

Upper Macungie Township, Lehigh County Annex

Hazard Mitigation Plan Points-of-Contact

Primary:

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Alternate:

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Municipal Profile

Upper Macungie Township is a mixed-use (residential, commercial, industrial) community located in Lehigh County, just west of Allentown. The township is bordered by; Maxatawny and Longswamp Townships (both in Berks County) to the west; Weisenberg and Lowhill Townships to the north; North Whitehall and South Whitehall Townships to the east; and Lower Macungie Township to the south. Based on the 2010 Census its population is 20,063 and covers 26.24 square miles.

The two watersheds that make up the township are the Little Lehigh and Jordan Creeks. The main tributaries are the Breinig Run, Hassen Creek, Iron Run, Little Cedar Creek and the Schaefer Run.

The townships main corridors running north-south are: Route 100, and Route 309. Running east-west are Interstate 78, Tilghman Street, Route 22 and Hamilton Boulevard.

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.

Daren Martocci, Director of Zoning / Planning
Role: Engineer / Planner

Duane A. Dellecker, Building Code Administrator
Role: Administrator

Scott Faust, Director of Public Works
Role: Public Works

Peter Christ, Emergency Management Coordinator
Role: Emergency Management

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.

Good Neighbor Coalition – This group of involved residents will be a valuable resource to assist with identifying problem areas in Upper Macungie Township. Information on this project will be reviewed and shared with a representative of this group.

Municipal Participation – continued

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 2013 Hazard Mitigation Plan.

Upper Macungie Township publishes a semi-annual newsletter to keep citizens and friends informed on township happenings. A portion of every issue of this newsletter is dedicated to supplying information on NPDES, MS4, MCM’s and a variety of other subjects related to runoff pollution, storm water management and clean water. The current and past issues of the newsletter are also available on our website at www.uppermac.org for residents 24/7.

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	FPA - L273: Floodplain Management Course Completed - Feb. 2017
Is floodplain management an auxiliary function?	Community FPA	Yes, FPA primary function to administer building code office.
Provide an explanation of NFIP administration services (e.g., permit review, GGIS, education or outreach, inspections, engineering capability)	Community FPA	All permits for construction related activities are reviewed for compliance.
What are the barriers to running an effective NFIP program in the community, if any?	Community FPA	The major barrier to running an effective NFIP program is public education. Many residents are not engaged until other activities adversely affect them.
2. Compliance History		
Is the community in good standing with the NFIP?	State NFIP Coordinator, FEMA NFIP Specialist, or community records	Unknown
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

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

Topic	Identify source of information, if different from the one listed.	Additional Comments
3. Regulation		
When did the community enter the NFIP?	NFIP Community Status Book	4/2/1979
Are the Flood Insurance Rate Maps (FIRMs) digital or paper? How are residents assisted with mapping?	Community FPA	FIRM's are digital. Residents are assisted through permit process.
Do floodplain regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	Community FPA	Floodplain regulations meet FEMA minimum requirements.
Describe the permitting process	Community FPA, State, FEMA NFIP	Elevations are shown on plans for all properties in developments being built. Zoning/building office reviews permits and plans for consistency with approved plans.
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	34 policies -
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	unknown
How many structures are exposed to flood risk within the community?	Community FPA or GIS Analyst	65 structures
Describe any areas of flood risk with limited NFIP policy coverage	Community FPA or FEMA Insurance Specialist	unknown
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?		There are 18 activities that assign credit points to reduce exposure to floods. Public Info, mapping / regulation, flood damage reduction & flood preparedness.
Does the plan include CRS planning requirements?	Community FPA, FEMA CRS Coordinator, or ISO representative	Action item #9 in 2013 plan

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.

Mosser Nursing Home – 60 residents (elderly)

Heather Glen Senior Living – 120 residents (elderly)

Country Meadows Nursing Home – 220 residents (elderly)

Above & Beyond Senior Living – 120 residents (elderly)

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

Valley Preferred Cycling Center – Outdoor recreational venue – seating for 450

Fireworks in the Park – Breinigsville 4th of July Celebration – Approx. 10,000 visitors

2. Economy

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

Upper Macungie Township is home to several large manufacturing employers, including Amazon, Air Products, Samuel Adams Brewery, Nestle Waters of North America and U-Line.

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.

