



9.22 Township of Washington

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

9.22.1 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
Peter deBoer, Jr., Township Administrator/Deputy OEM Coordinator 211 Route 31 North, Washington, NJ 07882 (908) 689-7204 admin@washington-twp-warren.org	Ann Kilduff, Deputy Clerk 211 Route 31 North, Washington, NJ 07882 (908) 689-7200 dptyclerk@washington-twp-warren.org

9.22.2 Municipal Profile

Washington Township is located in southeastern Warren County and occupies an area of approximately 17.8 square miles. According to the U.S. Census, the 2010 population for Township of Washington was 6,651. The Township is bordered to the north and east by Oxford Township, to the south by Hunterdon County, and to the west by Harmony Township. The Musconetcong River makes up Washington Township's eastern border. Other waterbodies in the Township include tributaries to the Musconetcong River, Shabbecong Creek, Morris Canal, Pohatcong Creek, Tunnel Brook, Brass Castle Creek and its tributaries, Furnace Brook and its tributaries. Unincorporated communities in the Township include: Brass Castle, Port Colden, Butlers Parks, Changewater, Fort Golden, and Pleasant Valley. Additionally, the Township is located within the New Jersey Highlands Region.

Growth/Development Trends

The following table summarizes recent residential/commercial development since 2010 to present and any known or anticipated major residential/commercial development and major infrastructure development that has been identified in the next five years within the municipality. Refer to the map in section 9.22.8 of this annex which illustrates the hazard areas along with the location of potential new development.

Table 9.22-1. 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 2010 to present					
Unity Bank Major Site Plan	Comm	1	5 East Asbury Anderson Road Block 78; Lot 9		Completed
Asbury Farms – Major Site Plan/GDP Amend	Comm		4 Clubhouse Drive Block 65; Lots 2 & 4	Wetlands Limestone	Ongoing
Washington Cemetery Soil Removal Permit	Comm	NA	Cemetery Hill Road Block 67; Lot 4		Completed
Retail Shoppes & Hawk Pointe	Comm	7 Units/ 1 Structure	4 Clubhouse Drive Block 65.01; Lots 1	Wetlands Limestone	Ongoing
DeSapio Real Estate - Dunkin Donuts/Verizon	Comm	2 bldgs	249-253 Route 31 S Block 66; Lots 20.05 & 20.06		Completed
Quick Chek Corp Major Site Plan	Comm	1	350 Route 57 West Block 23; Lot 12		Completed
Pride Builders, LLC Major Subdivision	Res	2 new houses	McCullough Road Block 47; Lot 9.04	Wetlands	Final Approval No houses built



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
Joe Justo Realty Major Subdivision	Res	8	West Asbury Anderson Road Block 74; Lot 5	Wetlands Limestone	Final Approval No Houses Built
Washington Comm Solar Major Site Plan	Comm	Solar Array	351 Route 57 West Block 67; Lot 63.01	Wetlands	Final Approval Not Built
Village Supermarkets Major Site Plan	Comm	1	4 Club House Drive Block 65; Lots 2 & 4	Wetlands Limestone	Completed Shop-Rite Market
Smith Motor Company Major Site Plan	Comm	Parking Lot	359 Route 31 South Block 66; Lots 20.01 & 20.11		Ongoing
Washington PV Generation – Site Plan	Comm	Solar Array	30 McCullough Road Block 47; Lot 7	Wetlands	Final Approval Not Built
Known or Anticipated Development in the Next Five (5) Years					
Johnson Chrysler Dodge Jeep Ram	Comm	1	411 Route 31 South Block 78; Lot 1		Approvals Ongoing
Asbury Farms	Comm & Res	Multiple	4 Club House Drive B 65, L 2 & 4 B 65 L 1,9 11-16	Conservation Easement	Retail & Commercial Development
Joe Justo Realty	Res	8	West Asbury Anderson Road Block 74; Lot 5 – 5.07	Wetlands Limestone	New Homes
Pride Builders, LLC Major Subdivision	Res	2 new houses	McCullough Road Block 47; Lot 9.04	Wetlands	New Homes
Hess Corporation Major Site Plan	Comm	1	323 Route 31 South Block 64; Lot 16.01		Final Approval Not completed

* Only location-specific hazard zones or vulnerabilities identified.

9.22.3 Natural Hazard Event History Specific to the Municipality

Warren 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 2008 to present were summarized to indicate the range and impact of hazard events in the community.

Information regarding specific damages at the municipal level, is presented in the table below. This summary is based on reference material or local sources. For further details on these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.22-2. Hazard Event History

Date(s) of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
February 12-13, 2008	Winter Storm	N/A	N/A	DPW overtime for snow and freezing rain for two days
March 5, 2008	Strong Wind	N/A	N/A	Road closure due to downed tree Asbury Anderson Rd. (CR 632).
October 28, 2008	Heavy Snow and Strong Winds	N/A	N/A	Township DPW OT treating snow covered roads; Mine Hill Rd closed due to downed tree; Traffic signal out SH 31 @ CR 632
February 12, 2009	High Wind	N/A	N/A	Road closures due to downed trees - Rymon Rd., Millpond Rd., Butter Milk Bridge Rd for several hours.
May 24, 2009	Lightning	N/A	N/A	Police OT due to call volume. House struck by lightning 9 Doral Blvd. Hartmans Corner Rd. closed due to downed tree.





