

Palmer Township, Northampton County Annex

Hazard Mitigation Plan Points-of-Contact

Primary:

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Alternate:

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Municipal Profile

Palmer Township is a suburban township located in the central-east portion of Northampton County. It encompasses an area of 10.7 square miles, and has an approximate population of 20,691 (2010 Census). The township is bordered by Wilson Borough and Forks Township to the east, Tatamy Borough to the northeast, Stockertown Borough to the north, Upper Nazareth Township to the northwest, Lower Nazareth Township and Bethlehem Township to the west, and the City of Easton to the south.

The Lehigh River is the township's southern border, and the Bushkill Creek forms the township's eastern border from Stockertown in the north, south to Wilson Borough, with the exception of where the township borders Tatamy Borough. The Schoeneck Creek also traverses the northern portion of the Township. Flooding has been a problem along the Bushkill and Schoeneck Creeks during significant storm events. Sinkholes have also been an issue in the Township, particularly in the northern portion.

US Route 22 enters the township from Bethlehem Township and travels east-west across the township and into Wilson Borough. PA Route 33 enters the township along the northern border with Stockertown Borough and travels southwest, exiting into Lower Nazareth Township just north of PA Route 248 (Nazareth Road). PA Route 248 travels southeast from the border with Lower Nazareth Township to where it interchanges with US Route 22 just west of Wilson Borough, where PA Route 248 continues into the borough as Northampton Street.

Municipal Participation

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

Robert Williams, Township Manager
Role: Administration

Kent Baird, Director of Planning
Role: Planning

Stephen Gallagher, Fire Commissioner
Role: Emergency Management Coordinator

James Raudenbush, Zoning Officer
Role: Floodplain Administrator

Thomas Adams, Director of Public Works
Role: Public Works

Scott Kistler, Public Works Superintendent
Role: Public Works

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.

Discussion with Planning Commission and Board of Supervisors

Notification to major developers / landowners and major employers / businesses

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.

Palmer Township plans to utilize the following during the current planning process: newsletter, Facebook, township website and Nixle. During the last update, the public was informed through the website and newsletter.

Compliance with the National Flood Insurance Program (NFIP)

Topic	Identify source of information, if different from the one listed.	Additional Comments
1. Staff Resources		
Is the Community Floodplain Administrator (FPA) or NFIP Coordinator certified?	Community FPA	No
Is floodplain management an auxiliary function?	Community FPA	Yes
Provide an explanation of NFIP administration services (e.g., permit review, GGIS, education or outreach, inspections, engineering capability)	Community FPA	Permit Review, education, engineering
What are the barriers to running an effective NFIP program in the community, if any?	Community FPA	Staff time
2. Compliance History		
Is the community in good standing with the NFIP?	State NFIP Coordinator, FEMA NFIP Specialist, or community records	Yes
Are there any outstanding compliance issues (i.e., current violations)?		No
When was the most recent Community Assistance Visits (CAV) or Community Assistance Contact (CAC)?		Unknown
Is a CAV or CAC scheduled or needed?		Yes
3. Regulation		
When did the community enter the NFIP?	NFIP Community Status Book	12/28/1976
Are the Flood Insurance Rate Maps (FIRMs) digital or paper? How are residents assisted with mapping?	Community FPA	Both, Residents are helped in person or via email
Do floodplain regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	Community FPA	Meet FEMA Requirements
Describe the permitting process	Community FPA, State, FEMA NFIP	Floodplain development permit application is required. Application reviewed by Floodplain Administrator, County Conservation District and Township Engineer.
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	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	Unknown
How many structures are exposed to flood risk within the community?	Community FPA or GIS Analyst	165
Describe any areas of flood risk with limited NFIP policy coverage	Community FPA or FEMA Insurance Specialist	Unknown

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

Topic	Identify source of information, if different from the one listed.	Additional Comments
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.

Grandview Apartments
HCR Manor Care

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

Palmer Community Day Event – annually in August at Fairview Park
Easton High School Bonfire Special Event – annually; day before Thanksgiving
Charles Chrin Community Center in Palmer Township
Palmer Park Mall
St. Janes Church
Easton Area High School
Palmer Elementary School
Tracy Elementary School
Easton Area Academy
Multiple township wide athletic fields

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.

