Washington Township, Northampton County Annex

Hazard Mitigation Plan Points-of-Contact

Primary:

George Abt
Emergency Management Coordinator
1021 Washington Boulevard, Bangor, PA 18013
610-564-0337

Alternate:

Robert Smith
Chairman of the Board / Deputy EMC
1021 Washington Boulevard, Bangor, PA 18013
610-588-1524
Bsmith1954@myyahoo.com

Municipal Profile

Washington Township is located in the northeastern part of Northampton County, sharing its northern border with Monroe County. It encompasses an area of approximately 18.1 square miles and has a population of 5,148 (2020 Census). The township is bordered by Plainfield Township to the west; Lower Mount Bethel Township to the southeast; Upper Mount Bethel Township and East Bangor to the east and northeast; and Hamilton Township (Monroe County) to the north. Washington Township encompasses the boroughs of Bangor and Roseto.

Washington Township is in the Delaware River watershed, and is primarily drained by Martins Creek, which runs north-south from Upper Mount Bethel Township through the center of Washington Township and south to the Delaware River. A small area in the southeast of the township is drained by the Delaware River tributary Oughoughton Creek. There are also a few small bodies of standing water in the western part of the township, as well as some smaller streams, which drain by Martins Creek tributary and into the Delaware River.

Washington Township is intersected at its center by two major roadways; PA Route 191 runs north-south from Monroe County through Washington Township as 1st Street, and then Washington Boulevard, before veering southwest into Plainfield Township. PA Route 512 runs east-west from Upper Mount Bethel Township as Erdman Street, then Market Street, and lastly Blue Valley Drive to Plainfield Township and Pen Argyl Borough. South Main Street is another primary route, running north-south to the east of PA Route 191. Springfield Drive and Richmond Road provide the southern-most connection to points east from Washington Township, starting perpendicular to South Main Street in the center of the township.

Municipal Participation

1. Identify municipal stakeholders to be involved in the planning process such as, floodplain administrator, public works, emergency management, engineers, planners, etc., and include their specific role in the process.

Robert Smith, Deputy EMC Role: Primary POC	Tina Serfass, Zoning Officer Role: Zoning Officer
Jeff Ott, Engineer Role: Township Engineer	George Abt, Local EMC Role: Emergency Management Coordinator

2. Identify community stakeholders such as; neighborhood groups, religious groups, major employers / businesses, etc., that will be informed and / or involved in the planning process and describe how they will be involved.

   Shelter – Washington Township Municipal Building, 1021 Washington Boulevard, Bangor, PA

3. Describe how the public **will be engaged** in the current planning process (examples, newsletters, social media, etc.), **and how they were engaged** since the 2018 Hazard Mitigation Plan.

   Department Facebook

   69 News

   Newspaper – Express Times, Morning Call, Press, Blue Valley Times

Compliance with the National Flood Insurance Program (NFIP)

Topic	Identify source of information if different from the one listed.	Additional Comments
1. Staff Resources		
Is the Community Floodplain Administrator (FPA) or NFIP Coordinator certified?	Community FPA	No
Is floodplain management an auxiliary function?	Community FPA	No
Provide an explanation of NFIP administration services (e.g., permit review, GGIS, education or outreach, inspections, engineering capability)	Community FPA	Unknown
What are the barriers to running an effective NFIP program in the community, if any?	Community FPA	FEMA's spot elevation location
2. Compliance History		
Is the community in good standing with the NFIP?	State NFIP Coordinator, FEMA NFIP Specialist, or community records	Yes
Are there any outstanding compliance issues (i.e., current violations)?		No
When was the most recent Community Assistance Visits (CAV) or Community Assistance Contact (CAC)?		Unknown
Is a CAV or CAC scheduled or needed?		Unknown
3. Regulation		
When did the community enter the NFIP?	NFIP Community Status Book	11/1/1974
Are the Flood Insurance Rate Maps (FIRMs) digital or paper? How are residents assisted with mapping?	Community FPA	Both digital and paper
Do floodplain regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	Community FPA	Meet
Describe the permitting process	Community FPA, State, FEMA NFIP	N/A