Date(s) of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
February 1-2, 2011	Winter Storm	N/A	N/A	DPW overtime for snow removal for two days
August 26 – September 5, 2011	Hurricane Irene	DR-4021	Yes	There were numerous roads closed due to fallen trees and downed power lines. Businesses were closed due to the storm and the declared state of emergency. Millpond Road and dam were damaged due to flooding. There was some minor damage to several businesses and residential properties. Public assistance was requested. Losses and costs to the Township included DPW overtime and police overtime.
September 28 – October 6, 2011	Remnants of Tropical Storm Lee	DR-4039	Yes	Trees and wires down causing road closures and power outages. There was minor damage to residential properties and businesses. DPW overtime for mainly road closures for downed trees. Public assistance was not requested.
October 29, 2011	Severe Storm	DR-4048	Yes	DPW OT for treatment of Icy Roads. DPW OT for debris removal. Trees / Wires down and power outages.
October 26 – November 8, 2012	Hurricane Sandy	DR-4086	Yes	During Sandy, power outages were reported to a majority of the Township. This led to the opening of warming and powering stations that were set up at the municipal building. Residents who needed shelter were directed to the Warren County established shelter. There were numerous roads closed in the Township due to fallen trees and downed power lines. Mine Hill Road was closed due to downed trees for several days. Businesses were closed due to the storm and the state of emergency. Multiple private homes were struck by fallen trees. There was minor damage reported to several businesses and homes. Public assistance was requested. Costs to the Township included: DPW overtime for debris removal (the DPW also refilled portable generators) and police overtime for emergency protective services.
September 12, 2013	Heavy Rain and Flash Flooding	N/A	N/A	Road closures due to down trees – Coleman Hill Rd., Angen Rd. and Harmony Brass Castle Rd. Wires Done SH 31 near Police HQ

9.22.4 Hazard Vulnerabilities and Ranking

The hazard profiles in Section 5.0 of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The risk ranking methodology is presented in Section 5.3. However, each municipality had the opportunity to adjust the final ranking based on municipal feedback. The following summarizes the hazard vulnerabilities and their ranking in the Township of Washington. 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 Washington.





Table 9.23-3. 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
Dam Failure	Damage estimate not available	Occasional	24	Medium
Drought	Damage estimate not available	Frequent	30	Medium
Earthquake	100-Year GBS: \$0 500-Year GBS: \$314,342 2,500-Year GBS: \$4,984,962	Occasional	28	Medium
Flood	1% Annual Chance: \$13,365,050	Frequent	18	Medium
Geologic	RCV Exposed to Carbonate Rock Areas: \$583,619,609	Occasional	36	High
Hurricane	100-year MRP: \$400,975.00 500-year MRP: 3064315 Annualized: \$31,905.00	Frequent	48	High
Nor'Easter	Damage estimate not available	Frequent	48	High
Severe Storm	100-Year MRP: \$400,975 500-year MRP: \$3,064,315 Annualized: \$31,905	Frequent	48	High
Severe Winter Storm	1% GBS: \$4,961,891 5% GBS: \$24,809,454	Frequent	51	High
Wildfire	Estimated Value in the Extreme, Very High, and High Hazard Areas: \$43,801,538	Occasional	16	Medium
Hazardous Materials	Damage estimate not available	Frequent	36	High

Notes:

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

- The general building stock valuation is based on the custom inventory generated for the municipality and based on improved value.
- 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 estimated value of contents. Loss estimates for the flood and earthquake hazards represent both structure and contents. Potential flood loss estimates were generated using Hazus-MH 2.2 and the 2011 FEMA DFIRM for the 1-percent annual chance event. For the geologic and wildfire hazards, the improved value and estimated contents of buildings located within the identified hazard zones is provided.

National Flood Insurance Program (NFIP) Summary

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

Table 9.22-4. NFIP Summary

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 1% Flood Boundary (3)
Township of Washington	33	24	\$188,867	2	0	13

Source: FEMA Region 2, 2014

(1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 2, and are current as of 11/30/2014.





Please note the total number of repetitive loss properties includes the severe repetitive loss properties. The number of claims represents claims closed by 11/30/14.

(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 is based on the latitude and longitude provided by FEMA Region 2 in the policy file.

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.

Number of policies and claims and claims total exclude properties located outside County boundary, based on provided latitude and longitude.

Critical Facilities

The table below presents the number of critical facilities, by type, in the community located in the effective FEMA flood zones (1% and 0.2% annual chance boundaries).

Table 9.22-5. Critical Facilities in the DFIRM 1% and 0.2% Annual Chance Flood Boundaries

Municipality	1% Annual Chance	0.2% Annual Chance
	Communication	Communication
Washington, Township of	1	1

Source: Warren County, FEMA 2011

Other Vulnerabilities Identified by Municipality

The hazard profiles in Section 5.0 of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. Further, mitigation projects have been identified that may more specifically detail vulnerabilities in the community. There are no additional vulnerabilities identified at this time.

9.22.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Education/Outreach and Community classification
- Self-Assessment of Capability
- National Flood Insurance Program
- Integration of Mitigation Planning into Existing and Future Planning Mechanisms

Planning and Regulatory Capability

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

Table 9.22-6. 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				



Table 9.22-6. 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.)
Master Plan	Yes, 1994 1998 2001 2007 2009	Local	Land Use Board	Master Plan Reexamination Report Reexamination Report Reexamination Report Housing Element
Capital Improvements Plan	Yes	Local	Township Committee	
Floodplain Management / Basin Plan	Yes, 2011 Yes, 2007	Federal Local	FEMA Zoning	74-7 Flood Insurance Rate Map 123-36.1
Stormwater Management Plan	Yes, 2004 2005 2009	Local & State	Land Use Board	Ordinance: Stormwater Management Plan Ordinance: Stormwater Management Plan Drainage Easement Reduction MP pg18,19
Open Space Plan	Yes, 2001 2009	Local	Land Use Board	Reexamination Report Ordinance 123-13.2A(1)
Stream Corridor Management Plan	Yes. 2006 2009 2009	Local & State	Land Use Board	64-31 Stream Corridor Buffer Natural Resource Conserv. (MP pg 39,40) Conservation Plan (MP pw 17,18)
Watershed Management or Protection Plan	Yes, 2006	Local & State	Land Use Board & Engineer	64-31
Economic Development Plan	No			
Comprehensive Emergency Management Plan	Yes	Local & State	OEM	Wash Twp Emergency Operation Plan
Emergency Response Plan	Yes	Local & State	OEM	Wash Twp Emergency Operation Plan
Post-Disaster Recovery Plan	Yes	Local & State	OEM	Wash Twp Emergency Operation Plan
Transportation Plan	Yes	Local	Land Use Board	Master Plan Reexamination Report Reexamination Report Reexamination Report Housing Element
Strategic Recovery Planning Report	No			
Other Plans:	No			
Regulatory Capability				
Building Code	Yes	State & Local		State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.)
Zoning Ordinance	Yes, 2008	Local	Committee / LUB	123
Subdivision Ordinance	Yes, 1987	Local	Committee / LUB	64 (22-28) Major & Minor Subdivision
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local	Zoning Officer	Chapter 74
NFIP: Cumulative Substantial Damages	No			
NFIP: Freeboard	Yes	State, Local		UCC
Growth Management Ordinances	Yes, 1995	Local	Land Use Board	123-12.2 Cluster, 123, Zoning
Site Plan Review Requirements	Yes, 2001 1989	Local	Land Use Board	123-25 Site Plan Review 64-13 Site Plan Review & Approval



