

## Hanover Township, Lehigh County Annex

### Hazard Mitigation Plan Points-of-Contact

#### Primary:

Melissa Wehr  
Township Manager  
2202 Grove Rd  
610-264-1069  
mwehr@hanleco.org

#### Alternate:

Chris Spadaccia  
Emergency Management Coordinator  
2202 Grove Rd  
610-264-1069  
spadacciachris@gmail.com

### Municipal Profile

Hanover Township is a suburban township located in the east-central part of Lehigh County, on the border with Northampton County. It encompasses an area of approximately 4.2 square miles, and has a population of 1,571 (2010 Census). The township is bordered by; Hanover Township (Northampton County) to the east; Bethlehem to the southeast; Allentown to the south; Whitehall Township and Catasauqua Borough to the west; and Allen and East Allen Townships (both in Northampton County) to the north.

Hanover Township is drained primarily by the Lehigh River, which forms the township's southwestern border with Whitehall Township. Two smaller tributaries of the Lehigh River cut southwest across the northern part of the township and across the southern border of the township.

Highway 22 crosses the township east-west and interchanges with Airport Road, which extends northeast toward Bath Borough (Northampton County) as State Route 987 and south into Allentown. Other significant local roads include Catasauqua Road, Dauphin Street, Irving Street, Pennsylvania Avenue, Postal Road, Race Street, and Schoenersville Road. Race Street and Schoenersville Road meet State Route 987 in the village of Schoenersville in Northampton County. Hanover Township is also home to the Lehigh Valley International Airport.

### 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.

Joe Fragnito, Maintenance Supervisor  
Role: Public Works

Melissa Wehr, Township Manager  
Role: Administration

Chris Spadaccia, Emergency Management Coordinator  
Role: Emergency Management

**Municipal Participation – continued**

- 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.

B Braun Medical  
 Lehigh Valley International Airport  
 Lehigh Valley Health Network  
 St. Luke’s University Health Network

- 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.

Township newsletters (twice / year)  
 Township website  
 Facebook

**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	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	Township will provide these services.
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

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

Topic	Identify source of information, if different from the one listed.	Additional Comments
<b>3. Regulation</b>		
When did the community enter the NFIP?	NFIP Community Status Book	Uncertain
Are the Flood Insurance Rate Maps (FIRMs) digital or paper? How are residents assisted with mapping?	Community FPA	Paper
Do floodplain regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	Community FPA	Meet
Describe the permitting process	Community FPA, State, FEMA NFIP	Per floodplain ordinance
<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	Unknown
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	None
How many structures are exposed to flood risk within the community?	Community FPA or GIS Analyst	1
Describe any areas of flood risk with limited NFIP policy coverage	Community FPA or FEMA Insurance Specialist	N/A
<b>5. Community Rating System (CRS)</b>		
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.

N/A

## **Community Assets – *continued***

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

Hanover Township Community Night @ Canal Park  
Lehigh Valley International Airport

### **2. Economy**

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

Hanover Township has a number of large employers, especially in Lehigh Valley Industrial Park III. In addition, consideration should be given to the Lehigh Valley International Airport and two major shopping centers, Valley Plaza Shopping Center on Catasauqua Road in the Township and Airport Center located off Airport Road in Hanover Township. Examples of large employers in LVIP III include B Braun Medical, Lehigh Valley Health Network Labs, and St. Luke's Offices.

### **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.

Canal Park and Lehigh Canal along with Catasauqua Lake will flood initially, thus holding flooding from the highway structure.

### **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.

Industrial buildings situated in LVIP II on Race Street and LVIP III situated off Airport Road, as well as the Lehigh Valley International Airport.

## Community Assets – *continued*

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

The sewer pumps stations, which support the shopping centers, industrial parks and neighboring area, are critical to the Township. There is a natural gas transmission line running through a portion of the Township. The Norfolk Southern railway transverses through the western portion of the Township and a large fiber optic communication line is also in the Township. The Lehigh Valley International Airport's geographic land area covers more than half of the Township with all flight paths (runways) running over the municipality. Airport Road, Route 22, Schoenersville Road, and Race Street carry a massive amount of tractor-trailer and vehicular traffic daily.