Compliance with the National Flood Insurance Program (NFIP) – *continued*

4. Insurance Summary		
How many NFIP policies are in the community? What is the total premium and coverage?	State NFIP Coordinator or FEMA NFIP Specialist	As of 9/22/2023 – 12 policies & $11,719 in premiums
How many claims have been paid in the community? What is the total amount of paid claims? How many substantial damage claims have there been?	FEMA NFIP or Insurance Specialist	As of 9/22/2023 – 10 claims & $71,968.51 paid to claims
How many structures are exposed to flood risk within the community?	Community FPA or GIS Analyst	58 structures (2013 Plan)
Describe any areas of flood risk with limited NFIP policy coverage	Community FPA or FEMA Insurance Specialist	While there are 58 structures in the 1% annual chance flood area, there are only 13 policies issues to property owners in this area (2013 Plan)
5. Community Rating System (CRS)		
Does the community participate in CRS?	Community FPA, State, or FEMA NFIP	Not participating
If so, what is the community's CRS Class Ranking?	Flood Insurance Manual (http://www.fema.gov/floodinsurancemanual.gov)	N/A
What categories and activities provide CRS points and how can the Class be improved?		N/A
Does the plan include CRS planning requirements?	Community FPA, FEMA CRS Coordinator, or ISO representative	N/A

Community Assets

Community assets are defined to include anything that is important to the character as well as the function of a community, and can be described in four categories, they are; people, economy, natural environment and built environment. Please identify the community assets and location under each category.

1. **People**
   - ✦ Concentrations of vulnerable populations such as the elderly, physically or mentally disabled, non-English speaking, and the medically or chemically dependent.

Slate Belt Nursing & Rehabilitation, Bangor
Lehigh Valley Health Network – Health Center at Bangor, Pen Argyl
Episcopal Apartments of Slate Belt, Bangor
Slate Belt Senior Center, Bangor

   - ✦ Types of visiting populations where large numbers of people are concentrated such as visitors for special events and students.

Washington Elementary School, Bangor

2. **Economy**
   - ✦ Major employers, primary economic sectors such as agriculture and commercial centers where losses would have a severe impact on the community.

Numerous food stores, hardware stores and financial institutions at:

Capital Plaza	Bangor Plaza
Blue Valley Plaza	512 Plaza

Community Assets – *continued*

3. Natural Environment

- Those areas / features that can provide protective functions that reduce the magnitude of hazard events such as, wetlands or riparian areas, and other environmental features important to protect.

Freshwater Forested / Shrub Wetlands:

Approximately 20.87 acres (PF01A) at Locke Heights area

Approximately 17.35 acres (PF01A / SS1A) at Richmond area

4. Built Environment

- Existing structures such as, concentrations of buildings that may be more vulnerable to hazards based on location, age, construction type and / or condition of use.

None

- Infrastructure systems such as water and wastewater facilities, power utilities, transportation systems, communication systems, energy pipelines and storage.

Nestle Waters spring water source, Bangor	Cellular Towers – AT&T, Bangor & Verizon, Bangor

- High potential loss facilities such as, dams, locations that house hazardous materials, military and / or civilian defense installations.

Tolino's Fuel, Bangor	BioSpectra, Bangor

- Critical facilities such as, hospitals, medical facilities, police and fires stations, emergency operations centers, shelters, schools and airports / heliports.

Bangor Health Center, Pen Argyl	Slate Belt Nursing, Bangor
Washing Township Fire Company, Bangor	Washington Elementary School, Bangor
Washington Township Police / Administration, Bangor	

- Cultural / historical resources such as, museums, parks, stadiums, etc.