Table 9.22-6. 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.)
	1987			64-25 Site Plan & Major Subdivision
Stormwater Management Ordinance	Yes, 2006 2006 1992	State, Local	Committee & Land Use Board	Ordinance 2006-19 64-31 Stormwater Management 123-18 Grading & Drainage
Municipal Separate Storm Sewer System (MS4)	Yes, 2006 2006	State, Local	Committee / LUB	83-1B Stormwater 64-31.1 Stormwater runoff
Natural Hazard Ordinance	No			
Post-Disaster Recovery Ordinance	No			
Real Estate Disclosure Requirement	Yes	State, Local	LUB & Zoning	98-5 Notice of Farm/Right to Farm Act
Other [Special Purpose Ordinances (i.e., sensitive areas, steep slope)]	Yes, 2006 1987	Local	Land Use Board	64-31.1 Environmentally Critical Areas 123-29 Area Requirements

Administrative and Technical Capability

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

Table 9.22-7. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Land Use Board
Mitigation Planning Committee	No	
Environmental Board/Commission	Yes	Environmental Commission
Open Space Board/Committee	No	
Economic Development Commission/Committee	Yes	Ad Hoc Committee
Maintenance Programs to Reduce Risk	Yes	Safety Committee
Mutual Aid Agreements	Yes	Local
Technical/Staffing Capability		
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Yes	Municipal & LUB Engineer/Planner Finelli Consulting Engineers/Scarlett Doyle, PP
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Municipal Engineer/Construction Official
Planners or engineers with an understanding of natural hazards	Yes	Municipal Engineer (Finelli Consulting Engineers)
NFIP Floodplain Administrator	Yes	Zoning Official (Curt Pantuso)
Surveyor(s)	Yes	Municipal Engineer (Finelli Consulting Engineers)
Personnel skilled or trained in GIS and/or Hazus-MH applications	Yes	Municipal Engineer (Finelli Consulting Engineers)
Scientist familiar with natural hazards	Yes	LUB Geotechnical Engineer (Van Cleef Engineering)
Emergency Manager	Yes	OEM Manager
Grant Writer(s)	Yes	In house staff



Table 9.22-7. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Staff with expertise or training in benefit/cost analysis	Yes	CFO
Professionals trained in conducting damage assessments	Yes	Construction Official

Fiscal Capability

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

Table 9.22-8. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital Improvements Project Funding	No
Authority to Levy Taxes for specific purposes	No
User fees for water, sewer, gas or electric service	No
Impact Fees for homebuyers or developers of new development/ homes	Yes
Stormwater Utility Fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal or State Funding Programs	Yes
Open Space Acquisition Funding Programs	Yes
Other	No

Education/Outreach and Community Classifications

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

Table 9.22-9. Education/Outreach and Community Classifications

Program	Do you have/participate in this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	NP	N/A
Building Code Effectiveness Grading Schedule (BCEGS)	No		
Public Protection (ISO Fire Protection Classes 1 to 10)	No		
Storm Ready	No	NP	N/A
Firewise	No	NP	N/A
Disaster/Safety Programs in/for Schools	Yes	20	
Organizations with Mitigation Focus (advocacy group, non-government)	No		
Public Education Program/Outreach (through website, social media)	No		



Table 9.22-9. Education/Outreach and Community Classifications

Program	Do you have/participate in this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Public-Private Partnerships	No		

N/A = Not applicable. NP = Not participating

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 <http://www.isomitigation.com/ppc/0000/ppc0001.html>
- The National Weather Service Storm Ready website at <http://www.weather.gov/stormready/howto.htm>
- The National Firewise Communities website at <http://firewise.org/>

Self-Assessment of Capability

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

Table 9.22-10. Self-Assessment of Capability

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





National Flood Insurance Program

NFIP Floodplain Administrator (FPA)

Curt Pantuso/Zoning Officer

Flood Vulnerability Summary

The Township does not maintain lists or inventories of flood damaged properties. During Hurricane Sandy, approximately 50 residents had minimal to moderate damage. The FPA does not conduct Substantial Damage assessments and they were not made during Hurricane Sandy. It is unknown if any properties are interested in mitigation. If there is interested, funding sources would predominately be the property owner through homeowners and flood insurance.

Resources

The FPA is the sole person assuming the responsibilities of floodplain administration in the Township. However, upon request, the Township Engineer will assist. The FPA only provides permit review and inspections. Education or outreach regarding flood risk and hazards or flood risk reduction is not provided to the community. The FPA indicated that there are barriers to running an effective floodplain management program and that is lack of funds. He does not feel adequately supported or trained. The FPA would consider attending continuing education and/or certification trainings only if funded.

Compliance History

The Township is currently in good-standing with the NFIP. It is unknown as to when the most recent compliance audit was conducted.

Regulatory

It is unknown if the Township's floodplain management regulations/ordinances exceed the FEMA and State minimum requirements. The Township will check flood maps and contact the Township Engineer if prospecting building will be located within the floodplain. The Township has considered joining CRS and would attend a CRS seminar only if funded.