Upper Macungie Township uses zoning, floodplain and other regulations to protect natural features that can reduce the magnitude of hazardous events; including: Conservation Design Development helps to protect woodlands, wetlands, riparian areas, floodplains, steep slopes, karst features, streams, natural ponds and springs.

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.

Upper Macungie Township has a comprehensive fire inspection program where over 830 non-residential building are inspected yearly. Due to this program, we can think of no specific hazards in this category.

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

The transportation system in the township is stressed. Two factors have had a major impact on this: increased population and large industrial / warehousing industry.

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

Approximately 70 facilities in the township report quantities of extremely hazardous substances through the Tier II (SARA Title III) inspection program. A complete list of facilities is maintained at the township office.

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

PA State Police	Township Police
Integrated Health Campus	LV Health Network
3 township fire stations – Fogelsville #8, Schantz Road #56 & Trexlertown #25	
Schools – Fogelsville Elementary, Fred J. Jaindl Elementary	

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

Grange Park	Lone Lane Park
Rodale Park	Route 100 Park
Valley Preferred Cycling Center	

Capability Assessment

Capability	✓ Regulatory ✓ Tools ✓ Programs	Status			Department / Agency Responsible	Effect on Hazard Loss Reduction: -Supports -Neutral -Hinders	Change since 2013 Plan? + Positive - Negative	Has the 2013 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	2019		Township	S	+	No		
	Capital Improvement Plan									
	Economic Development Plan									
	Continuity of Operations Plan	X	June 2020		Township	S	+	No		Part of Emergency Operations Plan
	Stormwater Management Plan / Ordinance	X	May 2020		Township	S	+	No		Ordinance
	Open Space Management Plan (or Parks/Rec., Greenways Plan)	X	2011		Township	S	+	No		
	Natural Resource Protection Plan									
	Transportation Plan									
	Historic Preservation Plan									
	Floodplain Management Plan	X	2/2002		Township	S	+	No		
	Farmland Preservation	X	2001, 2011		Township	S	+	No		
	Evacuation Plan	X	12/2011		Lehigh County	S	+	No		
	Disaster Recovery Plan									
	Hazard Mitigation Plan	X	7/2006		Lehigh County	S	+	No		
	Emergency Operations Plan	X	6/2020		Township	S	+	No		
	Zoning Regulations	X	2020		Township	S	+	No		
	Floodplain Regulations	X	2/2002		Township	S	+	No		
	NFIP Participation									
	Building Code	X	5/2004		Township	S	+	No		
Fire Code	X	6/2018		Township	S	+	No			
Other	X	6/2001		Township	S	+	No		SALDO Ordinance	

Capability Assessment – continued

Capability	✓ Staff ✓ Personnel ✓ Resources			Department / Agency	Change since 2013 Plan? + Positive - Negative	How can these capabilities be expanded and improved to reduce risk?	Additional Comments
		Yes	No				
2. Administrative & Technology	Planners (with land use / land development knowledge)	X		Community Development	No		
	Planners or engineers (with natural and / or human-caused hazards knowledge)	X		Keystone Consulting Engineers	No		
	Engineers or professionals trained in building and / or infrastructure construction practices (including building inspectors)	X		Keystone Consulting Engineers	No		
	Emergency Manager	X		Peter Christ	Yes		
	Floodplain administrator / manager	X		Duane A. Dellecker	Yes		
	Land surveyors	X		Keystone Consulting Engineers	No		
	Staff familiar with the hazards of the community	X		Fire Inspectors	No		
	Personnel skilled in Geographical Information Systems (GIS) and / or FEMA's HAZUS program	X		Keystone Consulting Engineers/ Township Staff	No		
	Grant writers or fiscal staff to handle large / complex grants	X		Keystone Consulting Engineers	No		
	Other						

Capability Assessment – continued

Capability		Yes	No	Department / Agency	Change since 2013 Plan? + Positive - Negative	How can these capabilities be expanded and improved to reduce risk?	Additional Comments
3. Financial Resources	Capital improvement programming		X				
	Community Development Block Grants (CDBG)		X				
	Special purposes taxes	X		Township	No		Local Services Tax
	Gas / Electricity utility fees		X				
	Water / Sewer fees	X		Township Sewer Authority			
	Stormwater utility fees		X				
	Development impact fees	X		Township			
	General obligation, revenue, and / or special tax bonds	X		Township			
	Partnering arrangements or intergovernmental agreements	X		PennDOT			Snow Plowing Agreement
Other							

