; Sewer Department	1. Municipal capital budget. 2. 25% complete.
Hired Information/Technology Director; maintains township website	Administration	1. Municipal salary budget. 2. 100% complete. Hired July, 2017.

Proposed Hazard Mitigation Initiatives for the Plan Update

The Township of Burlington 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 9.7-12 summarizes the comprehensive-range of specific mitigation initiatives the Township of Burlington 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 9.7-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.

Table 9.7-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Critical Facility (Yes/No)	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
T. of Burlington-1 (former BTT-5)	Prepare and Conduct Drills for Emergency Operations Plan of Upper and Lower Sylvan Lakes Dams. 2. BT OEM will endeavor to conduct drills when feasible.	No	Flooding	1, 3	BT OEM	Medium	Medium	Exercise was funded through local budget	Short Term	High	LPR	PR
T. of Burlington-2 (former BTT-7)	Evaluate benefits of participating in CRS program. Will be reevaluated every 2 years.	No	All	1, 2, 3, 4, 5, 6	Twp. Committee with support from Planning, OEM, Floodplain Adm.	Medium	Low	Municipal Government, OEM and Floodplain Admin.	Short Term	Medium	LPR	PR
T. of Burlington-3 (former BTT-8)	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 Add more links to website with more information.	No	All	5	Municipality with support from Planning Partners, County Planning, NJOEM, FEMA	Medium	Medium	Municipal budget	Short Term	High	EAP	PI
T. of Burlington-4	During the update of the municipal master plan, hazard mitigation principles will be integrated into the different elements of the master plan. This ensures that hazard assessment information is incorporated into future land use for the Township and the other elements of the plan.	No	All Hazards	1, 2, 3, 4, 5, 6	Municipality with support from Planning	High	Low	Municipal Budget	Short Term DOF	High	LRP	PR
T. of Burlington-5	The Township will continue to promote and support non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, including those that have been identified as Repetitive Loss (RL) and Severe Repetitive Loss	No	Flood	1, 2	Municipality with support from Planning, Engineering	High	High	HMGP, PDM, Municipal Budget	Short Term DOF	High	SIP	PR PP

Initiative	Mitigation Initiative	Critical Facility (Yes/No)	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
	(SRL), such as acquisition/relocation or elevation depending on feasibility. The parameters for this initiative would be: funding, benefits versus cost, and willing participation of property owners.											
T. of Burlington-6	Coordinate with the facilities manager at the Central Avenue Sewerage Treatment Plant to support the mitigation of the Plant via retrofit (e.g. elevation, flood-proofing) or relocation to protect structures from future damage. Phase 1: Identify most cost-effective mitigation option Phase 2: Work with facility manager to implement selected action based on available funding and local match ability.	Yes	All Hazards	2, 4, 6	Municipality with support from Central Avenue Sewage Treatment Plant	High	High	HMA Grants, Municipal Budget	Short Term DOF	High	SIP	SP, PP
T. of Burlington-7	Coordinate with the facilities manager Colorite Polymers to support the mitigation of the facility via retrofit (e.g. elevation, flood-proofing) or relocation to protect structures from future damage. Phase 1: Identify most cost-effective mitigation option Phase 2: Work with facility manager to implement selected action based on available funding and local match ability.	No	All Hazards	1, 2, 3	Municipality with support from Colorite Polymers	High	High	HMA Grants, Municipal Budget	Short Term DOF	High	SIP	SP, PP
T. of Burlington-8	Coordinate with the facilities manager at the Colorite Polymers - Burlington Plant to support the mitigation of the Plant via retrofit (e.g. elevation, flood-proofing) or relocation to protect structures from future damage. Phase 1: Identify most cost-effective mitigation option	No	All Hazards	1, 2, 3	Municipality with support from Colorite Polymers – Burlington Plant	High	High	HMA Grants, Municipal Budget	Short Term DOF	High	SIP	SP, PP