Community Rating System

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

Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, each community was surveyed to obtain a better understanding of their community's progress in plan integration. A summary is provided below. In addition, the community identified specific integration activities that will be incorporated into municipal procedures.

Planning

The 2007 Master Plan Reexamination continues to enhance and expand upon the goals and objectives from the 1994 Master Plan. The Plan places a priority on protecting the Township's unique environmental features, steep slopes, wetlands, stream courses, and agricultural soils; it also encourages the continued preservation of farmland and open space. The Plan proposes the addition of development regulations in hazard areas, such as limestone



formations and sinkholes, and the use of environmental impact statements that will include the impacts on the water supply, surface drainage and stormwater runoff.

The Township is located within both the Highlands Planning and Preservation Areas. The municipality submitted a Petition for Plan Conformance for its Preservation Area, which was approved by the Highlands Council on December 1, 2011. The goals of the 2011 Highlands Master Plan Element include to protect, restore and enhance the quality and quantity of surface and groundwater, to preserve extensive and contiguous areas of land in its natural state, to promote the conservation of water resource, and to promote brownfield remediation and redevelopment if possible. Many objectives are aimed to protect forest resources, open water and riparian areas, steep slopes, critical habitats, water resources and prime groundwater recharge areas. The Plan proposes to prohibit certain land uses in these areas in addition to land located above carbonate bedrock. The 2009 Highlands Environmentally Resource Inventory identifies the location and extent of these natural resources and environmentally sensitive areas within the Township.

Regulatory and Enforcement (Ordinances)

The Township has multiple ordinances pertaining to the mitigation of hazards. These ordinances include the NFIP Flood Damage Prevention Ordinance, a stormwater management ordinance, a carbonate rock district ordinance, snow emergencies ordinance, and a soil removal ordinance. When updating these and other ordinances, hazard mitigation is taken into consideration and is made a priority.

Prior to land use, zoning changes or development permitting, the Township reviews the hazard mitigation plan and other hazard analysis to ensure land use is consistent and compatible. The Township also limits development in high hazard areas. During the permit review process, addressing hazards such as building in floodplains and wildfire prone areas is looked at. The Township's rezoning procedures also recognizes hazard areas as limits on zoning changes.

Operational and Administration

The Township has established a Land Use Board and Environmental Commission that aid in planning decisions to support the conservation and preservation of the Township's critical environmental features.

Funding

The Township established an Open Space Trust Fund tax of 2 cents per \$100 of assessed value. Currently, the municipal budget does not have a line item for mitigation project funding; however, mitigation actions will be looked at when allocating funding in the future.

Education and Outreach

The Township posts community notices, and advisories on its website's homepage that provide residents with up-to-date information regarding the status of the community and emergency preparedness. In addition, information regarding the status of power outages and JCP&L are located on the homepage.

9.22.6 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 2011 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.

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Table 9.22-11. Past Mitigation Initiative Status

2011 Mitigation Action	Responsible Agency	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g, FEMA HMGP grant, local budget)?	Next Step (Include in 2016 HMP? or Discontinue)	Describe Next Step 1. If including action in the 2016 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why
Washington Township 1: Acquisition/ Elevation of one Severe Repetitive Loss property on Rymon Road.	OEM Coordinator	No Progress.	1. 0% complete 2. Budget and personnel constraints have restricted this action from moving forward 3. No funding secured	Include in 2016 HMP	Refer to new mitigation action Washington Twp-7.
Washington Township 2: Acquisition/ Elevation of one Repetitive Loss property on Butler Park Road.	OEM Coordinator	No Progress	1. 0% complete 2. Budget and personnel constraints have restricted this action from moving forward 3. No funding secured	Include in 2016 HMP	Refer to new mitigation action Washington Twp-7.
Washington Township 3: Acquisition/ Elevation of one Repetitive Loss property on Roaring Rock Road.	OEM Coordinator	No Progress	1. 0% complete 2. Budget and personnel constraints have restricted this action from moving forward 3. No funding secured	Include in 2016 HMP	Refer to new mitigation action Washington Twp-7.
Washington Township 4: Acquisition/ Elevation of 10 flood prone properties located on Butlers Park Road.	OEM Coordinator	No Progress	1. 0% complete 2. Budget and personnel constraints have restricted this action from moving forward 3. No funding secured	Include in 2016 HMP	Refer to new mitigation action Washington Twp-7.
Washington Township 5: Storm-water management system upgrade and improvement along Mill Pond Road.	Twp Administrator	No Progress	1. 0% complete 2. Budget and personnel constraints have restricted this action from moving forward 3. No funding secured	Include in 2016 HMP	This project would be highly regulated and very costly
Washington Township 6: Raise 200 feet of embankment an additional two feet in height along the stream bank parallel to Kayhart Lane.	Twp Administrator	No Progress	1. 0% complete 2. Budget and personnel constraints have restricted this action from moving forward 3. No funding secured	Include in 2016 HMP	This project would be highly regulated and very costly. Township Committee has never discussed



2011 Mitigation Action	Responsible Agency	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2016 HMP? or Discontinue)	Describe Next Step 1. If including action in the 2016 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why
Washington Township 7: Stream bank stabilization at bend of Roaring Rock Creek located near Meadow Breeze Lane.	Twp Administrator	No Progress	1. 0% complete 2. Budget and personnel constraints have restricted this action from moving forward 3. No funding secured	Include in 2016 HMP	This project would be highly regulated and very costly. Township Committee has never discussed
Washington Township 8: Conduct inundation study for dam located in Roaring Rock Park.	Twp Administrator	No Progress	1. 0% complete 2. Budget and personnel constraints have restricted this action from moving forward 3. No funding secured	Include in 2016 HMP	This project would be highly regulated and very costly. Is grant money available? Township Committee has never discussed
Washington Township 9: Flood-proofing of the Good Shepherd Christian School.	School Board Administrator	No Progress	1. 0% complete 2. Budget and personnel constraints have restricted this action from moving forward 3. No funding secured	Include in 2016 HMP	Township has no jurisdiction over this property/project; Township Committee has never discussed
Washington Township 10: Conduct all hazards public education and outreach program for hazard mitigation and preparedness.	WCOEM, OEM Coordinator	No Progress	1. 0% complete 2. Budget and personnel constraints have restricted this action from moving forward 3. No funding secured	Include in 2016 HMP	Not sure how to accomplish Township Committee has never discussed



Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy

There are no additional mitigation projects/activities identified that have also been completed but were not identified in the previous mitigation strategy in the 2011 Plan.