Capability	✓ Program ✓ Organization	Yes	No	Department / Agency	Change since 2013 Plan? + Positive - Negative	How can these capabilities be expanded and improved to reduce risk?	Additional Comments
4. Education & Outreach	Firewise Communities Certification		X				
	StormReady Certification	X		Lehigh County	No		
	Natural disaster or safety-related school programs	X		Fire Department	No		
	Ongoing public education or information programs such as, responsible water use, fire safety, household preparedness, and environmental education.	X		Upper Macungie Township	No		Community Newsletter
	Public-private partnership initiatives addressing disaster related issues.			X			
	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.			X			
	Other						

Capability Assessment – continued

Capability		Degree of Capability			Change since the 2013 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
Blue Barn Estates	Residential	11	Blue Barn Road	None	0% Complete
Fallbrooke	Residential	75	Twin Ponds Road	Breinig Run	
Hidden Meadows	Residential	66	Werley Road	None	25% Complete
High Gate	Residential	353	Mosser Road	Schaeffer Run Tributary	80% Complete
Lehigh Hills	Residential	513	Nursery Street & Rte. 100	Hassen Creek	
Parkland Fields	Residential	205	Schantz Road & Abigail Lane	None	50% Complete
Park View Court	Residential	10	Mosser Road	None	0% Complete
Schaeffer Run Commons	Residential	168	Hamilton Boulevard & Schaeffer Run Road	Schaeffer Run & Spring Creek	In SALDO Process
Trexler Fields	Residential	358	Hamilton Boulevard & Schaeffer Run Road	Schaeffer Run	75% complete
Valley West Estates	Residential	47	Olde Road & Nestle Way	Iron Run	50% Complete
Weiler's Road Twins	Residential	82	Weiler's Road	Schaeffer Run	0% Complete
Woodmere	Residential	189	Ash Lane	None	0% Complete
Wotring North	Residential	22	Ash Lane & Schaeffer Run Road	None	0% Complete
Wotring II	Residential	15	Ash Lane & Schaeffer Run Road	None	0% Complete
Wrenfield	Residential	98	Rt. 100 & Glenlivet Drive	None	0% Complete

Natural & Non-Natural Event History Specific to Upper Macungie Township

Type of Event and Date(s)	FEMA Disaster # (if applicable)	Local Damage(s) or Loss(es)
Winter Storm Jonas – 1/2016	DR-4267-PA	Jonas snow storm removal and salting
Pennsylvania COVID-19 Pandemic – 1/2020	DR-4506-PA	Emergency Protective measures to combat COVID-19 Pandemic.

2013 Municipal Action Plan Status

Existing Mitigation Action (from 2013 Hazard Mitigation Plan)		Status					Additional Comments
		No Progress / Unknown	In Progress	Continuous	Completed	Discontinued	
1	Fogelsville Dam Remediation (see Section J – Additional Comments)			X			Dam partially breached by Township
2	Retrofit structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Specifically identified are the following: - Trexler Road Bridge 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		Reconstruction Completed. Action carried through to the 2018 Action Plan.
3	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			New development strategies have resolved many of these issues.
4	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			

2013 Municipal Action Plan Status – continued

Existing Mitigation Action (from 2013 Hazard Mitigation Plan)		Status					Additional Comments
		No Progress / Unknown	In Progress	Continuous	Completed	Discontinued	
5	<p>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"> - 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			
6	Begin the process to adopt higher regulatory standards to manage flood risk (i.e. increased freeboard, cumulative substantial damage/improvements).	X					
7	Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed.		X				
8	Have designated NFIP Floodplain Administrator (FPA) become a Certified Floodplain Manager through the ASFPM, and pursue relevant continuing education training such as FEMA Benefit-Cost Analysis.				X		Building Code Administrator completed FEMA training class in Wilkes-Barre - Feb. 2017. Action carried through to the 2018 Action Plan.
9	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					
10	Archive elevation certificates			X			
11	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0			X			
12	Complete the ongoing updates of the Comprehensive Emergency Management Plans			X			

2013 Municipal Action Plan Status – continued

Existing Mitigation Action (from 2013 Hazard Mitigation Plan)		Status					Additional Comments
		No Progress / Unknown	In Progress	Continuous	Completed	Discontinued	
13	Create/enhance/ maintain mutual aid agreements with neighboring communities for continuity of operations.			X			
14	Identify and develop agreements with entities that can provide support with FEMA/PEMA paperwork after disasters; qualified damage assessment personnel – Improve post-disaster capabilities – damage assessment; FEMA/PEMA paperwork compilation, submissions, record-keeping	X					
15	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			

Notes:

1. Actions not carried through to the 2018 Action Plan are so noted.
2. To maintain National Flood Insurance Program (NFIP) compliance, actions related to the NFIP were carried through to the 2018 Action Plan even if identified by the municipality as completed.