Initiative	Mitigation Initiative	Critical Facility (Yes/No)	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
	Phase 2: Work with facility manager to implement selected action based on available funding and local match ability.											
T. of Burlington-9	Coordinate with the facilities manager at the Farkas Inc to support the mitigation of the facility via retrofit (e.g. elevation, flood-proofing) or relocation to protect structures from future damage. Phase 1: Identify most cost-effective mitigation option Phase 2: Work with facility manager to implement selected action based on available funding and local match ability.	No	All Hazards	1, 2, 3	Municipality with support from Farkas Inc.	High	High	HMA Grants, Municipal Budget	Short Term DOF	High	SIP	SP, PP
T. of Burlington-10	Coordinate with the facilities manager at the PSEG Burlington Generation Station to support the mitigation of the Station via retrofit (e.g. elevation, flood-proofing) or relocation to protect structures from future damage. Phase 1: Identify most cost-effective mitigation option Phase 2: Work with facility manager to implement selected action based on available funding and local match ability.	Yes	All Hazards	1, 2, 6	Municipality with support from Burlington Generation Station	High	High	HMA Grants, Municipal Budget	Short Term DOF	High	SIP	SP, PP
T. of Burlington-11	Coordinate with the facilities manager at the Rimtec Corporation to support the mitigation of the facility via retrofit (e.g. elevation, flood-proofing) or relocation to protect structures from future damage. Phase 1: Identify most cost-effective mitigation option Phase 2: Work with facility manager to implement selected action based on available funding and local match ability.	No	All Hazards	1, 2, 3	Municipality with support from Rimtec Corporation	High	High	HMA Grants, Municipal Budget	Short Term DOF	High	SIP	SP, 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 9.7-13. 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. of Burlington-1 (former BTT-5)	Prepare and Conduct Drills for Emergency Operations Plan of Upper and Lower Sylvan Lakes Dams. 2. BT OEM will endeavor to conduct drills when feasible.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
T. of Burlington-2 (former BTT-7)	Evaluate benefits of participating in CRS program. Will be reevaluated every 2 years.	1	1	0	0	1	1	0	0	1	1	1	0	1	1	9	Medium
T. of Burlington-3 (former BTT-8)	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 Add more links to website with more information.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
T. of Burlington-4	During the update of the municipal master plan, hazard mitigation principles will be integrated into the different elements of the master plan. This ensures that hazard assessment information is incorporated into future land use for the Township and the other elements of the plan.	0	1	0	1	1	1	-1	0	1	1	1	0	1	0	6	Medium

Table 9.7-13. 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. of Burlington-5	The Township will continue to promote and support non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, including those that have been identified as Repetitive Loss (RL) and Severe Repetitive Loss (SRL), such as acquisition/relocation or elevation depending on feasibility. The parameters for this initiative would be: funding, benefits versus cost, and willing participation of property owners.	1	1	0	1	1	1	-1	0	1	1	1	0	1	0	7	Medium
T. of Burlington-6	Coordinate with the facilities manager at the Central Avenue Sewerage Treatment Plant to support the mitigation of the Plant via retrofit (e.g. elevation, flood-proofing) or relocation to protect structures from future damage. Phase 1: Identify most cost-effective mitigation option Phase 2: Work with facility manager to implement selected action based on available funding and local match ability.	0	1	0	1	1	1	-1	0	1	1	1	0	1	0	6	Medium

Table 9.7-13. 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. of Burlington-7	Coordinate with the facilities manager Colorite Polymers to support the mitigation of the facility via retrofit (e.g. elevation, flood-proofing) or relocation to protect structures from future damage. Phase 1: Identify most cost-effective mitigation option Phase 2: Work with facility manager to implement selected action based on available funding and local match ability.	0	1	0	1	1	1	-1	0	1	1	1	0	1	0	6	Medium
T. of Burlington-8	Coordinate with the facilities manager at the Colorite Polymers - Burlington Plant to support the mitigation of the Plant via retrofit (e.g. elevation, flood-proofing) or relocation to protect structures from future damage. Phase 1: Identify most cost-effective mitigation option Phase 2: Work with facility manager to implement selected action based on available funding and local match ability.	0	1	0	1	1	1	-1	0	1	1	1	0	1	0	6	Medium
T. of Burlington-9	Coordinate with the facilities manager at the	0	1	0	1	1	1	-1	0	1	1	1	0	1	0	6	Medium

Table 9.7-13. 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
	Farkas Inc to support the mitigation of the facility via retrofit (e.g. elevation, flood-proofing) or relocation to protect structures from future damage. Phase 1: Identify most cost-effective mitigation option Phase 2: Work with facility manager to implement selected action based on available funding and local match ability.																
T. of Burlington-10	Coordinate with the facilities manager at the PSEG Burlington Generation Station to support the mitigation of the Station via retrofit (e.g. elevation, flood-proofing) or relocation to protect structures from future damage. Phase 1: Identify most cost-effective mitigation option Phase 2: Work with facility manager to implement selected action based on available funding and local match ability.	0	1	0	1	1	1	-1	0	1	1	1	0	1	0	6	Medium
T. of Burlington-11	Coordinate with the facilities manager at the Rimtec Corporation to support the mitigation	0	1	0	1	1	1	-1	0	1	1	1	0	1	0	6	0

Table 9.7-13. 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 the facility via retrofit (e.g. elevation, flood-proofing) or relocation to protect structures from future damage. Phase 1: Identify most cost-effective mitigation option Phase 2: Work with facility manager to implement selected action based on available funding and local match ability.																