Proposed Hazard Mitigation Initiatives for the Plan Update

The County hosted a mitigation action workshop in March 2015 where the following FEMA publications were provided to all plan participants to use as a resource as part of the municipal 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). In May 2015, the Township participated in a second workshop led by FEMA Region 2 and NJOEM and was provided the results to the risk assessment to further assist with the identification of mitigation actions.

Table 9.22-11 summarizes the comprehensive-range of specific mitigation initiatives the Borough would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 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.’ Table 9.22-12 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.22-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
Washington Twp-1 (old 5)	Storm-water management system upgrade and improvement along Mill Pond Road.	Existing	Flood	1, 2	Town Administration	Medium	High	FEMA Grants and local budget for cost share	Short Term / DOF	High	SIP	PP
Washington Twp-2 (old 6)	Raise 200 feet of embankment an additional two feet in height along the stream bank parallel to Kayhart Lane.	Existing	Flood	1, 2	Town Administration	Medium	High	FEMA Grants and local budget for cost share	Short Term / DOF	High	SIP	PP
Washington Twp-3 (old 7)	Stream bank stabilization at bend of Roaring Rock Creek located near Meadow Breeze Lane.	Existing	Flood	1, 2	Town Administration	Medium	High	FEMA Grants and local budget for cost share	Short Term / DOF	High	SIP	PP
Washington Twp-4 (old 8)	Conduct inundation study for dam located in Roaring Rock Park.	Existing	Flood	2, 4	Town Administration	Medium	Medium	FEMA Grants and local budget for cost share	Short Term / DOF	High	LPR	PR
Washington Twp-5 (old 9)	Flood-proofing of the Good Shepherd Christian School.	Existing	Flood	, 2	School Board Administration	Medium	Medium	FEMA Grants and local budget for cost share	Short Term / DOF	High	SIP	PP
Washington Twp-6 (old 10)	Conduct all hazards public education and outreach program for hazard mitigation and preparedness.	N/A	All	3, 4	OEM Staff with support from WCOEM	Medium	Low	FEMA Grants and local budget for cost share	Short Term / DOF	High	EAP	PI
Washington Twp-7	Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or acquisition/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 and determine most cost-effective mitigation option. Phase 2: Work with the property owners to implement selected action based on available funding and local match availability. Properties identified at this time: 13 Edgemere Terrace Property Flooding; Block 11 Lot 14; 1218 Butlers Park Road; Block 94 Lot 1											
	See above.	Existing	Flood, Severe Weather Wildfire, Severe Winter Weather	1, 2, 3, 4	Engineering via NFIP FPA with NJOEM, FEMA support	High	High	FEMA Mitigation Grant Programs and local budget (or property owner) for cost share	Ongoing (outreach and specific project identification); Long term DOF (specific project application and implementation)	High	SIP	PP
Washington Twp-8	Removal of high hazard trees	New and Existing	Severe Weather, Severe Winter Weather	1, 2	Township Administrator	Medium	Low to Medium	Municipal Budget	Ongoing	Medium	SIP	PP





Table 9.22-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
Washington Twp-9	Support continuity of operations at critical facilities. The following projects are identified at this time: Purchase and install a generator to use as backup power at a fueling station within the Township.	Existing	All	1, 2, 6	Township Administrator	Medium	Medium to High	Grant funding with local cost share	Short Term / DOF	Medium	SIP	PP
Washington Twp-10	Dredging of waterways and run-off areas within the Township	N/A	Flood	1, 2	Township Administrator	Medium	Medium to High	Grant funding with local cost share	Short Term / DOF	Medium	SIP	PP
Washington Twp-11	Installation of back-up generator at the Parks & Recreation Building	Existing	All	1, 2, 6	Township Administrator	Medium	Medium to High	Grant funding with local cost share	Short Term / DOF	Medium	SIP	PP

Notes:

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

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

Acronyms and Abbreviations:

- 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
- NJDEP New Jersey Department of Environmental Protection
- NJOEM New Jersey Office of Emergency Management
- 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
- HMA Hazard Mitigation Assistance Program

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.

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.





Costs:

- 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:

- 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 9.22-13. Summary of Prioritization of Actions

Mitigation Action / Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
Washington Twp-1 (old 5)	Storm-water management system upgrade and improvement along Mill Pond Road.	1	1	1	1	0	0	0	0	0	1	1	1	0	0	7	High
Washington Twp-2 (old 6)	Raise 200 feet of embankment an additional two feet in height along the stream bank parallel to Kayhart Lane.	1	1	1	1	0	0	0	0	0	1	1	1	0	0	7	High
Washington Twp-3 (old 7)	Stream bank stabilization at bend of Roaring Rock Creek located near Meadow Breeze Lane.	1	1	1	1	0	0	0	0	0	1	1	1	0	0	7	High
Washington Twp-4 (old 8)	Conduct inundation study for dam located in Roaring Rock Park.	1	1	1	1	0	0	0	0	0	1	1	1	0	0	7	High
Washington Twp-5 (old 9)	Flood-proofing of the Good Shepherd Christian School.	1	1	1	1	0	0	0	0	0	1	1	1	0	0	7	High
Washington Twp-6 (old 10)	Conduct all hazards public education and outreach program for hazard mitigation and preparedness.	1	1	1	1	1	1	1	0	1	1	1	1	0	0	11	High
Washington Twp-7	Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or acquisition/relocation to protect structures from future damage.	1	1	1	0	0	0	0	0	1	1	1	1	0	0	7	High
Washington Twp-8	Removal of high hazard trees	1	1	1	1	1	1	1	0	1	1	1	1	0	0	11	Medium
Washington Twp-9	Support continuity of operations at critical facilities. Purchase and install a generator to use as backup power at a fueling station within the Township.	1	1	1	0	0	0	0	0	1	1	1	1	0	0	7	Medium
Washington Twp-10	Dredging of waterways and run-off areas within the Township	1	1	1	0	0	0	0	0	1	1	1	1	0	0	7	Medium
Washington Twp-11	Installation of back-up generator at the Parks & Recreation Building	1	1	1	0	0	0	0	0	1	1	1	1	0	0	7	Medium

Note: Refer to Section 6 which contains the guidance on conducting the prioritization of mitigation actions.





