

# **Northampton Borough, Northampton County Annex**

## **Hazard Mitigation Plan Points-of-Contact**

### **Primary:**

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### **Alternate:**

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Chief of Police  
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## **Municipal Profile**

Northampton Borough is located in the western part of Northampton County. It encompasses an area of approximately 2.7 square miles and has a population of 10,395 (2020 Census). The borough is bordered by Allen Township to the north and east; North Catasauqua Borough to the south; and Whitehall Township (Lehigh County) and Coplay Borough (Lehigh County) to the west.

The Lehigh River forms the borough's western border with Lehigh County. The Hokendauqua Creek forms part of the borough's eastern border with Allen Township before turning south through the borough and emptying into the Lehigh River. There are also a few small bodies of standing water in the northern part of the borough.

Kreidersville Road travels south from Allen Township into the borough, where it forms Main Street, which travels north south through the entire borough. Cherryville Road also enters the borough through the northern border with Allen Township, and merges into Main Street. PA Route 329 (21st Street) is the main east-west roadway, though 10th Street and 4th Street to the south are also major east-west routes.

## 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.

LeRoy E. Brobst, Borough Manager Role: Floodplain Administrator	Bryan Kadingo, Chief of Police Role: Emergency Service
Kenneth Hall, Emergency Management Director Role: Emergency Service	Keith Knoblach, Fire Chief Role: Emergency Service
Greg Morey, Public Works Supervisor Role: Emergency Service	

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.

Volunteer Fire Department and Fire Police – continuing training sessions.

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.

Current: Information is available on our website – [www.northamptonboro.com](http://www.northamptonboro.com) – and contact information is updated and available.

Past: Same

## Compliance with the National Flood Insurance Program (NFIP)

Topic	Identify source of information if different from the one listed.	Additional Comments
<b>1. Staff Resources</b>		
Is the Community Floodplain Administrator (FPA) or NFIP Coordinator certified?	Community FPA	Yes
Is floodplain management an auxiliary function?	Community FPA	Auxiliary
Provide an explanation of NFIP administration services (e.g., permit review, GGIS, education or outreach, inspections, engineering capability)	Community FPA	All permits issued in a floodplain are subject to the floodplain ordinance.
What are the barriers to running an effective NFIP program in the community, if any?	Community FPA	None
<b>2. Compliance History</b>		
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?		No
<b>3. Regulation</b>		
When did the community enter the NFIP?	NFIP Community Status Book	4/5/1974
Are the Flood Insurance Rate Maps (FIRMs) digital or paper? How are residents assisted with mapping?	Community FPA	Paper / Internet – assistance administered personally
Do floodplain regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	Community FPA	Meets FEMA needs
Describe the permitting process	Community FPA, State, FEMA NFIP	The Floodplain Administrator reviews any permit applications in the floodplain.
<b>4. Insurance Summary</b>		
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 – 50 policies & \$62,638 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 – 26 claims & \$257,425.50 paid to claims
How many structures are exposed to flood risk within the community?	Community FPA or GIS Analyst	Unknown
Describe any areas of flood risk with limited NFIP policy coverage	Community FPA or FEMA Insurance Specialist	Unknown

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

5. Community Rating System (CRS)		
Does the community participate in CRS?	Community FPA, State, or FEMA NFIP	No
If so, what is the community's CRS Class Ranking?	Flood Insurance Manual ( <a href="http://www.fema.gov/floodinsurancemanual.gov">http://www.fema.gov/floodinsurancemanual.gov</a> )	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.

Five locations on:

East 21 <sup>st</sup> Street	Lincoln Avenue
Newport Avenue	Main Street
Washington Avenue	

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

Northampton Area School District	Northampton Area Middle School
Franklin & Siegfried Elementary Schools	Northampton Memorial Community Center

### 2. Economy

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

Any school located within the Borough	Cherry Square Shopping Center
Nazareth Pallet	

### 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.

None

**Community Assets – continued**

**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.

Former uptown shopping district

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

All have been adequately maintained.