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

9.7.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.7.8 Hazard Area Extent and Location

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

9.7.9 Additional Comments

None at this time.

Figure 9.7-1. Township of Burlington Hazard Area Extent and Location Map 1

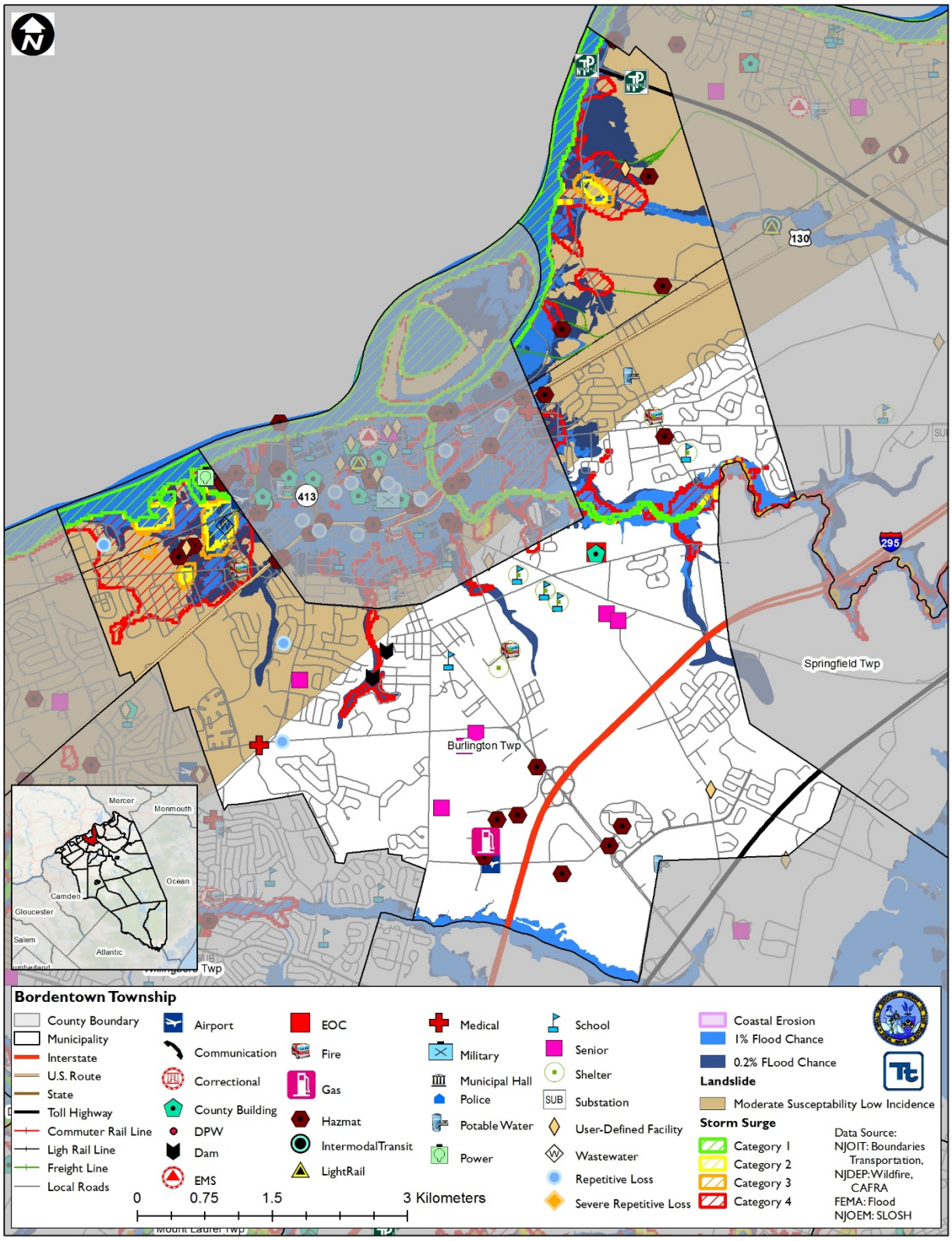
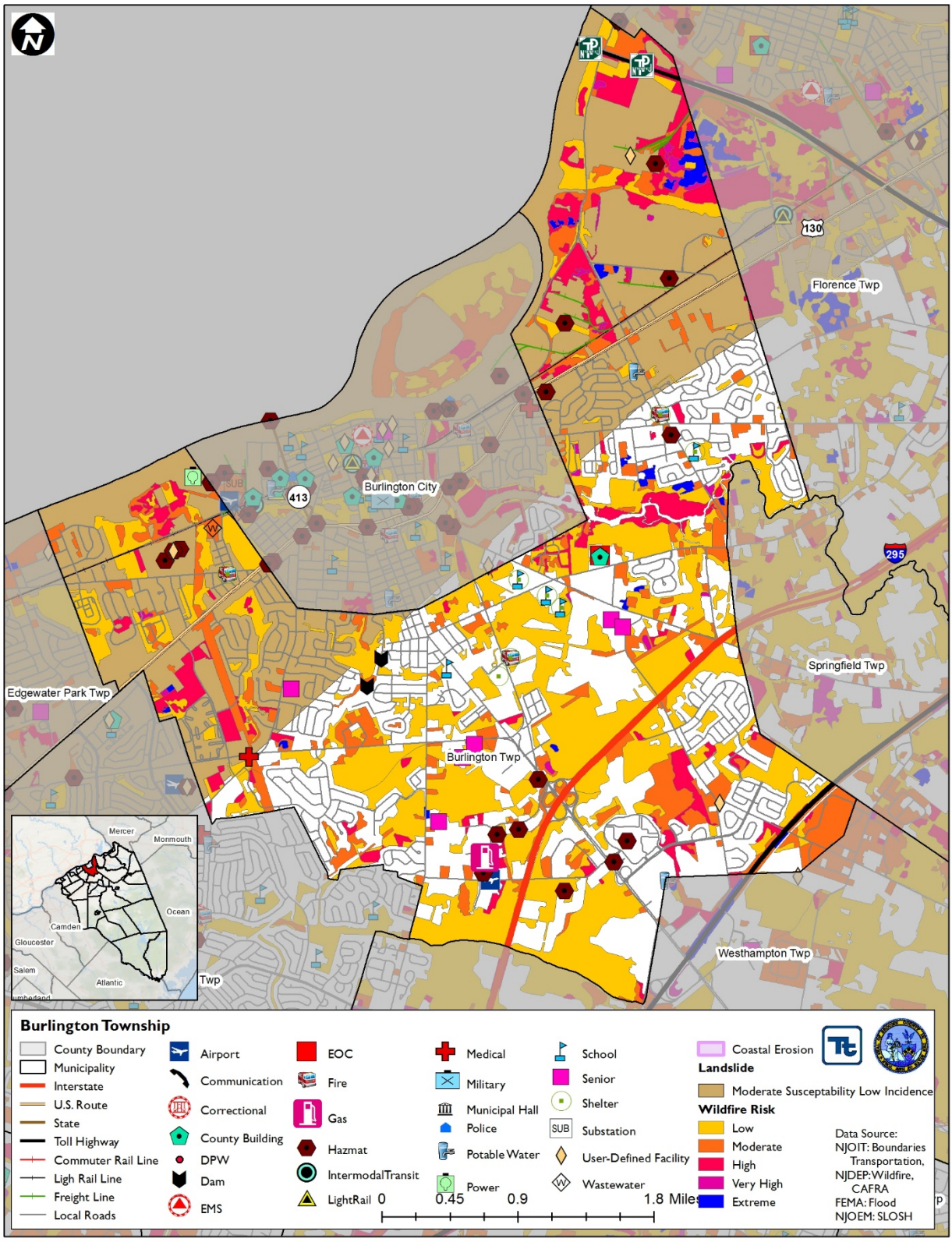