None

Capability Assessment

Capability	✓ Regulatory ✓ Tools ✓ Programs	Status: In Place	Status: Date Adopted or Updated	Status: Under Development	Department / Agency Responsible	Effect on Hazard Loss Reduction: -Supports -Neutral -Hinders	Change since 2018 Plan? + Positive - Negative	Has the 2018 Plan been integrated into the Regulatory Tool/Program ? If so, how?	How can these capabilities be expanded and improved to reduce risk?	Additional Comments
1. Planning & Regulatory	Comprehensive Plan									
	Capital Improvement Plan									
	Economic Development Plan									
	Continuity of Operations Plan									
	Stormwater Management Plan / Ordinance	X	9/2009			Township Engineer		N/A		
	Open Space Management Plan (or Parks/Rec., Greenways Plan)	X	9/2009					N/A		
	Natural Resource Protection Plan									
	Transportation Plan									
	Historic Preservation Plan									
	Floodplain Management Plan	X	10/2011		Zoning			N/A		
	Farmland Preservation									Through Northampton County
	Evacuation Plan									
	Disaster Recovery Plan									
	Hazard Mitigation Plan	X	2018					N/A		
	Emergency Operations Plan	X	6/2018		County EMA			N/A		
	Zoning Regulations	X	10/2011		Zoning			N/A		
	Floodplain Regulations	X	10/2011		Zoning			N/A		
	NFIP Participation	X	2001		Zoning			N/A		
	Building Code									Statewide building code, 3rd party
	Fire Code									
	Other									

Capability Assessment – *continued*

Capability	✓ Staff ✓ Personnel ✓ Resources	Yes	No	Department / Agency	Change since 2018 Plan? + Positive - Negative	How can these capabilities be expanded and improved to reduce risk?	Additional Comments
2. Administrative & Technology	Planners (with land use / land development knowledge)	X		3rd party	N/A		
	Planners or engineers (with natural and / or human caused hazards knowledge)	X		3rd party	N/A		
	Engineers or professionals trained in building and / or infrastructure construction practices (including building inspectors)	X		3rd party	N/A		Township Engineer does not perform building inspections
	Emergency Manager	X		Board of Supervisors	N/A		
	Floodplain administrator / manager	X		3rd party	N/A		
	Land surveyors	X		Board of Supervisors	N/A		Township Engineer
	Staff familiar with the hazards of the community	X			N/A		
	Personnel skilled in Geographical Information Systems (GIS) and / or FEMA's HAZUS program	X			N/A		
	Grant writers or fiscal staff to handle large / complex grants						
	Other						

Capability Assessment – *continued*

Capability		Yes	No	Department / Agency	Change since 2018 Plan? + Positive - Negative	How can these capabilities be expanded and improved to reduce risk?	Additional Comments
3. Financial Resources	Capital improvement programming						
	Community Development Block Grants (CDBG)						Township does not qualify.
	Special purposes taxes						
	Gas / Electricity utility fees						
	Water / Sewer fees						
	Stormwater utility fees						
	Development impact fees						
	General obligation, revenue, and / or special tax bonds						
	Partnering arrangements or intergovernmental agreements						
	Other						

Capability	✓ Program ✓ Organization	Yes	No	Department / Agency	Change since 2018 Plan? + Positive - Negative	How can these capabilities be expanded and improved to reduce risk?	Additional Comments
4. Education & Outreach	Firewise Communities Certification				N/A		
	StormReady Certification				N/A		
	Natural disaster or safety-related school programs				N/A		
	Ongoing public education or information programs such as, responsible water use, fire safety, household preparedness, and environmental education.				N/A		
	Public-private partnership initiatives addressing disaster related issues.				N/A		
	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.				N/A		
	Other						

Capability Assessment – *continued*

Capability		Degree of Capability			Change since the 2018 Hazard Mitigation Plan? If so, how?	Additional Comments
		Limited	Moderate	High		
5. Self – Assessment	Planning and Regulatory			X	No	
	Administrative and Technical		X		No	
	Financial	X			No	
	Education and Outreach	X			No	

Known or Anticipated Future Development / Redevelopment

Development / Property Name	Type of Development	Number of Structures	Location	Known Hazard Zone	Description / Status
N/A					

Natural & Non-Natural Event History

Type of Event and Date(s)	FEMA Disaster # (if applicable)	Local Damage(s) or Loss(es)
Pennsylvania COVID-19 Pandemic – 1/2020	DR-4506-PA	Emergency Protective measures to combat COVID-19 Pandemic.
Remnants of Hurricane Ida	DR-4618-PA	Assistance to eligible individuals and families affected by this disaster.