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

### Navy Operational Support Center & Marine Reserves

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

### LVHN Emergi-Center

Lehigh Valley International Airport

Han-Le-Co Voluntary Fire Company No. 1 located on Postal Road

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

Canal Park located off Dauphin Drive in the Township, which is part of the National Heritage Corridor

### 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		1974 2003 update	X	Administration & Engineering	S	+	N/A	Ongoing consideration is pursued	Completion in Spring 2023
	Capital Improvement Plan	X	Yearly, since 1976		Administration & Engineering	S	+	N/A	Ongoing consideration is pursued	
	Economic Development Plan	N/A								
	Continuity of Operations Plan	X	2021		Emergency Management	S	+		Completed	2023 Update
	Stormwater Management Plan / Ordinance	X	2022		Engineering	S	+	N/A	N/A	
	Open Space Management Plan (or Parks/Rec., Greenways Plan)	N/A								
	Natural Resource Protection Plan	N/A								
	Transportation Plan	N/A								
	Historic Preservation Plan	N/A								
	Floodplain Management Plan	X	2021		Administration & Engineering	S	+	No comments	No comments	
	Farmland Preservation	N/A								
	Evacuation Plan	X	2021		Administration	S	+	N/A	N/A	2023 Update
Disaster Recovery Plan	N/A									

**Capability Assessment – continued**

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	Hazard Mitigation Plan	X	2013		Administration	S	+	N/A	N/A	
	Emergency Operations Plan	X	2021		Administration	S	+	N/A	N/A	2023 Update
	Zoning Regulations	X	2022		Administration	S	+	N/A	N/A	
	Floodplain Regulations	X	2017		Administration & Engineering	S	+	N/A	N/A	
	NFIP Participation	X	4/2012		Administration & Engineering	S	+	N/A	N/A	
	Building Code	X	2022		Administration	S	+	N/A	N/A	
	Fire Code	X	2009		Administration	S	+	N/A	N/A	
	Other									

**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		Township Engineer	No		
	Planners or engineers (with natural and / or human-caused hazards knowledge)	X		Township Engineer	No		
	Engineers or professionals trained in building and / or infrastructure construction practices (including building inspectors)	X		Township Engineer	No		
	Emergency Manager	X		Administration	No		
	Floodplain administrator / manager	X		Township Engineer	No		
	Land surveyors	X		Township Engineer			
	Staff familiar with the hazards of the community	X		All Staff (Administration, Engineering, Public Works)			
	Personnel skilled in Geographical Information Systems (GIS) and / or FEMA's HAZUS program	X		Public Works/ Engineering			
	Grant writers or fiscal staff to handle large / complex grants	X		Township Manager			
	Other						



**Capability Assessment – continued**

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

Capability	✓ Program ✓ Organization			Department / Agency	Change since 2013 Plan? + Positive - Negative	How can these capabilities be expanded and improved to reduce risk?	Additional Comments
		Yes	No				
<b>4. Education &amp; Outreach</b>	Firewise Communities Certification		X				
	StormReady Certification		X				
	Natural disaster or safety-related school programs		X				
	Ongoing public education or information programs such as, responsible water use, fire safety, household preparedness, and environmental education.	X		Emergency Management	No	No	
	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		N/A	

**Known or Anticipated Future Development / Redevelopment**

Development / Property Name	Type of Development	Number of Structures	Location	Known Hazard Zone	Description / Status
Rockefeller Group	465,000 Sq Ft Warehouse	1	Willowbrook Rd		Building

**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)
Winter Storm Jonas – 1/2016	DR-4267-PA	Exact amount not available at this time.
Pennsylvania COVID-19 Pandemic – 1/2020	DR-4506-PA	Emergency Protective measures to combat COVID-19 Pandemic.
Tropical Storm Isaias		Sinkhole in Chestnut Grove and flooding of roadways

### 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	Continue to monitor flood vulnerability of the limited number of structures located in the NFIP SFHA. If flood vulnerability appears to increase, work with property owners to mitigate their properties. Specifically include these property owners in public education and outreach efforts (see following initiative).	NONE		X			Monitor flood vulnerability
2	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 2-8 (below).			X			Maintain NFIP compliance
3	Conduct and facilitate community and public education and outreach for residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction: - Provide and maintain links to the HMP website, and regularly post notices on the County/municipal homepage(s) referencing the HMP webpages. - Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation. - Use email notification systems and newsletters to better educate the public on flood insurance, the availability of mitigation grant funding, and personal natural hazard risk reduction measures. - Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding.			X			Public education and outreach
4	Begin 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					Higher regulatory standards
5	Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed.	X					Community assistance visit