Amazon Fulfillment Center	25 th Street Shopping Center
XPO Logistics	Palmer Town Center – Giant, Home Depot
Majestic Athletic	William Penn Plaza
HCR Manor Care	Palmer Super Center
Raub's Farm	Palmer Park Mall
UPS	Lulus
iHerb	MCS Industries

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.

Riparian Area at Mill Race Park	Natural Wetlands behind Suburban EMS
Lehigh River Shad Ladders	Easton Area High School Riparian Area and Pond
Multiple Retention Ponds	Entire Bike Trail System (access for first responders)

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.

Easton Area Academy	Hess Wood Recycling
Nazareth Borough Municipal Authority	Pallet Express
GJ Mills Apartments (serious flooding)	Blue Easel
Art's Toy Manufacturing (vacant)	Tower Products
Old trolley station	

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

State Route 22	State Route 33
Met ED Power Plant Sub Stations	Natural Gas Transmission Pipelines (several)

Community Assets – *continued*

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

Dam at Bushkill Creek (Penn Pump Park)
Dam at Bushkill Creek (next to the Crayola building)

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

Fire Departments	Police Department
Suburban EMS	Palmer Township Municipal Building
Easton Area High School	Charles Chrin Community Center – shelter
Palmer Elementary School	Tracy Elementary School
Easton Area Academy	

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

Briarcliffe Park	Fairview Park
Howard Lane Park	Keystone Park
Labarre Park	Old Orchard Park
Penn Pump Park	Riverview Park
Stephens Street Park	Village at Mill Race Park
Palmer Community Library	1818 Tavern
Blue Easel	Seipsville Inn
Seip House	

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	2018		Planning	S	+	Yes, recommends riparian buffer overlays		
	Capital Improvement Plan			X	Administration	S				
	Economic Development Plan									
	Continuity of Operations Plan			X		S	+	Yes, recognizes potential hazards		
	Stormwater Management Plan / Ordinance	X	2007		Public Services, Engineer	S				
	Open Space Management Plan (or Parks/Rec., Greenways Plan)	X	2020		Recreation, Planning	S	+	Yes, recommendations for improved stormwater management in parks		
	Natural Resource Protection Plan									
	Transportation Plan	X	2002							
	Historic Preservation Plan									
	Floodplain Management Plan									
	Farmland Preservation									
	Evacuation Plan									
Disaster Recovery Plan	X	Updated 2017, part of EOP		Emergency Management						

Capability Assessment – continued

Capability	<ul style="list-style-type: none"> ✓ 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	10/2018					N/A		
	Emergency Operations Plan	X	2003, last updated 2019	X		S	+	Yes, recognizes potential hazards		
	Zoning Regulations	X	1994	X	Zoning, Planning	S	+	Yes, establishes riparian buffer overlay districts		
	Floodplain Regulations	X	2014		Zoning	S		Yes		
	NFIP Participation	X								
	Building Code	X	PA UCC		Codes					
	Fire Code	X	Updated 5/2022		Fire Commissioner					
Other	X								Carbonate bedrock standards adopted 2003 as part of SALDO	

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		Planning	No		
	Planners or engineers (with natural and / or human-caused hazards knowledge)	X		Geotechnical Engineer (consultant)			
	Engineers or professionals trained in building and / or infrastructure construction practices (including building inspectors)	X		Codes, Engineer (consultant)			
	Emergency Manager	X		Emergency Management	Yes		Fire Commissioner, Chief of Police
	Floodplain administrator / manager	X		Zoning			
	Land surveyors	X		Engineer (consultant)			
	Staff familiar with the hazards of the community	X		Public Services, Emergency Management			
	Personnel skilled in Geographical Information Systems (GIS) and / or FEMA's HAZUS program	X		Planning			
	Grant writers or fiscal staff to handle large / complex grants	X		Public Services, Emergency Management			
	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		Administration	No		
	Community Development Block Grants (CDBG)		X		No		
	Special purposes taxes	X		Administration	Yes		North End Neighborhood Improvement District
	Gas / Electricity utility fees		X		No		
	Water / Sewer fees	X		Administration, Public Services, Planning	Yes		Sewer only
	Stormwater utility fees		X		No		Under Consideration
	Development impact fees	X			No		Recreation fees, voluntary traffic contributions
	General obligation, revenue, and / or special tax bonds	X		Administration	No		
	Partnering arrangements or intergovernmental agreements	X		Emergency Management	No		Mutual Aid
	Other		X		No		