2018 Municipal Action Plan Status

	Existing Mitigation Action (from 2018 Hazard Mitigation Plan)	Status					Additional Comments
		No Progress / Unknown	In Progress	Continuous	Completed	Discontinued	
1	500 Bangor Junction Road Stormwater Upgrades - Install additional storm sewer piping under the abandoned railroad bed to allow downstream flow. This will eliminate the damming causing the flooding condition, which requires closing of the road. Will eliminate flooding the access to 500 Bangor Junction Road. (1 residential). Will reduce the need for Township Road crew to place road closure signs and reduce the need for the Township Police and Fire Department from doing traffic control at this site.	X					No progress
2	300 Block of American Bangor Road Stormwater Upgrades - Install additional or larger storm sewer piping to allow the storm water to flow to the south side of American Bangor Road without toping over the roadway. Clear vegetation and trees, excavate and clean the roadside swales on the north side of American Bangor Road to allow more volume of water to remain within the swale. This will eliminate the flooding condition, which requires closing of the road. Will reduce the need for Township Road crew to place road closure signs and reduce the need for the Township Police and Fire Department from doing traffic control at this site.	X					No progress
3	Storm sewers at Elm Avenue; 700 block Rutt Road; 2500 block of Ackermanville Road; and 200 block Oak Road – Install catch basins and storm sewer piping. This will eliminate the need for street clean up and street repair after flooding or sever rain. This will also eliminate the flooding condition specific to 726 Rutt Road.	X					No progress
4	300 Block of Flicksville Road Stormwater Upgrades - Install catch basins and storm sewer piping to discharge the low-lying area to the Martins Creek. This will eliminate the flooding condition, which requires closing of the road. Will eliminate the flooding of 302, 304 and 311 Flicksville Road (3 residential). Will reduce the need for Township Road crew to place road closure signs and reduce the need for the Township Police and Fire Department from doing traffic control at this site.	X					No progress
5	Riprap installation at 1st block of Brodt Road, and 1st block of Mack Road – These are problem areas with road shoulder wash outs during flooding or sever rain events. This would disperse the energy of the water and eliminate road repairs.	X					No progress

2018 Municipal Action Plan Status – *continued*

	Existing Mitigation Action (from 2018 Hazard Mitigation Plan)	Status					Additional Comments
		No Progress / Unknown	In Progress	Continuous	Completed	Discontinued	
6	600-700 block of Washington Blvd (Route 191) Mitigation - Fill the eroded area on the south side of Washington Blvd (Route 191) caused by the topping over of the Waltz Creek. This will eliminate the flooding condition, which requires closing of the road. Will keep the Waltz Creek within its banks & potentially prevent the flooding of 625, 630 & 636 Washington Blvd. (2 residential and 1 business). Will reduce the need for PennDOT to place road closure signs& reduce / eliminate the need for the Township Police & Fire Department from doing traffic control at this site. Provide for safe travel to the general public. PennDOT would need to obtain permission from the property owner to place fill on the site. The Township may assist by providing some fill. PennDOT would need to provide equipment & manpower for the final grading and stabilization of the fill.	X					No progress
7	Hahn Road Reconstruction & Stormwater Upgrades - Road reconstruction, replace existing storm sewer piping with larger pipes & install additional catch basins & storm sewer piping to handle the volume of storm water. This will eliminate the erosion & washouts. Will reduce the continuous restoration required by the Twp. Road crew after rain events.	X					No progress
8	800 Block of Rutt Road Stormwater Upgrades - Installation of larger storm sewer pipes to carry the volume of water, preventing the toping over of the upstream inlet during heavy rain events & washouts within Washington Township & the Borough of Bangor. This would reduce the potential of flooding of 35+ residential units & 3 businesses & eliminate extensive restoration by the Bangor Borough & Washington Twp. road crews. This will eliminate the flooding condition, which requires closing of the road. Will reduce the need for Bangor Borough & Washington Twp. Road crews to place road closure signs & reduce the need for the Bangor Borough & Washington Twp. Police & Fire Departments from doing traffic control at this site.	X					No progress
9	1100 block of Mt Pleasant Road Stream Channel Restoration - Will eliminate road flooding due to the stream flow diversion from previous storm events. Restoring all of the stream flow to the existing pipe under the roadway. This will eliminate the flooding condition, which requires closing of the road. Will reduce the need for Twp. Road crew to place road closure signs & clean-up & reduce the need for the Washington Twp. Police & Fire Departments from doing traffic control at this site.	X					No progress