**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	
6	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		NFIP FPA become a certified floodplain manager. Action carried through to the 2018 Action Plan.
7	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					Join Community Rating System
8	Archive elevation certificates	X					Archive elevation certificates
9	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0			X			Support plan maintenance and update
10	Complete the on-going updates of the Comprehensive Emergency Management Plans			X			Update CEMP
11	Create/enhance/maintain mutual aid agreements with neighboring communities for continuity of operations.				X		Enhance mutual aid agreements. Action carried through to the 2018 Action Plan.
12	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		Identify post disaster capabilities. Action carried through to the 2018 Action Plan.
13	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			Develop post-disaster capabilities

**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	Continue to monitor flood vulnerability of the limited number of structures located in the NFIP SFHA. If flood vulnerability appears to increase, work with property owners to mitigate their properties. Specifically include these property owners in public education and outreach efforts (see following initiative).	Structure & Infrastructure	Flood	High	Low (monitoring flood vulnerability, Outreach). High – Mitigation of structures	Municipal Budget (monitoring, outreach); FEMA HMA grants for mitigation	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from PEMA, ISO FEMA	Ongoing	Existing
2	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 2-8 (below).	Local plans & Regulations	Flood	High	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><b>3</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: 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.</p>	Education & Awareness	All Hazards	High	Low-Medium	Municipal Budget	Municipality with support from Planning Partners, PEMA, FEMA	Short-term	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
<b>4</b>	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).	Education & Awareness	Flood; Subsidence/ Sinkholes	High	Low	Municipal Budget	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from PEMA, FEMA. LVPC for Carbonate Bedrock Standard model ordinance.	Short-term	New & Existing
<b>5</b>	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
<b>6</b>	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 upon 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
7	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 (depending upon funding)	N/A
8	Obtain and archive elevation certificates for NFIP compliance.	Public Education and Awareness	Flood	High	Low	Municipal Budget	NFIP Floodplain Administrator	Ongoing	N/A
9	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) with support from Planning Partners (through their Points of Contact), PEMA	Ongoing	New & Existing
10	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
11	Create/enhance/maintain mutual aid agreements with neighboring communities for continuity of operations.	All Categories	All Hazards	High	Low	Municipal Budget	Municipality w/ support from surrounding municipalities and County	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	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
13	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 grant programs	Municipality with support from County, PEMA	Short-term (depending upon funding)	N/A
14	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.	Local plans & Regulations	Pandemic and Infectious Disease	Medium	Low	Municipal Budget	Municipality, working with County EMA and PA Department of Health	Ongoing	N/A
15	Devise an employee vaccination and immunization plan to prevent an outbreak within the municipal employee ranks.	Local plans & Regulations	Pandemic and Infectious Disease	Medium	Low	Municipal Budget	Municipality	Short-term	N/A
16	Devise a municipal continuity of operations plan to keep essential services running in the event that a significant portion of the workforce is affected.	Local plans & Regulations	Pandemic and Infectious Disease	Medium	Low	Municipal Budget	Municipality	Short-term	N/A
17	Devise a public education and outreach plan regarding disease prevention.	Education & Awareness	Pandemic and Infectious Disease	Medium	Low	Municipal Budget	Municipality	Ongoing	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
18	Provide education and outreach to residents regarding how to prevent the spread of invasive species, including quarantine procedures.	Education & Awareness	Invasive Species	High	Low	Municipal Budget	Municipality	Ongoing	N/A
19	Develop a neighborhood cleanup plan designed to remove discarded tires, trash and other items in which standing water can form.	Education & Awareness	Invasive Species	High	Low	Municipal Budget	Municipality	Short-term	N/A
20	Provide training and education for first responders to ensure effective emergency care.	Local plans & Regulations	Drug Overdose Crisis	High	Low	Municipal Budget	Municipality	Ongoing	N/A
21	Provide education and outreach, especially in K-12, regarding drug abuse prevention.	Education & Awareness	Drug Overdose Crisis	High	Low	Municipal Budget	Municipality / 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