Hanover Township, Northampton County Annex

Hazard Mitigation Plan Points-of-Contact

Primary:

Martin Limpar Public Works Director 3630 Jacksonville Rd., Bethlehem, PA 18017-9302 610-866-1140 mlimpar@hanovertwp-nc.org

Alternate:

John J. Finnigan, Jr. Emergency Management Coordinator 3630 Jacksonville Rd., Bethlehem, PA 18017-9302 610-360-9995 15EM1Hanover@gmail.com

Municipal Profile

Hanover Township is a suburban township located in the west-central part of Northampton County, on the border with Lehigh County. It encompasses an area of approximately 6.7 square miles and has a population of 11,783 (2020 Census). The township is bordered by East Allen Township to the north; Lower Nazareth Township to the northeast; Bethlehem Township to the east; Bethlehem City (Northampton County) to the southeast, Bethlehem City (Lehigh County) to the southwest, and Hanover Township (Lehigh County) to the west.

With the exception of a cutout for the Bethlehem Golf Course, the Monocacy Creek forms the township's southern border with Bethlehem Township and Bethlehem City and serves as the major drainage waterway of the township. The Catasauqua Creek also drains a small portion of the township.

US Route 22 is the most significant east-west roadway in the township, passing through the middle of the township. PA Route 512 is the major north-south highway, extending from its interchange with US Route 22 in the eastern part of the township north into East Allen Township, Bath Borough and eventually connecting with PA Route 33 in Wind Gap. Jacksonville Road is another major north-south roadway, passing from the northern border with East Allen Township south, then southwest, into Bethlehem City (Lehigh County). Airport Road (S.R. 0963) is on the western border of the Township from its border with Hanover – Lehigh County extending north into East Allen 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.

Martin Limpar, Public Works Director	John J. Finnigan Jr., EMC
Role: Public Works	Role: Administration
Hanover Engineering, Municipal Engineer	Tracy Lussier, Zoning Officer
Role: Administration & Support	Role: Zoning & Permitting

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.

Hanover Township is part of the Colonial Regional Police Department, who in conjunctions with the Hanover Township Volunteer Fire Co #1 and its Ambulance Corp provide the primary emergency management services. Businesses are primarily informed / notified during the planning and permitting phases of their building and occupancy.

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: The Township maintains a website, including email notifications, issues three (winter, spring-summer & fall) newsletters and has incorporated digital signs for public awareness and information.

Past: Same

Compliance with the National Flood Insurance Program (NFIP)

Торіс	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	Yes
Provide an explanation of NFIP administration services (e.g., permit review, GGIS, education or outreach, inspections, engineering capability)	Community FPA	Primarily handled by the Zoning Office and Municipal Engineer during the planning and permitting.
What are the barriers to running an effective NFIP program in the community, if any?	Community FPA	Public awareness and municipal resources.
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)?		N/A
Is a CAV or CAC scheduled or needed?		No
3. Regulation		
When did the community enter the NFIP?	NFIP Community Status Book	11/23/1973
Are the Flood Insurance Rate Maps (FIRMs) digital or paper? How are residents assisted with mapping?	Community FPA	Both digital and hard copy
Do floodplain regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	Community FPA	The local flood plain ordinance was adopted after the most recent update.
Describe the permitting process	Community FPA, State, FEMA NFIP	Zoning Officer & outside agencies review and permits.

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 – 13 policies & \$5,837 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 – 4 claims & \$33,793.53 paid to claims
How many structures are exposed to flood risk within the community?	Community FPA or GIS Analyst	+/- 18
Describe any areas of flood risk with limited NFIP policy coverage	Community FPA or FEMA Insurance Specialist	31 parcels in 1% annual flood
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 (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.

The Township is a typical suburban location with various high-density residential facilities including age restricted, dispersed throughout the Township.

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

In addition to various churches, schools, and the Hanover Township Community Center, the easterly, and portions of the westerly sections of the Township consist of business parks, which experience an influx of people during typical business hours.

Community Assets – continued

2. Economy

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

The easterly and portions of the westerly sections of the Township consist of business partners where losses would impact the community.

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.

In addition to Federal Flood Plain Mapping, the Township Zoning Ordinance creates the Monocacy Creek Protection District and a special Conservation District overlay to provide additional regulations for development along sensitive natural features, including streams, wetlands, steep slopes, rock outcroppings, etc. which are protected in other districts as well.

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.

