



9.38 Township of Westampton

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

9.38.1 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
Sgt. Daryl Caulfield, Police / OEM 710 Rancocas Rd., Westampton, NJ 08060 609.267.3000 caulfield@wtprd.us	Chief Craig Farnsworth, Emergency Services 710 Rancocas Rd., Westampton, NJ 08060 609.267.2041 cfarnsworth@westamptonfire.org

9.38.2 Municipal Profile

Westampton Township was organized from the township of Northampton by an Act of Assembly dated March 6, 1850. It received its name as the “western” portion of Northampton. In 1854, a part was added from Pemberton Township, and in 1880, Eastampton Township was formed from Westampton. In 1956, the township was completed with Willingboro Township giving the balance of Rancocas Village to Westampton Township.

The Township of Westampton is governed under the Township form of government. Under this form, Westampton is governed by five Council members, each of whom is elected for a three-year staggered term. At the beginning of each year, the Council members elect one of their members to serve as Mayor and one as Deputy Mayor for that year.¹

Between its northern border of Mill Creek and southern border of the Rancocas Creek North Branch, Westampton Township contains nearly 13 miles of streams. Named streams within the Township include Barkers Brook, Gaunts Brook, Mill Creek, and the Rancocas Creek and its North Branch. The Township is bounded on the west by Willingboro, on the north by Burlington Township and Springfield, and on the east by Eastampton and Mt. Holly. The Township has a total area of 11.2 square miles, of which 11.03 square miles is land and 0.17 square miles is water. According to the 2010 Census, the community's population was 8,813.

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

Table 9.38-1. 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					
Virtua Hospital	Comm.	10 Buildings	541 & Woodlane 804/7	Wildfire: High	Planning

¹ http://www.njslom.org/magart0307_p14.html



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
Super Wawa / Chick-Fil-A	Comm.	2 Buildings	76 Springside 203/4.01&5	None	Planning
Willows	Apts.	6 Buildings	Woodlane & Stemmers 401/2&8	Flood: 1% Event: A-Zone; Wildfire: High	Under construction

* Only location-specific hazard zones or vulnerabilities identified.

9.38.3 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 9.38-2. 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		Downed trees and wires, power outages, road closures
June 23, 2015	Severe Storm (DR-4231)	Yes	Downed trees and wires, power outages, road closures
January 22-24, 2016	Severe Winter Storm (DR-4264)	Yes	Local government cleared roadways in order to rescue stranded motorists and maintain access for emergency response vehicles conducting emergency response actions. Roadway clearance was conducted throughout the period of snowfall so that emergency response could continue during the incident. Emergency protective measures: <ul style="list-style-type: none"> • Clearing areas for access where the storm caused down power lines • Emergency towing of vehicles that are blocking the road and preventing emergency plowing • Sheltering of stranded motorists and others to protect and save lives

Notes:

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

9.38.4 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 Westampton. 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 Westampton. 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 from a low hazard to a medium hazard.

Table 9.38-3. 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: \$42,951,602	Occasional	12	Low
Drought	Damage estimate not available.	Frequent	30	Medium
Earthquake	100-Year GBS: \$0 500-Year GBS: \$2,702,109 2,500-Year GBS: \$39,798,267	Occasional	28	Medium
Flood*	1% Annual Chance: \$110,182,624	Frequent	18	High
Landslide	RCV Exposed to Landslide Hazard Area \$0	Rare	6	Low
Severe Storm	100-year MRP: \$1,655,690 500-year MRP: \$10,595,342 Annualized: \$107,267	Frequent	48	High
Severe Winter Weather	1% GBS: \$24,873,470 5% GBS: \$124,367,352	Frequent	51	High
Wildfire*	Estimated Value in the Extreme, Very High, and High Hazard Areas: \$127,122,403	Occasional	16	Medium

Notes:

- Building damage ratio estimates based on FEMA 386-2 (August 2001)
 - 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
 - Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the value of contents.
 - Loss estimates for the flood and earthquake hazards represent both structure and contents.
 - The HAZUS-MH earthquake model results are reported by Census Tract.
- * The Township of Westampton changed the risk ranking of flood from low to high and wildfire from low to medium.