2018 Municipal Action Plan Status – *continued*

	Existing Mitigation Action (from 2018 Hazard Mitigation Plan)	Status					Additional Comments
		No Progress / Unknown	In Progress	Continuous	Completed	Discontinued	
10	Retrofit structures located in hazard prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Phase 1: Identify appropriate candidates for retrofitting based on cost- effectiveness versus relocation. Phase 2: Where retrofitting is determined to be a viable option, work with property owners toward implementation of that action based on available funding from FEMA and local match availability.	X					No progress
11	Purchase, or relocate structures located in hazard- prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Phase 1: Identify appropriate candidates for relocation based on cost-effectiveness versus retrofitting. Phase 2: Where relocation is determined to be a viable option, work with property owners toward implementation of that action based on available funding from FEMA and local match availability.	X					No progress
12	Maintain compliance with and good standing in the NFIP including adoption and enforcement of floodplain management requirements (e.g. regulating all new and substantially improved construction in Special Hazard Flood Areas), floodplain identification and mapping, and flood insurance outreach to the community. Further, continue to meet and/or exceed the minimum NFIP standards and criteria through the following NFIP- related continued compliance actions identified as below.			X			
13	Conduct and facilitate community and public education and outreach for residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction: - Provide and maintain links to the HMP website, and regularly post notices on the County/municipal homepage(s) referencing the HMP webpages. - Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation. - Use email notification systems and newsletters to better educate the public on flood insurance, the availability of mitigation grant funding, and personal natural hazard risk reduction measures. - Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding.	X					

2018 Municipal Action Plan Status – *continued*

	Existing Mitigation Action (from 2018 Hazard Mitigation Plan)	Status					Additional Comments
		No Progress / Unknown	In Progress	Continuous	Completed	Discontinued	
14	Begin and/or continue the process to adopt higher regulatory standards to manage flood risk (i.e. increased freeboard, cumulative substantial damage/improvements).	X					No progress
15	Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed.	X					No progress
16	Have designated NFIP Floodplain Administrator (FPA) become a Certified Floodplain Manager through the ASFPM and/or pursue relevant continuing education training such as FEMA Benefit Cost Analysis.	X					No progress
17	Participate in the Community Rating System (CRS) to further manage flood risk and reduce flood insurance premiums for NFIP policyholders. This shall start with the submission to FEMA-DHS of a Letter of Intent to join CRS, followed by the completion and submission of an application to the program once the community's current compliance with the NFIP is established.	X					No progress
18	Obtain and archive elevation certificates for NFIP compliance.			X			
19	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0.			X			
20	Complete the ongoing updates of the Comprehensive Emergency Management Plans.			X			
21	Create/enhance/ maintain mutual aid agreements with neighboring communities for continuity of operations.			X			
22	Develop and maintain capabilities to process FEMA/PEMA paperwork after disasters; qualified damage assessment personnel – Improve post-disaster capabilities – damage assessment; FEMA/PEMA paperwork compilation, submissions, record keeping.	X					No progress
23	Work with regional agencies (i.e. County and PEMA) to help develop damage assessment capabilities at the local level through such things as training programs, certification of qualified individuals (e.g. code officials, floodplain managers, engineers).	X					No progress

Notes:

1. Actions not carried through to the 2023 Action Plan are so noted.
2. To maintain National Flood Insurance Program (NFIP) compliance, actions related to the NFIP were carried through to the 2023 Action Plan even if identified by the municipality as completed.