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

None

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

Police Station / Emergency Operations	Fire Station
Schools within the Borough	

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

Atlas, 4<sup>th</sup> Street, Municipal, Uptown & Canal Street Parks

Northampton Area School District – Al Erdosy Stadium

**Capability Assessment**

Capability	✓ Regulatory ✓ Tools ✓ Programs	Status			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
		In Place	Date Adopted or Updated	Under Development						
1. Planning & Regulatory	Comprehensive Plan	X	9/2005	X	Planning Commission	S	+			
	Capital Improvement Plan									
	Economic Development Plan									
	Continuity of Operations Plan									
	Stormwater Management Plan / Ordinance	X	5/2007	X	Boro Manager	S	+			Currently under development
	Open Space Management Plan (or Parks/Rec., Greenways Plan)			X	Planning Commission	S				
	Natural Resource Protection Plan									
	Transportation Plan									
	Historic Preservation Plan									
	Floodplain Management Plan	X	6/2014		Floodplain Administrator	S	+			Ordinance #1193
	Farmland Preservation									
	Evacuation Plan	X	7/2011		EM	S				
	Disaster Recovery Plan	X	7/2001		EM	S				
	Hazard Mitigation Plan	X	2/2019						N/A	
	Emergency Operations Plan	X	7/2011		EM	S				
	Zoning Regulations	X	12/1999		Zoning Officer	S				
	Floodplain Regulations									
	NFIP Participation	X	5/2001		Floodplain Administrator	S	+			
Building Code	X	6/2004		Building Inspector	S	+			Uniform Construction Code	
Fire Code	X	6/1993		Fire Chief	S					
Other										

**Capability Assessment – continued**

Capability	✓ <b>Staff</b> ✓ <b>Personnel</b> ✓ <b>Resources</b>	Yes	No	Department / Agency	Change since 2018 Plan? + Positive - Negative	How can these capabilities be expanded and improved to reduce risk?	Additional Comments
<b>2. Administrative &amp; Technology</b>	Planners (with land use / land development knowledge)	X					
	Planners or engineers (with natural and / or human caused hazards knowledge)						
	Engineers or professionals trained in building and / or infrastructure construction practices (including building inspectors)	X		Zoning			
	Emergency Manager	X		Emergency Manager			
	Floodplain administrator / manager	X		Borough Manager			
	Land surveyors						
	Staff familiar with the hazards of the community	X		Public Works / Police			
	Personnel skilled in Geographical Information Systems (GIS) and / or FEMA's HAZUS program						
	Grant writers or fiscal staff to handle large / complex grants	X		Community Planner			
	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
<b>3. Financial Resources</b>	Capital improvement programming						
	Community Development Block Grants (CDBG)						
	Special purposes taxes						
	Gas / Electricity utility fees						
	Water / Sewer fees						
	Stormwater utility fees						
	Development impact fees						
	General obligation, revenue, and / or special tax bonds	X		Zoning			
	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
<b>4. Education &amp; Outreach</b>	Firewise Communities Certification						
	StormReady Certification						
	Natural disaster or safety-related school programs						
	Ongoing public education or information programs such as, responsible water use, fire safety, household preparedness, and environmental education.	X		Fire Department			Fire Prevention
	Public-private partnership initiatives addressing disaster related issues.						
	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	X		Fire Department			
	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		
	Administrative and Technical		X			
	Financial			X		
	Education and Outreach		X			

**Known or Anticipated Future Development / Redevelopment**

Development / Property Name	Type of Development	Number of Structures	Location	Known Hazard Zone	Description / Status
Willow Brook Farms	Residential	11	East of Howertown Road @ Fuller Drive	No	
School House Apartments	Residential	12	1503 Main Street	No	
Windward Pass Apartments	Residential	12	1796 Main Street	No	