Capability Assessment – continued

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				
4. Education & Outreach	Firewise Communities Certification	X		Fire Department	X		
	StormReady Certification						Under Consideration
	Natural disaster or safety-related school programs	X		Fire Department			Fire Safety Programs to Community Educators and Daycare Staff
	Ongoing public education or information programs such as, responsible water use, fire safety, household preparedness, and environmental education.	X		Fire Department, Environmental Steering Committee			Fire Safety Programs to Community Educators and Daycare Staff, Annual Training provided & Establishing environmental education webinars
	Public-private partnership initiatives addressing disaster related issues.	X		Emergency Operations	X		Active shooter and other emergency drills
	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	X		Police and Fire Departments, Nurture Nature Center	X		Program Under Development – Received Citizen Interest; Investigation Started 2016. Participate in the Create Resilience Project.
	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			
	Administrative and Technical		X			
	Financial		X			
	Education and Outreach		X			

Known or Anticipated Future Development / Redevelopment

Development / Property Name	Type of Development	Number of Structures	Location	Known Hazard Zone	Description / Status
GJ Mills	Multi-family residential	1 (23 dwelling units)	Bushkill Drive	Flooding	Proposed
North End	Industrial / Commercial	32	Route 33, Main Street & Van Buren Road	Sinkholes, flooding	Underway
Northwood Farms	Residential	137	Northwood Avenue, Van Buren Road & Route 248	Sinkholes	Underway

Natural & Non-Natural Event History Specific to Palmer Township

Type of Event and Date(s)	FEMA Disaster # (if applicable)	Local Damage(s) or Loss(es)
Sinkholes – April 4 th , 2013		Road damage, utility damage, vehicle damage
Sinkhole – May 6 th , 2013		Road damage, utility damage
Sinkhole – May 23 rd , 2013		Road damage, utility damage, vehicle damage
Hailstorm – June 30 th , 2015		Roof and siding damages on numerous homes and buildings
Sinkhole – February 3 rd , 2016		Road damage, utility damage, structure damage (2)
Severe storm and flooding – February 24 th , 2016		Park damage
Severe thunderstorm – February 23 rd , 2017		Traffic signal damage
Sinkhole – April 2018		Road damage, utility and infrastructure damage (water and sewer)
Sinkhole – July 2020		Road damage, infrastructure damage (storm sewer)
Tropical Storm Isaias – August 4 th , 2020	In process	Infrastructure damage (sewer & storm sewer)
COVID-19 Pandemic – March 2020	DR-4506-PA	Financial Losses
Remnants of Hurricane Ida	DR-4618-PA	Assistance to eligible individuals and families affected by this disaster.

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	<p>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:</p> <ul style="list-style-type: none"> - Tatamy Road near Bushkill Creek <p>Phase 1: Identify appropriate candidates for retrofitting based on cost-effectiveness versus relocation.</p> <p>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.</p>	X					
2	<p>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. Specifically identified are the following:</p> <ul style="list-style-type: none"> - Stocker Mill Road near Bushkill Creek <p>Phase 1: Identify appropriate candidates for relocation based on cost effectiveness versus retrofitting.</p> <p>Phase 2: Where relocation is determined to be a viable option, work with property owners toward implementation of that action based on available funding from FEMA and local match availability.</p>	X					
3	<p>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.</p> <p>Further, continue to meet and/or exceed the minimum NFIP standards and criteria through the following NFIP- related continued compliance actions identified as Initiatives 4a-4d (below).</p>				X		Ordinance adopted June 24, 2014. Action carried through to the 2018 Action Plan.