Figure 9.7-2. Township of Burlington Hazard Area Extent and Location Map 2



Action Number: T. of Burlington 1 (Former BTT-5)

Mitigation Action/Initiative: Prepare and Conduct Drills for Emergency Operations Plan of Upper and Lower Sylvan Lakes Dams. 2. BT OEM will endeavor to conduct drills when feasible.

Assessing the Risk	
Hazard(s) addressed:	Flooding
Specific problem being mitigated:	Severe weather events impacting on both Sylvan Lakes
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No action – Problem continues
	2. Hire a consultant to plan and facilitate the exercises – Potentially cost prohibitive
	3. Conduct full scale exercises to simulate dam failure – Not technically feasible
Action/Project Intended for Implementation	
Description of Selected Action/Project	Conduct drills of the Emergency Operations Plan for both Sylvan Lakes dams
Action/Project Category	LPR
Goals Met	1, 3
Critical Facility	Yes
Benefits (losses avoided)	Prepare for potential emergency at the Sylvan Lake dams
Estimated Cost	Less than $10,000.00
Priority*	High
Plan for Implementation	
Responsible Organization	Engineering Department
Local Planning Mechanism	Emergency Management
Potential Funding Sources	Township budget
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 3/27/18 Progress on Action/Project: Not completed

Action Number: T. of Burlington 1 (Former BTT-5)

Mitigation Action/Initiative: Prepare and Conduct Drills for Emergency Operations Plan of Upper and Lower Sylvan Lakes Dams. 2. BT OEM will endeavor to conduct drills when feasible.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	1	
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Single hazard
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	There are none
Total	12	
Priority (High/Med/Low)	High	