National Flood Insurance Program (NFIP) Summary

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

Table 9.38-4. 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 Westampton	49	20	\$199,139.41	4	1	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 9.38-6. 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
Note: - = Damages not calculated by HAZUS-MH v4.0

Other Vulnerabilities Identified

The municipality has identified the following vulnerabilities within their community:

- Rancocas Creek – primary flooding source.

9.38.5 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 Westampton.

Table 9.38-7. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Planning Capability				
Master Plan	11/10/98	Local	Planning	Code 131-19



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.)
	6/13/00 6/13/00			Code 250-4 Code 250-22
Capital Improvements Plan	2/28/74	Local	Planning	Code 215-14
Floodplain Management / Basin Plan	2/12/80	Local	Planning	Chapter 131
Stormwater Management Plan	No			Chapter 209
Open Space Plan	8/10/87	Local	Planning	Chapter 250
Stream Corridor Management Plan	No			
Watershed Management or Protection Plan	No			
Economic Development Plan	8/23/94	Local	Planning	Chapter 32
Comprehensive Emergency Management Plan	8/2009	Local	OEM	EOP
Emergency Operation Plan	No			
Post-Disaster Recovery Plan	No			
Transportation Plan	No			
Strategic Recovery Planning Report	No			
Other Plans:	No			
Regulatory Capability				
Building Code	12/14/71	State & Local	Land Development Board	Chapter 99
Zoning Ordinance	8/10/87	Local	Land Development Board	Chapter 250 – Zoning
Subdivision Ordinance	6/22/54	Local	Planning	Chapter 215
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local	Construction Official	Chapter 131 – Floodplain Management
NFIP: Cumulative Substantial Damages	No			
NFIP: Freeboard	Yes	State, Local	Construction Official	Chapter 131 - new construction and substantial improvement of any residential structure located in an A or AE Zone shall have the lowest floor, including basement, together with the attendant utilities (including all electrical, heating, ventilating, air-conditioning and other service equipment) and sanitary facilities, elevated at or above the base flood elevation plus one foot or as required by ASCE/SEI 24-14; Require within any AO or AH zone on the municipality's DFIRM that all new construction and substantial improvement of any residential



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.)
				structure shall have the lowest floor, including basement, together with the attendant utilities and sanitary facilities, elevated above the depth number specified in feet plus one foot above the highest adjacent grade (at least three feet if no depth number is specified) and require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.
Growth Management Ordinances				
Site Plan Review Requirements	Yes	Local		Chapter 196 – Site Plan Review
Stormwater Management Ordinance	Yes	Local	Code Enforcement Officer	Chapter 209 – Stormwater Management
Municipal Separate Storm Sewer System (MS4)	No			
Natural Hazard Ordinance	No			
Post-Disaster Recovery Ordinance	No			
Real Estate Disclosure Requirement	12/15/06	State		Chapter 250, Attach. 5
Other (Special Purpose Ordinances [i.e., sensitive areas, steep slope])	Yes	Local		ERI for the Township of Westampton (February 2011)

Administrative and Technical Capability

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

Table 9.38-8. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Township Planning Board and Engineer
Mitigation Planning Committee	No	
Environmental Board/Commission	No	
Open Space Board/Committee	No	
Economic Development Commission/Committee	No	
Maintenance programs to reduce risk	No	
Mutual aid agreements	Yes	Surrounding municipalities
Technical/Staffing Capability		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Y	Township Planning Board and Engineer
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Township Engineer / Construction Official



Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Planners or engineers with an understanding of natural hazards	Y	Township Planning Board and Engineer
NFIP Floodplain Administrator (FPA)	Y	Construction Official
Surveyor(s)	Y	Township Engineer
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Y	Township Engineer
Scientist familiar with natural hazards	N	None
Emergency Manager	Y	Emergency Management Coordinator
Grant writer(s)	N	None
Staff with expertise or training in benefit/cost analysis	Y	CFO Bob Hudnell
Professionals trained in conducting damage assessments		

Fiscal Capability

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

Table 9.38-9. 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	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	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other	

Community Classifications

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

Table 9.38-10. Community Classifications

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	N/A	N/A
Building Code Effectiveness Grading Schedule (BCEGS)	No		
Public Protection (ISO Fire Protection Classes 1 to 10)	No		



Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Storm Ready Certification	No	N/A	N/A
Firewise Communities classification	No	N/A	N/A
Natural disaster/safety programs in/for schools	No		
Organizations with mitigation focus (advocacy group, non-government)	No		
Public education program/outreach (through website, social media)	No		
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 X(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 Westampton’s capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

Table 9.38-11. Self-Assessment Capability for the Municipality

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



Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)*	Moderate	High
Capability to integrate mitigation into municipal processes and activities		X	

National Flood Insurance Program

NFIP Floodplain Administrator (FPA)

M. Gene Blair, Construction/Zoning Officer

Flood Vulnerability Summary

At this time, the municipality does not maintain a list or inventory of properties that have been flood damaged, and does not have a record of the number of homes that may have been damaged during Hurricane Sandy or other storm events. The municipality does not make sustainable damage estimates and does not have a count for a given storm event. Funding sources for potential mitigated properties can include local budget or grant funding with aid from the property owner.

Resources

The FPA is the sole person assuming the responsibilities of floodplain administration for the Township. NFIP administration services and functions provided by the FPA include, permit review, inspections, and education and outreach. The Township provides education and outreach to the community regarding the flood hazard; information and links to flood maps and insurance information is available on the website. The FPA is adequately supported and trained to fulfill the responsibilities as the FPA, but would consider attending continuing education and/or certification training on floodplain management if it were offered in the County.

Compliance History

The Township is currently in good standing with the NFIP; however, the date of the most recent compliance audit is unknown.

Regulatory

The Township’s floodplain management regulations/ordinances meet the FEMA and State minimum requirements. The planning board and zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions. The Township has considered joining the Community Rating System (CRS) and would attend a CRS seminar if offered locally.

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

Environmental Resource Inventory: In 2009, the Township authorized the Delaware Valley Regional Planning Commission to produce an Environmental Resource Inventory (ERI). The ERI is a compilation of text and visual information about the natural resource characteristics and environmental features of the Township.





The Westampton ERI contains a brief history of the Township, along with descriptions of the geography/topography (slopes), land uses, geology, soils, wildlife/habitats, streams and wetlands, infrastructure and regional relationships. The ERI can be used by residents and educators to teach about the township community and its natural resources.

Master Plan: On April 1, 2015, the Township adopted the 2015 Mater Plan and Development Regulations reexamination report. The Township has adopted several elements of the master plan: goals and objectives; land use plan; open space, recreation, and farmland preservation plan; circulation plan; housing element and fair share plan; environmental resource inventory; vision statement; and population and housing trends.

Land Development Board: The Land Development Board is composed of 9 members and 2 alternates. There are 6 Class IV members who are appointed for 4 year terms and 3 members appointed annually (Mayor, Committeeperson and the Zoning Officer). The alternate positions are each 2 year appointments.

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 the 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 www.nj.gov/dep/dwq/msrp_home.htm. Westampton is a Tier A municipality.

Zoning (Chapter 250): The purpose of this chapter shall be to establish a pattern for the use of land and buildings based upon the Master Plan and enacted in order to promote and protect the public health, safety, morals, comfort, convenience and the general welfare of the people. This chapter is intended to regulate the use of land within zoning districts; secure safety from fire, panic and other dangers; provide adequate light and air; promote orderly development; avoid undue concentration of population; prevent the overcrowding of land or buildings; establish standards of development; limit congestion in the streets; prohibit incompatible uses; regulate the alteration of existing buildings; protect against hazards; conserve the taxable value of land; preserve open space, historic and natural features; permit the development of land in accordance with the purposes of the low- and moderate-income provisions of this chapter; and encourage the inclusion of aesthetics, amenities of living and a balance of public services.

Stormwater Management: The Township of Westampton created a Stormwater Control Ordinance in 2007. The purpose of this ordinance is to establish minimum stormwater management requirements and controls for major development.

Operational and Administration

The Township has the following boards, commissions and committees:

- Historic Preservation Commission
- Land Development Board
- Recreation Committee
- Timbuctoo Committee



The Land Development Board is responsible for Zoning and Land Use.