2024 Mitigation Action Plan

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
1	500 Bangor Junction Road Stormwater Upgrades - Install additional storm sewer piping under the abandoned railroad bed to allow downstream flow. This will eliminate the damming causing the flooding condition, which requires closing of the road. Will eliminate flooding the access to 500 Bangor Junction Road. (1 residential). Will reduce the need for Township Road crew to place road closure signs and reduce the need for the Township Police and Fire Department from doing traffic control at this site.	15	Structure & Infrastructure	Flood	Medium	Low	FEMA Mitigation Grant Funding; Township Budget	Township	Short-term (depending on funding)	Existing

2024 Mitigation Action Plan – *continued*

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
2	300 Block of American Bangor Road Stormwater Upgrades - Install additional or larger storm sewer piping to allow the storm water to flow to the south side of American Bangor Road without toping over the roadway. Clear vegetation and trees, excavate and clean the roadside swales on the north side of American Bangor Road to allow more volume of water to remain within the swale. This will eliminate the flooding condition, which requires closing of the road. Will reduce the need for Township Road crew to place road closure signs and reduce the need for the Township Police and Fire Department from doing traffic control at this site.	15	Structure & Infrastructure	Flood	Medium	Medium	FEMA Mitigation Grant Funding; Township Budget	Township	Short-term (depending on funding)	Existing
3	Storm sewers at Elm Avenue; 700 block Rutt Road; 2500 block of Ackermanville Road; and 200 block Oak Road – Install catch basins and storm sewer piping. This will eliminate the need for street clean up and street repair after flooding or sever rain. This will also eliminate the flooding condition specific to 726 Rutt Road.	15	Structure & Infrastructure	Flood	Medium	Medium	FEMA Mitigation Grant Funding; Township Budget	Township	Short-term (depending on funding)	Existing

2024 Mitigation Action Plan – *continued*

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
4	300 Block of Flicksville Road Stormwater Upgrades - Install catch basins and storm sewer piping to discharge the low-lying area to the Martins Creek. This will eliminate the flooding condition, which requires closing of the road. Will eliminate the flooding of 302, 304 and 311 Flicksville Road (3 residential). Will reduce the need for Township Road crew to place road closure signs and reduce the need for the Township Police and Fire Department from doing traffic control at this site.	15	Structure & Infrastructure	Flood	Medium	Medium	FEMA Mitigation Grant Funding; Township Budget	Township	Short-term (depending on funding)	Existing
5	Riprap installation at 1st block of Brodt Road, and 1st block of Mack Road – These are problem areas with road shoulder wash outs during flooding or sever rain events. This would disperse the energy of the water and eliminate road repairs.	15	Structure & Infrastructure	Flood	Medium	Medium	FEMA Mitigation Grant Funding; Township Budget	Township	Short-term (depending on funding)	Existing

2024 Mitigation Action Plan – *continued*

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
6	600-700 block of Washington Blvd (Route 191) Mitigation - Fill the eroded area on the south side of Washington Blvd (Route 191) caused by the topping over of the Waltz Creek. This will eliminate the flooding condition, which requires closing of the road. Will keep the Waltz Creek within its banks & potentially prevent the flooding of 625, 630 & 636 Washington Blvd. (2 residential and 1 business). Will reduce the need for PennDOT to place road closure signs& reduce / eliminate the need for the Township Police & Fire Department from doing traffic control at this site. Provide for safe travel to the general public. PennDOT would need to obtain permission from the property owner to place fill on the site. The Township may assist by providing some fill. PennDOT would need to provide equipment & manpower for the final grading and stabilization of the fill.	15	Structure & Infrastructure	Flood; Transportation Accident	Medium	Low	PennDOT	PennDOT, w/ support from Washington Township	Short-term (depending on funding)	Existing