9.22.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.22.8 Hazard Area Extent and Location

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

9.22.9 Additional Comments

None at this time.

DRAFT



Figure 9.22-1. Township of Washington Hazard Area Extent and Location Map 1

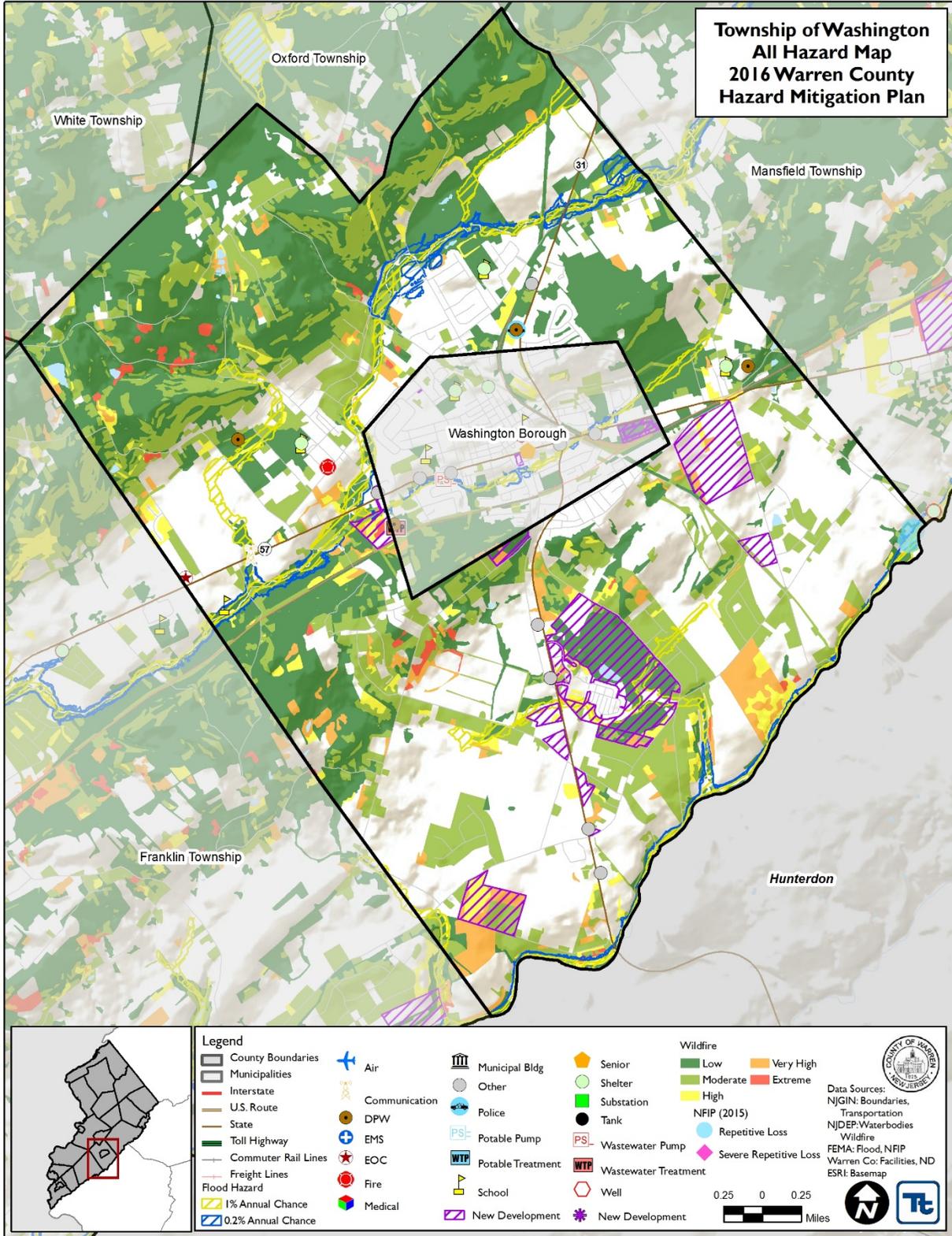
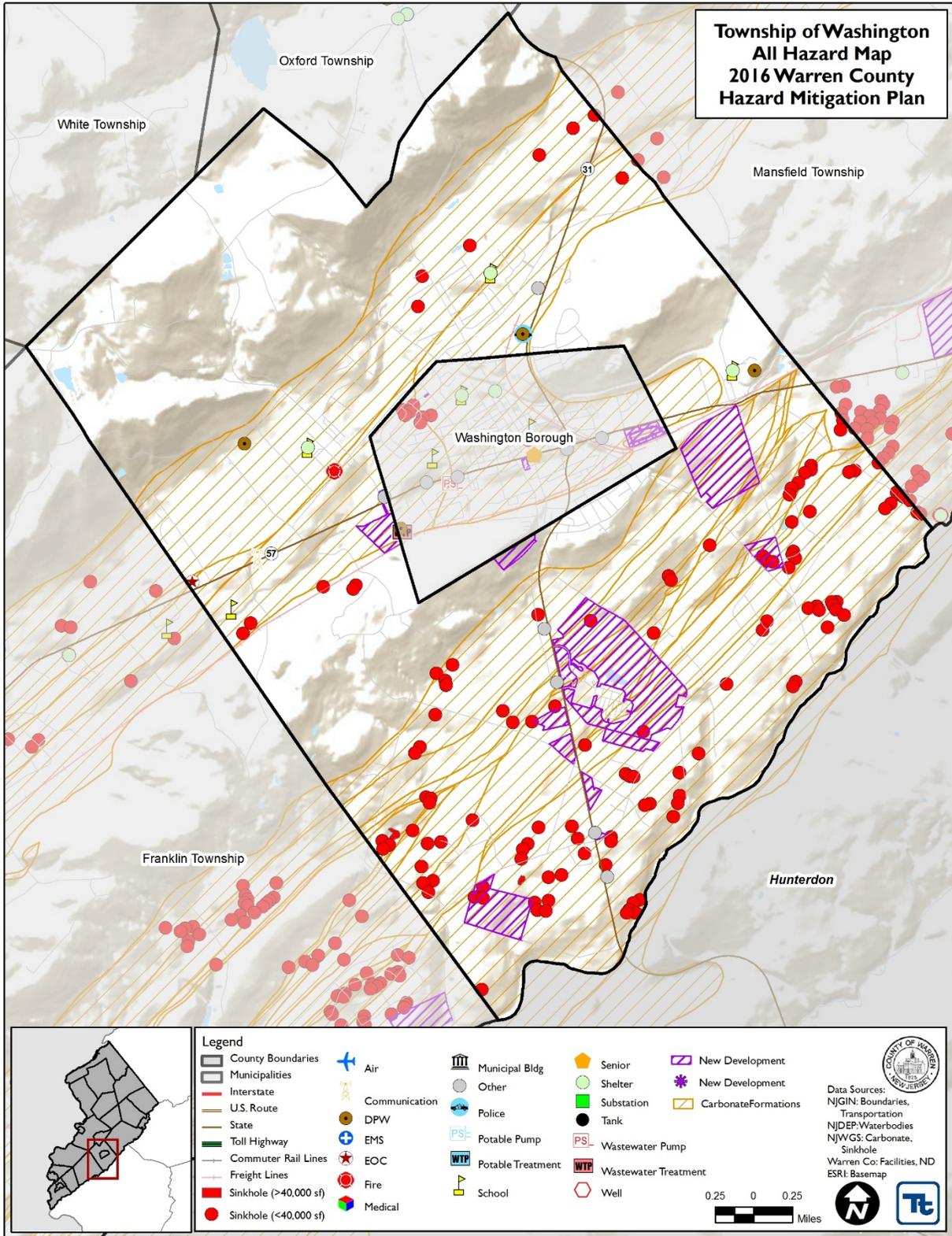