2018 Mitigation Action Plan

Mitigation Action		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	Fogelsville Dam Remediation (see Section J – Additional Comments)	Structural Project	Dam Failure; Flood	High	High	DEP, DCNR, PFBC, FEMA, Local Budget	DEP, Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from FEMA	Long-term (depending on funding)	Existing
2	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.	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) with support from PEMA, FEMA	Long-term (depending on funding)	Existing
3	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.	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) with support from PEMA, FEMA	Long-term (depending on funding)	Existing

2018 Mitigation Action Plan – continued

	Mitigation Action	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	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.	Local plans & Regulations	Flood	High	Low - Medium	Municipal Budget	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from PEMA, ISO FEMA	Ongoing	New & Existing

2018 Mitigation Action Plan – continued

Mitigation Action	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>5 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"> - 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. 	Education & Awareness	All Hazards	High	Low-Medium	Municipal Budget	Municipality with support from Planning Partners, PEMA, FEMA	Short-term	N/A
<p>6 Begin and/or continue the process to adopt higher regulatory standards to manage flood risk (i.e. increased freeboard, cumulative substantial damage/improvements).</p>	Local plans & Regulations	Flood	High	Low	Municipal Budget	Via Municipal Engineer/NFIP Floodplain Admin. with support from PEMA, FEMA	Short-term	New & Existing

2018 Mitigation Action Plan – continued

Mitigation Action		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	Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed.	Local plans & Regulations	Flood	Medium	Low	Municipal Budget	NFIP Floodplain Administrator with support from PA DEP, PEMA, FEMA	Short-term	N/A
8	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.	Local plans & Regulations	Flood	High	Low	Municipal Budget	NFIP Floodplain Administrator	Short-term (depending on funding)	N/A
9	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.	Local plans & Regulations	Flood	Medium	Low	Municipal Budget	NFIP Floodplain Administrator with support from PA DEP, PEMA, FEMA	Short-term	N/A
10	Obtain and archive elevation certificates for NFIP compliance.	Local plans & Regulations	Flood	High	Low	Municipal Budget	NFIP Floodplain Administrator	Ongoing	N/A
11	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0	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

2018 Mitigation Action Plan – continued

Mitigation Action		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	Complete the ongoing updates of the Comprehensive Emergency Management Plans	Local plans & Regulations	All Hazards	High	Low	Municipal Budget	Municipality with support from PEMA	Ongoing	New & Existing
13	Create/enhance/maintain mutual aid agreements with neighboring communities for continuity of operations.	All Categories	All Hazards	High	Low	Municipal Budget	Municipality with support from surrounding municipalities and County	Ongoing	New & Existing
14	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.	Education & Awareness	All Hazards	Medium	Medium	Municipal budget	Municipality with support from County, PEMA, FEMA	Short-term	N/A
15	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).	Education & Awareness	All Hazards	Medium	Medium	Municipal budget, FEMA HMA and HLS grant programs	Municipality with support from County, PEMA	Short-term (depending on funding)	N/A
16	Work with regional and state agencies (FEMA/PEMA/PA Dept. of Health) to help develop action plans (such as "Shelter in Place" & "Preventive Techniques") dealing with at-risk populations and exposure.	Education & Awareness	Pandemic and Infectious Disease	Medium	Low	FEMA, PEMA, PA Department of Health	FEMA/PEMA/PA Department of Health - coordinate with local emergency services	Short-term (depending on funding)	N/A

2018 Mitigation Action Plan – continued

	Mitigation Action	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
17	Work with regional agencies (Penn State Cooperative Extension, PA Depts. Of Agriculture & Forestry) to identify invasive species & help develop damage assessment and mitigation techniques.	Education & Awareness	Invasive Species	Medium	Medium	FEMA, PA Departments of Agriculture and Forestry	PEMA, PA Departments of Agriculture and Forestry, County and Municipal support	Short-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