2024 Mitigation Action Plan – *continued*

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
7	Hahn Road Reconstruction & Stormwater Upgrades - Road reconstruction, replace existing storm sewer piping with larger pipes & install additional catch basins & storm sewer piping to handle the volume of storm water. This will eliminate the erosion & washouts. Will reduce the continuous restoration required by the Twp. Road crew after rain events.	15	Structure & Infrastructure	Flood; Transportation Accident	Medium	Medium	FEMA Mitigation Grant Funding; Township Budget	Township	Long-term (depending on funding)	Existing

2024 Mitigation Action Plan – *continued*

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
8	800 Block of Rutt Road Stormwater Upgrades - Installation of larger storm sewer pipes to carry the volume of water, preventing the toping over of the upstream inlet during heavy rain events & washouts within Washington Township & the Borough of Bangor. This would reduce the potential of flooding of 35+ residential units & 3 businesses & eliminate extensive restoration by the Bangor Borough & Washington Twp. road crews. This will eliminate the flooding condition, which requires closing of the road. Will reduce the need for Bangor Borough & Washington Twp. Road crews to place road closure signs & reduce the need for the Bangor Borough & Washington Twp. Police & Fire Departments from doing traffic control at this site.	15	Structure & Infrastructure	Flood; Transportation Accident	Medium	High	FEMA Mitigation Grant Funding; Township Budget	Township	Short-term (depending on funding)	Existing

2024 Mitigation Action Plan – *continued*

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
9	1100 block of Mt Pleasant Road Stream Channel Restoration - Will eliminate road flooding due to the stream flow diversion from previous storm events. Restoring all of the stream flow to the existing pipe under the roadway. This will eliminate the flooding condition, which requires closing of the road. Will reduce the need for Twp. Road crew to place road closure signs & cleanup & reduce the need for the Washington Twp. Police & Fire Departments from doing traffic control at this site.	20	Natural Systems Protection	Flood; Transportation Accident	Medium	High	FEMA Mitigation Grant Funding; Township Budget	Township	Short-term (depending on funding)	Existing

2024 Mitigation Action Plan – *continued*

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
10	Retrofit structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Phase 1: Identify appropriate candidates for retrofitting based on cost-effectiveness versus relocation. Phase 2: Where retrofitting is determined to be a viable option, work with property owners toward implementation of that action based on available funding from FEMA and local match availability.	1	Structure & Infrastructure	Flood	High	High	FEMA Mitigation Grant Programs and local budget (or property owner) for cost share	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) w/ support from PEMA, FEMA	Long-term (depending on funding)	Existing
11	Purchase, or relocate structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Phase 1: Identify appropriate candidates for relocation based on cost-effectiveness versus retrofitting. Phase 2: Where relocation is determined to be a viable option, work with property owners toward implementation of that action based on available funding from FEMA and local match availability.	2	Structure & Infrastructure	Flood	High	High	FEMA Mitigation Grant Programs and local budget (or property owner) for cost share	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) w/ support from PEMA, FEMA pal	Long-term (depending on funding)	Existing

2024 Mitigation Action Plan – *continued*

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
12	Maintain compliance with and good standing in the NFIP including adoption & enforcement of floodplain management requirements (e.g. regulating all new & substantially improved construction in Special Hazard Flood Areas), floodplain identification & mapping, & flood insurance outreach to the community. Further, continue to meet and/or exceed the minimum NFIP standards and criteria through the following NFIP- related continued compliance actions identified below.	3	Local plans & Regulations	Flood	High	Low – Medium	Municipal Budget	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) w/ support from PEMA, ISO FEMA	Ongoing	New & Existing

2024 Mitigation Action Plan – *continued*

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and/or Existing Structures
13	Conduct and facilitate community and public education and outreach for residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction: - Provide and maintain links to the HMP website, and regularly post notices on the County/municipal homepage(s) referencing the HMP webpages. - Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation. - Use email notification systems and newsletters to better educate the public on flood insurance, the availability of mitigation grant funding, and personal natural hazard risk reduction measures. - Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding.	4	Education & Awareness	All Hazards	High	Low-Medium	Municipal Budget	Municipality w/ support from Planning Partners, PEMA, FEMA	Short-term	N/A