Figure 9.22-2. Township of Washington Hazard Area Extent and Location Map 2





Action Number: Washington Twp-1
Action Name: Storm-water management system upgrade and improvement along Mill Pond Road.

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	Stormwater system along Mill Pond Road is in need of upgrades and improvements
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Storm-water management system upgrade and improvement along Mill Pond Road. 2. Do nothing - current problem continues 3. No other feasible options were identified
Action/Project Intended for Implementation	
Description of Selected Action/Project	Storm-water management system upgrade and improvement along Mill Pond Road.
Mitigation Action/Project Type	SIP
Goals Met	1, 2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	Medium
Estimated Cost	High
Priority*	High
Plan for Implementation	
Responsible Organization	Town Administration
Local Planning Mechanism	Stormwater Management, Capital Improvement
Potential Funding Sources	FEMA Grants and local budget for cost share
Timeline for Completion	Short Term / DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization



Action Number:

Washington Twp-1

Action Name:

Storm-water management system upgrade and improvement along Mill Pond Road.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	Protect roadway from flood damage
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	0	Need grant funding
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
Total	7	
Priority (High/Med/Low)	High	



Action Number: Washington Twp-2
Action Name: Raise 200 feet of embankment an additional two feet in height along the stream bank parallel to Kayhart Lane.

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	Flooding of Kayhart Lane; stream bank needs to be raised
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	<ol style="list-style-type: none"> 1. Raise 200 feet of embankment an additional two feet in height along the stream bank parallel to Kayhart Lane. 2. Do nothing - current problem continues 3. No other feasible options were identified
Action/Project Intended for Implementation	
Description of Selected Action/Project	Raise 200 feet of embankment an additional two feet in height along the stream bank parallel to Kayhart Lane.
Mitigation Action/Project Type	SIP
Goals Met	1, 2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	Medium
Estimated Cost	High
Priority*	High
Plan for Implementation	
Responsible Organization	Town Administration
Local Planning Mechanism	Stormwater Management, Capital Improvement
Potential Funding Sources	FEMA Grants and local budget for cost share
Timeline for Completion	Short Term / DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:



Action Number:

Washington Twp-2

Action Name:

Raise 200 feet of embankment an additional two feet in height along the stream bank parallel to Kayhart Lane.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	Protect roadway from flood damage
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	0	Need grant funding
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
Total	7	
Priority (High/Med/Low)	High	



Action Number: Washington Twp-3
Action Name: Stream bank stabilization at bend of Roaring Rock Creek located near Meadow Breeze Lane.

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	Stream bank is in need of stabilization; roadway prone to flood damage
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Stream bank stabilization at bend of Roaring Rock Creek located near Meadow Breeze Lane. 2. Do nothing - current problem continues 3. No other feasible options were identified
Action/Project Intended for Implementation	
Description of Selected Action/Project	Stream bank stabilization at bend of Roaring Rock Creek located near Meadow Breeze Lane.
Mitigation Action/Project Type	SIP
Goals Met	1, 2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	Medium
Estimated Cost	High
Priority*	High
Plan for Implementation	
Responsible Organization	Town Administration
Local Planning Mechanism	Stormwater Management, Capital Improvement
Potential Funding Sources	FEMA Grants and local budget for cost share
Timeline for Completion	Short Term / DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:



Action Number:

Washington Twp-3

Action Name:

Stream bank stabilization at bend of Roaring Rock Creek located near Meadow Breeze Lane.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	Protect roadway from flood damage
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	0	Need to obtain grant funding
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
Total	7	
Priority (High/Med/Low)	High	



Action Number: Washington Twp-5
Action Name: Flood-proofing of the Good Shepherd Christian School.