**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	Streambank Stabilization – Lerchenmiller Drive to Main Street –Construct stream bank stabilization improvements.		X				Will be part of MS4 program
2	Work with Northampton County EMS to install backup power at the Borough of Northampton Sewage Pump. This project is part of the Northampton Countywide Generator Project, funded through 2008 LPDM.	X					
3	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			2009 International Property Maintenance Code
4	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					
5	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 Initiatives below.			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	
6	Conduct and facilitate community and public education for residents and businesses to include, but not be limited to, the following to promote and effect 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			Website – MS4 data
7	Begin and/or continue the process to adopt higher regulatory standards to manage flood risk (i.e. increased freeboard, cumulative substantial damage/improvements) and sinkhole risk (e.g. carbonate bedrock standards).			X			2018 – New apartment inspection ordinance
8	Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed.	X					
9	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				
10	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					
11	Obtain and archive elevation certificates for NFIP compliance.			X			
12	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0.			X			
13	Complete the ongoing updates of the Comprehensive Emergency Management Plans.			X			
14	Create/enhance/maintain mutual aid agreements with neighboring communities for continuity of operations.			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	
15	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			
16	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			
17	Re-lining manholes in floodplain.			X			

**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.

## 2023 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	Streambank Stabilization – Lerchenmiller Drive to Main Street –Construct stream bank stabilization improvements.	20	Natural Systems Preservation	Flood	Medium	Medium - High	FEMA Mitigation Grant Programs & local budget for cost share	Municipal Public Works	Short-term (depending on funding)	N/A
2	Work with Northampton County EMS to install backup power at the Borough of Northampton Sewage Pump. This project is part of the Northampton Countywide Generator Project, funded through 2008 LPDM.	17	Structure & Infrastructure	All Hazards	High	Low – Medium (local share of LPDM grant)	2008 LPDM grant; local budget for match	Municipal public works, working w/ Northampton County EMS	Short-term	Existing
3	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

**2023 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
<p><b>4</b> 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.</p>	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
<p><b>5</b> Maintain compliance with and good standing in the NFIP including adoption &amp; enforcement of floodplain management requirements (e.g. regulating all new &amp; substantially improved construction in Special Hazard Flood Areas), floodplain identification &amp; mapping, &amp; 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.</p>	3	Local plans & Regulations	Flood	High	High	Municipal Budget	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) w/ support from PEMA, ISO FEMA	Ongoing	New & Existing

**2023 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
<p><b>6</b> 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:</p> <ul style="list-style-type: none"> <li>- Provide and maintain links to the HMP website, and regularly post notices on the County/municipal homepage(s) referencing the HMP webpages.</li> <li>- 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.</li> <li>- 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.</li> <li>- Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding.</li> </ul>	4	Education & Awareness	All Hazards	High	Low-Medium	Municipal Budget	Municipality w/ support from Planning Partners, PEMA, FEMA	Short-term	N/A



**2023 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	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; Subsidence / Sinkholes	High	Low	Municipal Budget	Municipality (Mun. Engineer / NFIP Floodplain Adm.) w/ support from PEMA, FEMA	Short-term	New & Existing
8	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
9	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
10	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

**2023 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
11	Obtain and archive elevation certificates for NFIP compliance.	8	Local plans & Regulations	Flood	Low	Low	Municipal Budget	NFIP Floodplain Administrator	Ongoing	N/A
12	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
13	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
14	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
15	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

## 2023 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
16 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
17 Re-lining manholes in floodplain.	22	Structure & Infrastructure	Flood	High	\$176,000	State grant, Borough funds	Administration, Public Works	Completion by December 31, 2018	N/A
18 Conduct physical remediation or improvement at the West Side Detention Dam to improve its condition rating from “Fair” to “Satisfactory”	24	Structure & Infrastructure	Dam Failure	High	High	Municipal Budget, FEMA HMA or HHPD grants	Municipality	Ongoing	Existing

### 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