Funding

The Township has access to Capital Improvements project funding and is eligible to apply for Community Development Block Grants, FEMA Pre-Disaster Mitigation or Flood Mitigation Assistance grant funding, or other state/federal grants to fund mitigation projects.

Education and Outreach

The Township of Westampton has a municipal website where one can access information about the Township government, departments, assessments, recycling/trash, minutes and agendas, see township news and upcoming events. On the Township Fire and Emergency Services page one can see what the Westampton Township Emergency Services post to their Facebook page.

9.38.6 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 9.38-12. Status of Previous Mitigation Actions

Action Number	2013 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Steps 1. Project to be included in 2019 HMP or Discontinue 2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
WA-1	Obtain and install backup power sources at all critical facilities to include shelters and in the municipal building (EOC)	Westampton Township OEM Coordinator and Municipality	No Progress	1. 0% complete 2. Budget and personnel constraints have restricted this action from moving forward 3. No funding secured	1. Include in 2019 HMP Negotiate with Virtua
WA-2	Conduct Public Outreach / Education in storm preparedness and notification procedures	Westampton Township OEM Coordinator and Municipality	Complete	1. Preparedness demonstrations conducted at Township Meetings and Township sponsored events	1. Discontinue. 2. Complete
WA-3	Evaluate and rebuild drainage along Dale Road to mitigate flooding conditions	Westampton Township Engineer and DPW	No Progress	1. 0% complete 2. Budget and personnel constraints 3. No funding	1. Include in 2019 HMP 2. Seek funding
WA-4	Install three additional storm drains to improve storm water management on Main Street	Westampton Township Engineer and DPW	No Progress	1. 0% complete 2. Budget and personnel constraints have restricted this action from moving forward 3. No funding secured	1. Include in 2019 HMP. 2. Seek funding
WA-5	Evaluate and rebuild drainage along David Street to mitigate flooding conditions	Westampton Township Engineer and DPW	Complete	1. Mitigated during repaving	1. Discontinue 2. Complete
WA-6	Evaluate and rebuild drainage along Rancocas Road to mitigate flooding conditions	NJ DOT County Hwy Dept.	Complete	1. Mitigated during repaving	1. Discontinue 2. Complete
WA-7	Evaluate and rebuild drainage along CR 541 to mitigate flooding conditions	NJ DOT County Hwy Dept.	Choose an item.	1. Mitigated during repaving	1. Discontinue. 2. Complete
WA-8	Conduct and facilitate community and public education and outreach for residents and businesses to promote natural hazard risk reduction to include disaster preparedness and hazard mitigation	Municipality, PPP, County OEM, NJOEM and FEMA	Complete	1. See WA-2	1. Discontinue 2. Complete
WA-9	Continue to support the implementation, monitoring, maintenance, and updating of this	Westampton Township Municipal	Complete	Complete	1. Discontinue 2. Participating in plan update





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.
	plan through participation in the five year plan update.	Government, OEM Coordinator, County OEM, NJOEM and FEMA			
WA-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	<i>Complete</i>	1. Completed throughout township by Asplundah	1. Discontinue 2. Complete
WA-11	Support the mitigation of vulnerable structures via retrofit (e.g. Elevation, flood-proofing) or relocation to protect structures from future damage with repetitive loss and severe repetitive loss properties as a priority when applicable. Phase 1: Identify appropriate candidates based on cost-effectiveness and repetitive loss. Phase 2: Work with the property owners to implement selected action based on available funding from the State and FEMA and local match availability.	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from County Planning, NJOEM, FEMA	<i>No Progress</i>	1. 0% complete 2. Budget and personnel constraints have restricted this action from moving forward 3. No funding secured	1. Include in 2019 HMP 2. Review revised FEMA Floodplain Maps 3. Make appropriate notifications, recommendations and revisions



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Township of Westampton 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 by the municipality.