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	School is prone to flooding and damages
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Flood-proofing of the Good Shepherd Christian School.
	2. Do nothing - current problem continues
	3. No other feasible options were identified
Action/Project Intended for Implementation	
Description of Selected Action/Project	Flood-proofing of the Good Shepherd Christian School.
Mitigation Action/Project Type	SIP
Goals Met	1, 2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	Medium
Estimated Cost	Medium
Priority*	High
Plan for Implementation	
Responsible Organization	School Board Administration
Local Planning Mechanism	Stormwater Management, Capital Improvement
Potential Funding Sources	FEMA Grants and local budget for cost share
Timeline for Completion	Short Term / DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:



Action Number: Washington Twp-5

Action Name: Flood-proofing of the Good Shepherd Christian School.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	Protect school from flood damages
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	0	
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	1	Flood, Severe Weather
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
Total	7	
Priority (High/Med/Low)	High	



Action Number: Washington Twp-8

Action Name: Removal of high hazard trees

Assessing the Risk	
Hazard(s) addressed:	Severe Weather, Severe Winter Weather
Specific problem being mitigated:	High hazard trees pose a threat to the Township during periods of strong winds
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Removal of high hazard trees
	2. Do nothing - current problem continues
	3. No other feasible options were identified
Action/Project Intended for Implementation	
Description of Selected Action/Project	Removal of high hazard trees
Mitigation Action/Project Type	SIP
Goals Met	1, 2
Applies to existing structures/infrastructure, future, or not applicable	New and Existing
Benefits (losses avoided)	Medium
Estimated Cost	Low to Medium
Priority*	Medium
Plan for Implementation	
Responsible Organization	Township Administrator
Local Planning Mechanism	Public Works, Capital Improvement
Potential Funding Sources	Municipal Budget
Timeline for Completion	Ongoing
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:



Action Number: Washington Twp-8

Action Name: Removal of high hazard trees

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Protect residents from being injured by fallen trees
Property Protection	1	Protect infrastructure from tree damage
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	1	
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	Medium	



Action Number: Washington Twp-9
Action Name: Support continuity of operations at critical facilities - Purchase and install a generator to use as backup power at a fueling station within the Township.

Assessing the Risk	
Hazard(s) addressed:	All
Specific problem being mitigated:	The fueling station in the Township does not have backup power which prevents it from providing gas during power outages
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	<ol style="list-style-type: none"> 1. Purchase and install a generator to use as backup power at a fueling station within the Township. 2. Do nothing - current problem continues 3. No other feasible options were identified
Action/Project Intended for Implementation	
Description of Selected Action/Project	Support continuity of operations at critical facilities - Purchase and install a generator to use as backup power at a fueling station within the Township.
Mitigation Action/Project Type	SIP
Goals Met	1, 2, 6
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	Medium
Estimated Cost	Medium to High
Priority*	Medium
Plan for Implementation	
Responsible Organization	Township Administrator
Local Planning Mechanism	Emergency Operations
Potential Funding Sources	Grant funding with local cost share
Timeline for Completion	Short Term / DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:



Action Number:

Washington Twp-9

Action Name:

Purchase and install a generator to use as backup power at a fueling station within the Township.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	0	
Political	0	
Legal	0	
Fiscal	0	
Environmental	0	
Social	1	Provide fuel to residents during periods of power outages
Administrative	1	
Multi-Hazard	1	All
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
Total	7	
Priority (High/Med/Low)	Medium	



Action Number: Washington Twp-10

Action Name: Dredging of waterways and run-off areas within the Township

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	Waterways and run-off areas become blocked with debris causing flooding during periods of heavy rain
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Dredging of waterways and run-off areas within the Township
	2. Do nothing - current problem continues
	3. No other feasible options were identified
Action/Project Intended for Implementation	
Description of Selected Action/Project	Dredging of waterways and run-off areas within the Township
Mitigation Action/Project Type	SIP
Goals Met	1, 2
Applies to existing structures/infrastructure, future, or not applicable	N/A
Benefits (losses avoided)	Medium
Estimated Cost	Medium to High
Priority*	Medium
Plan for Implementation	
Responsible Organization	Township Administrator
Local Planning Mechanism	Stormwater Management, Capital Improvement
Potential Funding Sources	Grant funding with local cost share
Timeline for Completion	Short Term / DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:



Action Number: Washington Twp-10

Action Name: Dredging of waterways and run-off areas within the Township

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Protect residents from flooding
Property Protection	1	Protects structures from flood damage
Cost-Effectiveness	1	
Technical	0	
Political	0	
Legal	0	
Fiscal	0	
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
Total	7	
Priority (High/Med/Low)	Medium	



Action Number: Washington Twp-11

Action Name: Installation of back-up generator at the Parks & Recreation Building

Assessing the Risk	
Hazard(s) addressed:	All
Specific problem being mitigated:	No backup power for the municipal building
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Installation of back-up generator at the Parks & Recreation Building
	2. Do nothing - current problem continues
	3. No other feasible options were identified
Action/Project Intended for Implementation	
Description of Selected Action/Project	Installation of back-up generator at the Parks & Recreation Building
Mitigation Action/Project Type	SIP
Goals Met	1, 2, 6
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	Medium
Estimated Cost	Medium to High
Priority*	Medium
Plan for Implementation	
Responsible Organization	Township Administrator
Local Planning Mechanism	Emergency Operations
Potential Funding Sources	Grant funding with local cost share
Timeline for Completion	Short Term / DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:



Action Number: Washington Twp-11

Action Name: Installation of back-up generator at the Parks & Recreation Building

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	0	
Political	0	
Legal	0	
Fiscal	0	Need grant funding
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
Total	7	
Priority (High/Med/Low)	Medium	