2024 Mitigation Action Plan – *continued*

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
14	Begin and/or continue the process to adopt higher regulatory standards to manage flood risk (i.e. increased freeboard, cumulative substantial damage / improvements) sinkhole risk (e.g. carbonate bedrock standards).	5	Local plans & Regulations	Flood	High	Low	Municipal Budget	Municipality (Mun. Engineer / NFIP Floodplain Adm.) w/ support from PEMA, FEMA	Short-term	New & Existing
15	Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed.	3	Local plans & Regulations	Flood	High	Low	Municipal Budget	NFIP Floodplain Administrator w/ support from PADEP, PEMA, FEMA	Short-term	N/A
16	Have designated NFIP Floodplain Administrator (FPA) become a Certified Floodplain Manager through the ASFPM and/or pursue relevant continuing education training such as FEMA Benefit-Cost Analysis.	6	Local plans & Regulations	Flood	Medium	Low	Municipal Budget	NFIP Floodplain Administrator	Short-term (depending on funding)	N/A
17	Participate in the Community Rating System (CRS) to further manage flood risk and reduce flood insurance premiums for NFIP policyholders. This shall start with the submission to FEMA-DHS of a Letter of Intent to join CRS, followed by the completion and submission of an application to the program once the community's current compliance with the NFIP is established.	7	Local plans & Regulations	Flood	High	Low	Municipal Budget	NFIP Floodplain Administrator w/ support from PADEP, PEMA, FEMA	Short-term	N/A

2024 Mitigation Action Plan – *continued*

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
18	Obtain and archive elevation certificates for NFIP compliance.	8	Local plans & Regulations	Flood	Low	Low	Municipal Budget	NFIP Floodplain Administrator	Ongoing	N/A
19	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0.	9	All Categories	All Hazards	High	Low – High (for 5-year update)	Municipal Budget, possibly FEMA Mitigation Grant Funding for 5-year update	Municipality (via mitigation planning point of contacts) w/ support from Planning Partners (through their Points of Contact), PEMA	Ongoing	New & Existing
20	Complete the ongoing updates of the Comprehensive Emergency Management Plans.	10	Local plans & Regulations	All Hazards	Medium	Low	Municipal Budget	Municipality w/ support from PEMA	Ongoing	New & Existing
21	Create/enhance/maintain mutual aid agreements with neighboring communities for continuity of operations.	11	All Categories	All Hazards	Medium	Low	Municipal Budget	Municipality w/ support from surrounding municipalities and County	Ongoing	New & Existing
22	Develop & maintain capabilities to process FEMA/PEMA paperwork after disasters; qualified damage assessment personnel – Improve post disaster capabilities – Damage assessment; FEMA/PEMA paperwork compilation, submissions, record keeping.	12	Structure & Infrastructure	All Hazards	Low	Medium	Municipal Budget	Municipality w/ support from County, PEMA, FEMA	Short-term	N/A

2024 Mitigation Action Plan – *continued*

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
23	Work with regional agencies (i.e. County and PEMA) to help develop damage assessment capabilities at the local level through such things as training programs, certification of qualified individuals (e.g. code officials, floodplain managers, engineers).	13	Structure & Infrastructure	All Hazards	Medium	Medium	Municipal Budget, FEMA HMA grant programs	Municipality w/ support from County, PEMA	Short-, long-term (depending on funding)	N/A

Notes:

Estimated Costs:

- Where actual project costs have been reasonable 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.

Potential Funding (FEMA HMA):

- **BRIC =** Building Resilient Infrastructure and Communities
- **FMA** = Flood Mitigation Assistance Grant Program
- **HMGP** = Hazard Mitigation Grant Program
- **HSGP** = Homeland Security Grant Program
- **EMPG** = Emergency Management Performance Grant

Implementation Schedule:

- **Short Term** = 1 to 5 years
- **Long Term** = 5 years or greater
- **DOF** = Depending on Funding

Applies to New and/or Existing Structures:

- **N/A** = Not Applicable