Proposed Hazard Mitigation Initiatives for the Plan Update

The municipality 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 9.38-13 summarizes the comprehensive-range of specific mitigation initiatives the Township of Westampton 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 9.38-14 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.38-13. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Critical Facility (Yes / No)	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
WA-1 (Former WA-1)	Obtain and install backup power sources at all critical facilities to include shelters and in the municipal building (EOC)	Yes	All	1, 2, 6	Westampton Township OEM Coordinator and Municipality	High	High	HMGP PDM	Short Term (DOF)	High	SIP	SP
WA-2 (Former WA-3)	Evaluate and rebuild drainage along Dale Road to mitigate flooding conditions	N/A	Flood	1, 2	Westampton Township Engineer and DPW	Medium	Medium	Township DPW	Long Term (DOF)	Medium	SIP	PP
WA-3 (Former WA-4)	Install three additional storm drains to improve storm water management on Main Street	N/A	Flood	1, 2	Westampton Township Engineer and DPW	Medium	Medium	Township DPW	Long Term (DOF)	Medium	SIP	PP
WA-4 (Former WA-11)	Support the mitigation of vulnerable structures via retrofit (e.g. Elevation, flood-proofing) or relocation to protect structures from future damage with repetitive loss and severe repetitive loss properties as a priority when applicable. Phase 1: Identify appropriate candidates based on cost-effectiveness and repetitive loss. Phase 2: Work with the property owners to implement selected action based on available funding from the State and FEMA and local match availability.	No	Flood	1, 2	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from County Planning, NJOEM, FEMA	High	High	Grant funding	Short	High	SIP	PP
WA-5	During future updates of the Master Plan, Capital Improvements Plan, Open Space Plan, Economic Development Plan, or other plans, work to integrate hazard mitigation principles and recommendations into the plans. Additionally, use these hazard mitigation principles and plan recommendations to	No	All Hazards	All	Municipality	High	Low	Municipal Budget	Short Term, Depending on update schedule	High	LPR	PR, PI





Table 9.38-13. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Critical Facility (Yes / No)	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
	update local building and zoning codes to create a more resilient community.											
WA-6	<p>The Township will promote and support non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, specifically those that have been identified as Repetitive Loss (RL) and Severe Repetitive Loss (SRL). At risk areas include:</p> <ul style="list-style-type: none"> • Creek Road • Mohican Trail <p>Alternatives would include acquisition/relocation or elevation depending on feasibility, and the completion of initiative is dependent on funding, benefits versus cost, and willing participation of property owners.</p>	No	Flood	1, 2	Municipality with support from County	High	High	Grant funding; Municipal budget	Short	High	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.

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

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.



Table 9.38-14. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community	Total	High / Medium / Low
WA-1 (Former WA-1)	Obtain and install backup power sources at all critical facilities to include shelters and in the municipal building (EOC)	1	1	1	1	1	1	-1	0	0	1	1	1	1	0	9	High
WA-2 (Former WA-3)	Evaluate and rebuild drainage along Dale Road to mitigate flooding conditions	1	1	0	1	1	1	-1	0	0	1	0	1	1	0	7	Medium
WA-3 (Former WA-4)	Install three additional storm drains to improve storm water management on Main Street	1	1	1	1	1	1	-1	0	0	1	0	1	1	0	8	Medium
WA-4 (Former WA-11)	Support the mitigation of vulnerable structures via retrofit (e.g. Elevation, flood-proofing) or relocation to protect structures from future damage with repetitive loss and severe repetitive loss properties as a priority when applicable. Phase 1: Identify appropriate candidates based on cost-effectiveness and repetitive loss. Phase 2: Work with the property owners to implement selected action based on available funding from the State and FEMA and local match availability.	1	1	1	1	1	1	-1	0	0	1	0	1	1	0	8	High





Table 9.38-14. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community	Total	High / Medium / Low
WA-5	During future updates of the Master Plan, Capital Improvements Plan, Open Space Plan, Economic Development Plan, or other plans, work to integrate hazard mitigation principles and recommendations into the plans. Additionally, use these hazard mitigation principles and plan recommendations to update local building and zoning codes to create a more resilient community.	1	1	1	1	1	1	1	0	0	1	1	0	1	0	10	High
WA-6	The Township will promote and support non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, specifically those that have been identified as Repetitive Loss (RL) and Severe Repetitive Loss (SRL). At risk areas include: <ul style="list-style-type: none"> Creek Road Mohican Trail Alternatives would include acquisition/relocation or elevation depending on feasibility, and the completion of initiative	1	1	0	1	1	1	-1	0	0	1	0	1	1	0	8	High





Table 9.38-14. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community	Total	High / Medium / Low
	is dependent on funding, benefits versus cost, and willing participation of property owners.																