Approximately 0.3% of the municipality's general building stock is located within the 1% Annual Flood Area.

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

Westgate water systems maintains two facilities within 1% and 0.2% Annual Flood Areas.

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

None known

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

Critical facilities are distributed throughout the Township.

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

While the Township maintains several parks, the primary park with greatest usage is located adjacent to the Community Center, Municipal Pool, and Municipal Building, centrally located in the Township with primary access from Jacksonville Road

Capability Assessment

			Status			Effect on Hazard Loss	Change	Has the 2018	How can	
Capability	 ✓ Regulatory ✓ Tools ✓ Programs 	In Place	Date Adopted or Updated	Under Development	Department / Agency Responsible	Reduction: - <u>S</u> upports - <u>N</u> eutral - <u>H</u> inders	since 2018 Plan? + Positive - Negative	Plan been integrated into the Regulatory Tool/Program ? If so, how?	these capabilities be expanded and improved to reduce risk?	Additional Comments
	Comprehensive Plan	Χ	2023		LVPC	S	+			
	Capital Improvement Plan	X	2013		Internal and Hanover Engineering	S				BEING UPDATED
	Economic Development Plan									
	Continuity of Operations Plan									
	Stormwater Management Plan / Ordinance	X	2022		Hanover Engineering	S	+			Participating in LVPC Update
~	Open Space Management Plan (or Parks/Rec., Greenways Plan)	Х	2006		Internal and Hanover Engineering	S				
Regulatory	Natural Resource Protection Plan	Х	2010		Internal and Hanover Engineering	S				Part of Zoning and SALDO
Planning & Re	Transportation Plan	Х	2013		Internal and Hanover Engineering	S				Act 209 Transportation Impact Fees
inc	Historic Preservation Plan									
olai	Floodplain Management Plan	Х	2014		Internal	S				Zoning Officer
	Farmland Preservation									
	Evacuation Plan									
	Disaster Recovery Plan									
	Hazard Mitigation Plan	Х	2018		Internal	S		N/A		Updating
	Emergency Operations Plan	Х	1/2024		Internal	S	+			
	Zoning Regulations	X	2023		Internal and Hanover Engineering	S	+			Always Updating
	Floodplain Regulations	X	2014		Internal and Hanover Engineering	S				

Capability	✓ Regulatory✓ Tools✓ Programs	In Place	Status Date Adopted or Updated	Under Development	Department / Agency Responsible	Effect on Hazard Loss Reduction: - <u>S</u> upports - <u>N</u> eutral - <u>H</u> inders	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
	NFIP Participation									
ng & ory	Building Code	Х	2012		Internal and External	S				BCO and Third Party
1. Planning 8 Regulatory	Fire Code	Х	2012		Internal and External	S				BCO, VFC & Third Party
1. P Re	Other	X	2010		Internal and Hanover Engineering	S				SALDO – Always Updating

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
	Planners (with land use / land development knowledge)	х		Internal and Hanover Engineering			
	Planners or engineers (with natural and / or human caused hazards knowledge)	Х		Hanover Engineering			
ology	Engineers or professionals trained in building and / or infrastructure construction practices (including building inspectors)	Х		Hanover Engineering			
& Technology	Emergency Manager	x		Internal			Emergency Management Coordinator and 1 Deputy
ive	Floodplain administrator / manager	Х		Internal			Zoning Officer
listrat	Land surveyors Staff familiar with the hazards of the community Personnel skilled in Geographical Information Systems (GIS) and / or FEMA's HAZUS program			Hanover Engineering			
. Administrative				Internal and Hanover Engineering			
6				Hanover Engineering			
	Grant writers or fiscal staff to handle large / complex grants	х		Internal			Township Manager and Treasurer
	Other						

Capability		Yes	No	Department / Agency	Change since 2018 Plan? + Positive - Negative	How can these capabilities be expanded and improved to reduce risk?	Additional Comments
	Capital improvement programming	Х		Internal			Treasurer
9S	Community Development Block Grants (CDBG)	Х		Internal			Treasurer
l rce	Special purposes taxes	Х		Internal			Treasurer
Resources	Gas / Electricity utility fees	Х		Internal			Treasurer
	Water / Sewer fees	Х		Internal			Treasurer
cial	Stormwater utility fees						
Financial	Development impact fees	Х		Internal			Treasurer
Fin	General obligation, revenue, and / or special tax bonds	Х		Internal			Treasurer
Э	Partnering arrangements or intergovernmental agreements	Х		Internal			Treasurer
	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
	Firewise Communities Certification						
	StormReady Certification						
	Natural disaster or safety-related school programs						N/A Township has no control over BASD
Education & Outreach	Ongoing public education or information programs such as, responsible water use, fire safety, household preparedness, and environmental education.	х		Internal	Enhanced website capabilities & changeable message signs strategically placed in the Twp.		
Щ	Public-private partnership initiatives addressing disaster related issues.						
4	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	х		Internal			Volunteer Emergency Services and various committees and advisory boards
	Other						