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	
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: a.) Provide and maintain links to the HMP website, and regularly post notices on the municipal website referencing the HMP webpages. b.) Prepare and distribute informational letters to flood vulnerable property owners, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation. c.) Use newsletters to better educate the public on flood insurance, sinkhole insurance, the availability of mitigation grant funding, and personal natural hazard risk reduction measures. d.) Work with homeowners associations, civic and business groups to disseminate information on flood insurance, sinkhole insurance, and the availability of mitigation grant funding.		X				Have provided mailings to floodplain property owners and provided information in newsletter and on website
5	Begin the process to adopt higher regulatory standards to manage flood risk (i.e. increased freeboard, cumulative substantial damage/improvements).	X					
6	Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed.	X					
7	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					
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					
9	Archive elevation certificates		X				
10	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0		X				
11	Complete the ongoing updates of the Comprehensive Emergency Management Plans			X	X		Action carried through to the 2018 Action Plan.
12	Create/enhance/maintain mutual aid agreements with neighboring communities for continuity of operations.			X	X		Action carried through to the 2018 Action Plan.

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	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					
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).	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	<p>Retrofit structures located in hazard-prone areas to protect structures from future damage, with repetitive loss & severe repetitive loss properties as priority. Specifically identified are the following:</p> <p>- Tatamy Road near Bushkill Creek 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.</p>	Structural Project	Flood, Windstorm/ Tornado, Winter Storm	Low	High	FEMA Mitigation Grant Programs and property owner for cost share	Municipality with support from PEMA, FEMA	Long-term DOF	Existing
2	<p>Purchase, or relocate structures located in hazard- prone areas to protect structures from future damage, with repetitive loss & severe repetitive loss properties as priority. Specifically identified are the following:</p> <p>- Stocker Mill Road near Bushkill Creek Phase 1: Identify appropriate candidates for relocation based on cost-effectiveness versus retrofitting. Phase 2: Where relocation is determined to be a viable option, work with property owners toward implementation of that action based on available funding from FEMA and local match availability.</p>	Structural Project	Flood	Low	High	FEMA Mitigation Grant Programs and local budget for cost share	Municipality with support from PEMA, FEMA	Long-term DOF	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>3 Maintain compliance with & good-standing in the NFIP including adoption & enforcement of floodplain management requirements (e.g. regulating all new & substantially improved construction in Special Hazard Flood Areas), floodplain identification & mapping, & flood insurance outreach to the community. Further, continue to meet and/or exceed the minimum NFIP standards & criteria through the following NFIP- related continued compliance actions identified as Initiatives 4a-4d (below).</p>	<p>Planning Mechanisms, Education and Outreach</p>	<p>Flood, Windstorm/ Tornado, Winter Storm</p>	<p>High</p>	<p>Low - Medium</p>	<p>Local Budget</p>	<p>Municipality (via NFIP Floodplain Administrator) with support from PEMA, ISO FEMA</p>	<p>Ongoing</p>	<p>New & Existing</p>