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



9.38.7 Future Needs to Better Understand Risk/Vulnerability

None at this time.

9.38.8 Hazard Area Extent and Location

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

9.38.9 Additional Comments

None at this time.



Figure 9.38-1. Township of Westampton Hazard Area Extent and Location Map 1

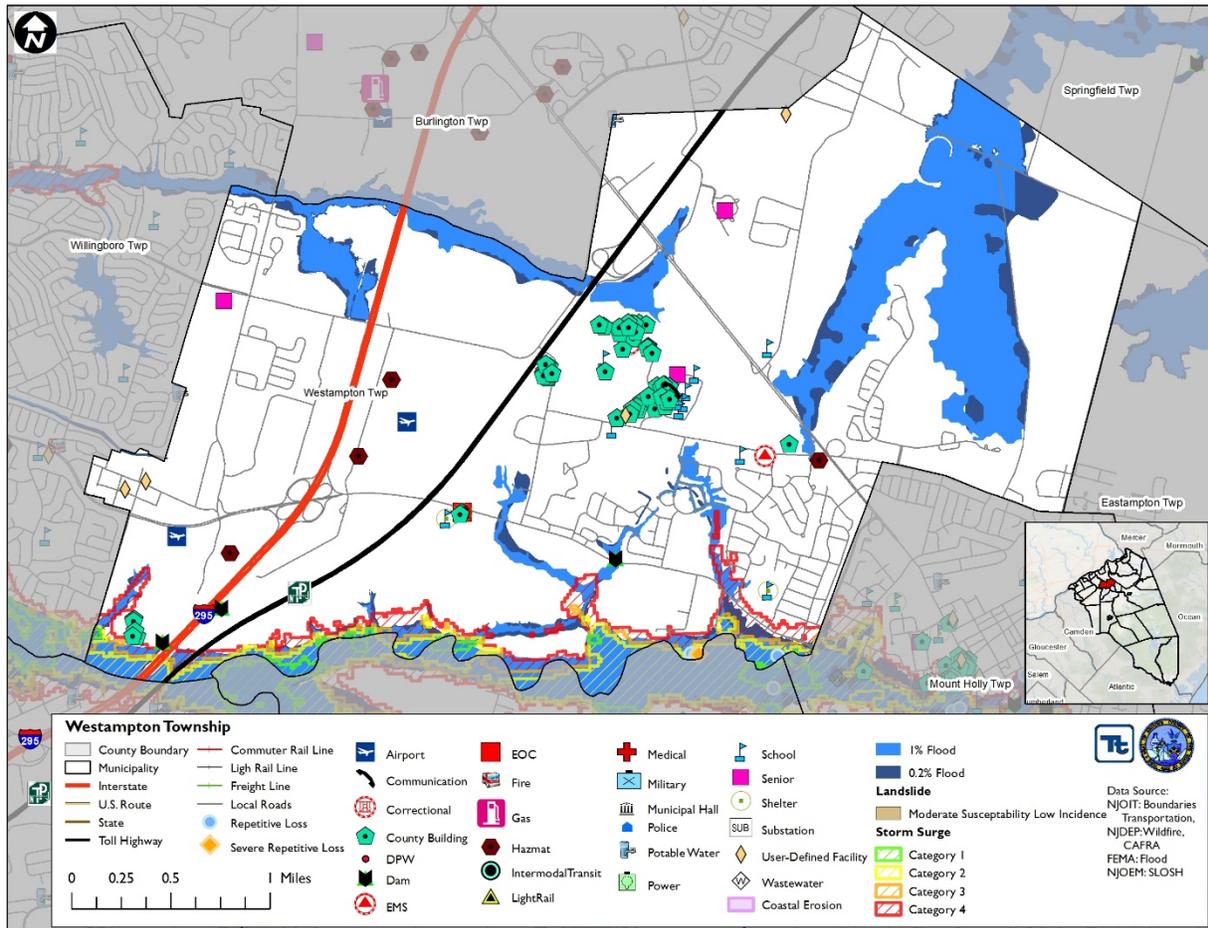
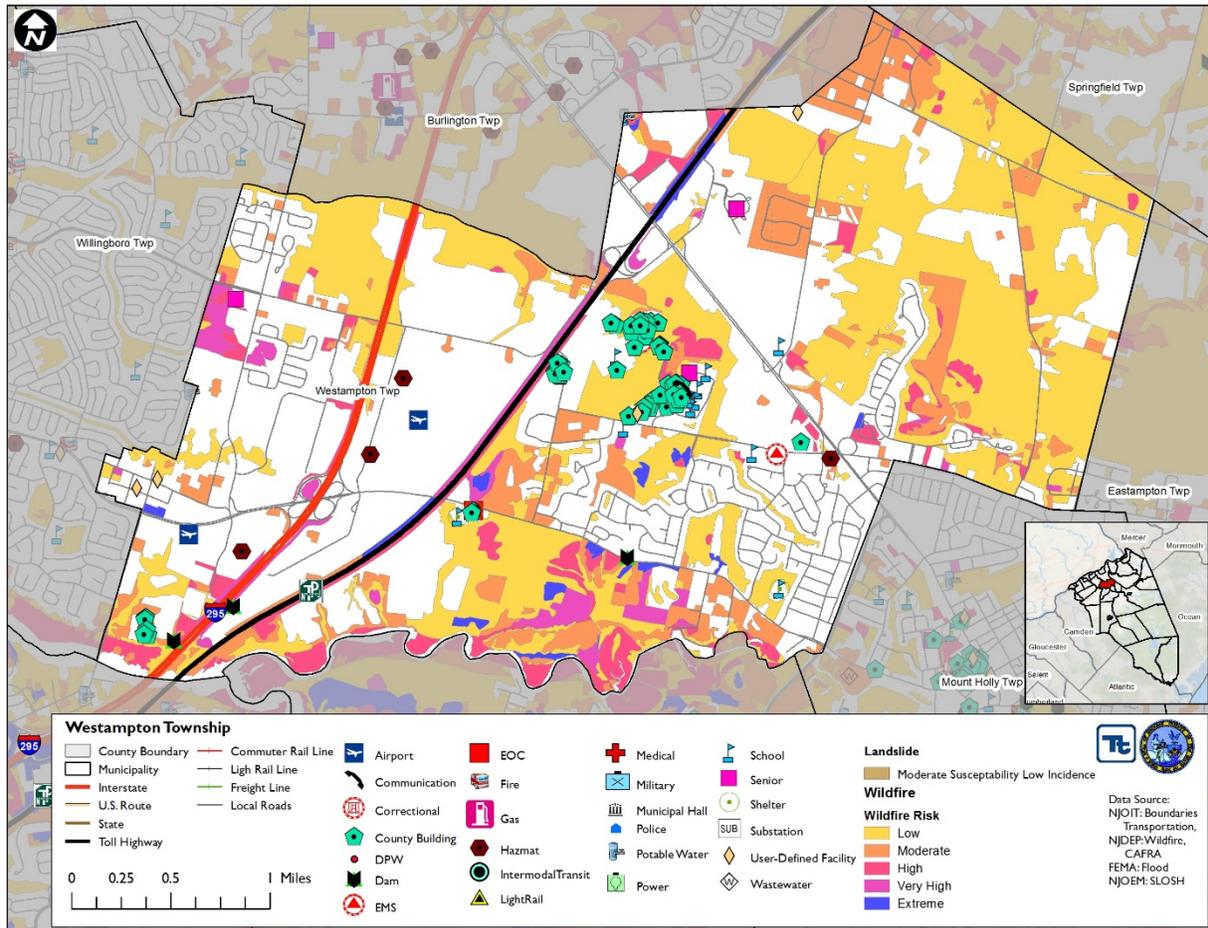




Figure 9.38-2. Township of Westampton Hazard Area Extent and Location Map 2





Action Number:

WA-1 (Former WA-1)

Mitigation Action Name:

Obtain and install backup power sources at all critical facilities to include shelters and in the municipal building (EOC)

Assessing the Risk	
Hazard(s) addressed:	All
Specific problem being mitigated:	Backup power to essential facilities is critical during an emergency event
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Solar panels: weather dependent and costly. Mobile generator: may lack sufficient power supply or run time.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Installation of generators and backup power required to ensure the building's ability to remain functional during an event.
Mitigation Action Type	SIP
Goals Met	1, 2, 6
Critical Facility (Y/N)	Yes
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	High
Plan for Implementation	
Responsible Organization	Westampton Township OEM Coordinator and Municipality
Local Planning Mechanism	Hazard mitigation, emergency management
Potential Funding Sources	HMGP PDM
Timeline for Completion	Short Term (DOF)
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 1/31/18 Status: Budget and personnel constraints have restricted this action from moving forward.



Action Number:

WA-1 (Former WA-1)

Mitigation Action Name:

Obtain and install backup power sources at all critical facilities to include shelters and in the municipal building (EOC)

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	0	
Social	0	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	9	
Priority (H/M/L)	High	



Action Number:

WA-3 (Former WA-4)

Mitigation Action Name:

Install three additional storm drains to improve storm water management on Main Street

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	Increase capacity to manage stormwater runoff will lessen the likelihood of flooding along the roadway.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Add nearby green infrastructure space to increase storage capacity of stormwater and floodwaters. - May not have the necessary space for adequate storage capacity. Remove all drainage infrastructure and install new infrastructure with increased storage/flow capacity - May be a cost-prohibitive action.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Additional drainage pipes will allow for stormwater to properly drain from Main Street.
Mitigation Action Type	SIP
Goals Met	1, 2
Critical Facility (Y/N)	N/A
Benefits (losses avoided)	Medium
Estimated Cost	Medium
Priority*	Medium
Plan for Implementation	
Responsible Organization	Westampton Township Engineer and DPW
Local Planning Mechanism	Hazard mitigation, emergency management
Potential Funding Sources	Township DPW
Timeline for Completion	Long Term (DOF)
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 1/31/18 Status: Budget and personnel constraints have restricted this action from moving forward.



Action Number:

WA-3 (Former WA-4)

Mitigation Action Name:

Install three additional storm drains to improve storm water management on Main Street

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	0	
Social	0	
Administrative	1	
Multi-Hazard	0	
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	8	
Priority (H/M/L)	Medium	



Action Number:

WA-6

Mitigation Action Name:

The Township will promote and support non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, specifically those that have been identified as Repetitive Loss (RL) and Severe Repetitive Loss (SRL). At risk areas include:

- Creek Road
- Mohican Trail

Alternatives would include acquisition/relocation or elevation depending on feasibility, and the completion of initiative is dependent on funding, benefits versus cost, and willing participation of property owners.

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	Repetitively flooded properties place an undue stress on the property owner and Township and efforts should be made to mitigate them.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Construct flood walls/barriers around vulnerable areas – costly and can divert floodwaters to other areas Deployable flood barriers for vulnerable areas – Requires a great deal of work to implement prior to each event
Action/Project Intended for Implementation	
Description of Selected Action/Project	Work with owners to explore mitigation opportunities for repetitively flooded properties, and if appropriate and feasible, carry out acquisition, relocation, elevation and floodproofing measures to protect these properties.
Mitigation Action Type	SIP
Goals Met	1, 2
Critical Facility (Y/N)	No
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	High
Plan for Implementation	
Responsible Organization	Municipality with support from County
Local Planning Mechanism	PP
Potential Funding Sources	Grant funding; Municipal budget
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 5/31/18 Status: New Action



Action Number:
Mitigation Action Name:

WA-6

The Township will promote and support non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, specifically those that have been identified as Repetitive Loss (RL) and Severe Repetitive Loss (SRL). At risk areas include:

- Creek Road
- Mohican Trail

Alternatives would include acquisition/relocation or elevation depending on feasibility, and the completion of initiative is dependent on funding, benefits versus cost, and willing participation of property owners.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	0	
Technical	1	
Political	1	
Legal	1	
Fiscal	-1	
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	0	
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	8	
Priority (H/M/L)	High	