Capability		Deg	ree of Capab	ility	Change since the 2018 Hazard Mitigation Plan?	Additional Comments
Capa		Limited	Moderate	High	If so, how?	Additional Comments
t	Planning and Regulatory		X		No	
f- ne	Administrative and Technical		X		No	
5. Sel ssessi	Financial	X			No	
Ä	Education and Outreach		Х		No	

Known or Anticipated Future Development / Redevelopment

Development / Property Name	Type of Development	Number of Structures	Location	Known Hazard Zone	Description / Status
Hanover Corp. Center II	Commercial	5 – 10	Northeasterly portion (Rt. 512 & Jaindl Blvd)	None	Ongoing Planning and Construction
Gulick Property	Commercial w/ Residential	20-300+	Southeasterly portion (Rt. 512 & Rt. 22)	Flood – Monocacy Creek	N/A
Lehigh Northampton Airport Authority +/- 325 acres	Commercial & Industrial	20 - 40	Airport Road Corridor	None	N/A

Natural & Non-Natural Event History Specific to Hanover Township

Type of Event and Date(s)	FEMA Disaster # (if applicable)	Local Damage(s) or Loss(es)
COVID-19 Pandemic – March, 2020	DR-4506-PA	Emergency Protective measures to combat COVID-19 Pandemic.
Remnants of Hurricane Ida – August, 2022	DR-4618-PA	Assistance to eligible individuals and families affected by this disaster.

2018 Municipal Action Plan Status

				Status			
	Existing Mitigation Action (from 2018 Hazard Mitigation Plan)	No Progress / Unknown	In Progress	Continuous	Completed	Discontinued	Additional Comments
1	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.			х			Long term DOF Retrofit structures in hazard prone areas (HPs)
2	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.			х			Long Term DOF Purchase or relocate structures in HPA
3	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 below.			x			Maintain compliance with NFIP
4	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.			Х			Community and Public Education

2018 Municipal Action Plan Status – *continued*

				Status			
	Existing Mitigation Action (from 2018 Hazard Mitigation Plan)	No Progress / Unknown	In Progress	Continuous	Completed	Discontinued	Additional Comments
5	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			Adopt higher regulatory standards
6	Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed.				Х		Determine CAV or CAC needed. Action carried through to the 2018 Action Plan.
7	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			Certification of Floodplain Administrator
8	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			Participate in CRS
9	Obtain and archive elevation certificates for NFIP compliance.			Х			Archive Elevation Certificate
10	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0.			Х			Support this plan
11	Complete the ongoing updates of the Comprehensive Emergency Management Plans.			Х			Update Comprehensive Emergency Management Plan
12	Create/enhance/maintain mutual aid agreements with neighboring communities for continuity of operations.			Х			Continue/create Mutual Aid Agreements
13	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	X			Develop Agreements for administration and support
14	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).			Х			Work with Regional Agencies
15	Coordinate with the County Emergency Management Agency and PA Department of Health, which is responsible for setting up points of distribution and providers for immunizations.			Х			

2018 Municipal Action Plan Status – continued

				Status			
	Existing Mitigation Action (from 2018 Hazard Mitigation Plan)	No Progress / Unknown	In Progress	Continuous	Completed	Discontinued	Additional Comments
16	Devise an employee vaccination and immunization plan to prevent an outbreak within the municipal employee ranks.			Х			
17	Devise a municipal continuity of operations plan to keep essential services running in the event that a significant portion of the workforce is affected.			Х			
18	Devise a public education and outreach plan regarding disease prevention.			Х			
19	Provide education and outreach to residents regarding how to prevent the spread of invasive species, including quarantine procedures.			Х			
20	Develop a neighborhood cleanup plan designed to remove discarded tires, trash and other items in which standing water can form.			Х			
21	Provide training and education for first responders to ensure effective emergency care.			Х			
22	Provide education and outreach, especially in K-12, regarding drug abuse prevention.			Х			