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	<p>Conduct and facilitate community & public education & outreach for residents & businesses to include, but not be limited to, the following to promote & effect natural hazard risk reduction:</p> <p>a.) Provide & maintain links to the HMP website, & regularly post notices on the municipal website referencing the HMP webpages.</p> <p>b.) Prepare & distribute informational letters to flood vulnerable property owners, explaining the availability of mitigation grant funding to mitigate their properties, & instructing them on how they can learn more & implement mitigation.</p> <p>c.) Use newsletters to better educate the public on flood insurance, sinkhole insurance, the availability of mitigation grant funding, & personal natural hazard risk reduction measures.</p> <p>d.) Work with homeowners' associations, civic & business groups to disseminate information on flood insurance, sinkhole insurance, & the availability of mitigation grant funding.</p>	Education and Outreach	All Hazards	High	Low-Medium	Municipal Budget	Municipality with support from Planning Partners, PEMA, FEMA	Short	N/A
5	Begin and/or continue the process to adopt higher regulatory standards to manage flood risk (i.e. increased freeboard, cumulative substantial damage/improvements).	Planning Mechanisms, Education and Outreach	Flood, Windstorm/ Tornado, Winter Storm	Medium	Low	Municipal Budget	Municipality with support from PEMA, FEMA	Short	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
6	Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed.	Education and Outreach	Flood, Windstorm/ Tornado, Winter Storm	Medium	Low	Municipal Budget	NFIP Floodplain Administrator with support from PADEP, PEMA, FEMA	Short (year 1)	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.	Education and Outreach	Flood, Windstorm/ Tornado, Winter Storm	Low	Low	Municipal Budget	NFIP Floodplain Administrator	Short (DOF)	N/A
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.	Education and Outreach	Flood, Windstorm/ Tornado, Winter Storm	Medium	Low	Municipal Budget	NFIP Floodplain Administrator with support from PADEP, PEMA, FEMA	Short (year 1)	NA
9	Obtain and archive elevation certificates for NFIP compliance.	Education and Outreach	Flood, Windstorm/ Tornado, Winter Storm	Low	Low	Local Budget	NFIP Floodplain Administrator	On-going	NA

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
10	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0	Planning Mechanisms	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) with support from Planning Partners (through their Points of Contact), PEMA	Ongoing	New & Existing
11	Complete the ongoing updates of the Comprehensive Emergency Management Plans	Planning Mechanisms	All Hazards	High	Low	Local Budget	Municipality with support from PEMA	Ongoing	New & Existing
12	Create/enhance/maintain mutual aid agreements with neighboring communities for continuity of operations.	Planning Mechanisms, Education and Outreach	All Hazards	High	Low	Local Budget	Municipality with support from Surrounding municipalities and County	Ongoing	New & Existing
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.	Education and Outreach	All Hazards	Medium	Medium	Local budget	Municipality with support from County, PEMA, FEMA	Short	N/A
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).	Education and Outreach	All Hazards	Medium	Medium	Local budget, FEMA HMA grant programs	Municipality with support from County, PEMA	Short – Long-term DOF	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
15	Rewrite zoning ordinance and update SALDO regulations in accordance with newly adopted Comprehensive Plan and Parks & Open Space Plan	Local Plans and Regulations	Flood, Sinkholes, Environmental Hazards / Explosion	High	\$70,000	General funds, grants	Planning	One year	N/A
16	Purchase and installation of permanent, alternative power source (IE: generator) for the municipal building. The Municipal Building is not only the central location of government operations for all residents within the community but also houses/serves as the Emergency Operations Center (EOC) both during and after weather / non-weather related incidents.	Structure and Infrastructure	All Hazards	High	High	FEMA Mitigation Grant Programs, Municipal Budget	Municipality with support from Local and County EM	Short Term	New & Existing
17	Purchase and installation of permanent, alternative power source (IE: generator) for the municipally owned Charles Chrin Community Center. This facility serves as the primary sheltering location as well as a heating/cooling/charging station for the residents during and after any weather / non-weather incidents. Without power, the facility is unable to provide adequate, necessary services.	Structure and Infrastructure	All Hazards	High	High	FEMA Mitigation Grant Programs, Municipal Budget	Municipality with support from Local and County EM	Short Term	New & Existing
18	Installation of a large, underground public stormwater culvert system parallel to existing culverts on Meadow Avenue, Seip Avenue and terminate along Nazareth Road.	Structure and Infrastructure	Flooding	High	High	FEMA Mitigation Grant Programs, Municipal Budget	Municipality with support from Local and County EM	Long-Term (3-years) DOF	Existing

Notes:**Estimated Costs:**

- Where actual project costs have been reasonable estimated: Low = < \$10,000; Medium = \$10,000 to \$100,000; High = > \$100,000;
- Where actual project costs cannot reasonably be established at this time:
 - Low** = Possible to fund under existing budget. Project is part of, or can be part of an existing on-going program.
 - Medium** = Could budget for under existing work plan, but would require a reappropriation 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