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	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, Windstorm/ Tornado, Winter Storm, Earthquake	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

	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	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	Long-term (depending on funding)	Existing

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
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 below.	3	Local plans & Regulations	Flood, Windstorm/ Tornado, Winter Storm	High	Low - Medium	Local Budget	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) w/ support from PEMA, ISO FEMA	Ongoing	New & Existing

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
 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 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 groups to disseminate information on flood insurance and the availability of mitigation groups to disseminate information on flood insurance and the availability of mitigation 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

	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
Ę	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).	5	Local plans & Regulations	Flood; Subsidence/ Sinkholes	High	Low	Municipal Budget	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) w/ support from PEMA, FEMA	Short-term	New & Existing
e	Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed.	3	Local plans & Regulations	Flood, Windstorm/ Tornado, Winter Storm	High	Low	Municipal Budget	NFIP Floodplain Administrator w/ support from PA DEP, PEMA, FEMA	Short-term (1 year)	N/A
7	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, Windstorm/ Tornado, Winter Storm	Medium	Low	Municipal Budget	NFIP Floodplain Administrator	Short-term (depending on funding)	N/A

	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	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, Windstorm/ Tornado, Winter Storm	High	Low	Municipal Budget	NFIP Floodplain Administrator with support from PADEP, PEMA, FEMA	Short-term (1 year)	N/A
9	Obtain and archive elevation certificates for NFIP compliance.	8	Local plans & Regulations	Flood, Windstorm/ Tornado, Winter Storm	Low	Low	Local Budget	NFIP Floodplain Administrator	Ongoing	N/A
10	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)	Local 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

	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'	Complete the ongoing updates of the Comprehensive Emergency Management Plans.	10	Local plans & Regulations	All Hazards	Medium	Low	Local Budget	Municipality w/ support from PEMA	Ongoing	New & Existing
1:	Create/enhance/maintain mutual aid agreements with neighboring communities for continuity of operations.	11	All Categories	All Hazards	Medium	Low	Local Budget	Municipality w/ support from Surrounding municipalities and County	Ongoing	New & Existing
1:	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.	12	Education & Awareness	All Hazards	Low	Medium	Local budget	Municipality w/ support from County, PEMA, FEMA	Short-term	N/A
1,	Work with regional agencies (i.e. County and PEMA) to help develop damage assessment capabilities at the local	13	Education & Awareness	All Hazards	Medium	Medium	Local budget, FEMA HMA grant programs	Municipality w/ support from County, PEMA	Short-, long- term (depending on funding)	N/A

	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
15	Coordinate with the County Emergency Management Agency and PA Department of Health, which is responsible for setting up points of distribution and providers for immunizations.	11	Local plans & Regulations	Pandemic and Infectious Disease	Medium	Low	Municipal Budget	Municipality, working with County EMA and PA Department of Health	Ongoing	N/A
16	Devise an employee vaccination and immunization plan to prevent an outbreak within the municipal employee ranks.	27	Local plans & Regulations	Pandemic and Infectious Disease	High	Low	Municipal Budget	Municipality	Short-term	N/A
17	Devise a municipal continuity of operations plan to keep essential services running in the event that a significant portion of the workforce is affected.	11	Local plans & Regulations	Pandemic and Infectious Disease	Medium	Low	Municipal Budget	Municipality	Short-term	N/A
18	Devise a public education and outreach plan regarding disease prevention.	27	Education & Awareness	Pandemic and Infectious Disease	High	Low	Municipal Budget	Municipality	Ongoing	N/A
19	Provide education and outreach to residents regarding how to prevent the spread of invasive species, including quarantine procedures.	27	Education & Awareness	Invasive Species	High	Low	Municipal Budget	Municipality	Ongoing	N/A

	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
20	Develop a neighborhood cleanup plan designed to remove discarded tires, trash and other items in which standing water can form.	27	Education & Awareness	Invasive Species	High	Low	Municipal Budget	Municipality	Short-term	N/A
21	Provide training and education for first responders to ensure effective emergency care.	27	Local plans & Regulations	Drug Overdose Crisis	High	Low	Municipal Budget	Municipality	Ongoing	N/A
22	Provide education and outreach, especially in K-12, regarding drug abuse prevention.	27	Education & Awareness	Drug Overdose Crisis	High	Low	Municipal Budget	Municipality/ BASD (School District)	Ongoing	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