### Palmer Township, Northampton County Annex

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

#### **Primary:**

Stephen Gallagher Fire Commissioner / Emergency Management Coordinator 3 Weller Place, Palmer, PA 18045 610-559-9809 sgallagher@palmertwp.com

#### Alternate:

Kent Baird Director of Planning 3 Weller Place, Palmer, PA 18045 610-253-7191 kbaird@palmertwp.com

#### **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 22,317 (2020 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 North End, due to Karst geology.

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.

Lehigh Valley International Airport is located 15 miles west of Palmer Township in Hanover Township, serving as the Township's primary 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.

Robert Williams, Township Manager Role: Administration	James Raudenbush, Zoning Officer Role: Zoning Administrator / Former Floodplain Administrator
Kent Baird, Director of Planning Role: Planning	Thomas Adams, Director of Public Services Role: Public Services
Stephen Gallagher, Fire Commissioner Role: Emergency Management Coordinator	Scott Kistler, Director of Public Works Role: Public Works
Craig Beavers, Assistant Director of Planning Role: Planning / Floodplain Administrator	Paige Strasko, MS4 / Environmental Administrator Role: Public Services
Philip Goudbout, Director of Public Services Role: Public Services	

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.

Planning Commission, Environmental Steering Committee, and Board of Supervisors will hold discussions. Planning, Codes, Public Services, Public Works, Fire, Police, and Parks Departments will be informed and involved. Notification will be sent to: major developers/landowners, major businesses, Business, Industrial, and Professional Association of Palmer Township

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.

Propose to engage stakeholders through: social media, communication with stakeholders, city website, announcements with newsletters, outreach through the city emergency alerts service NIXLE, and public meetings.

**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	Yes, the Asst. Planning Director is a CFM		
Is floodplain management an auxiliary function?	Community FPA	No		
Provide an explanation of NFIP administration services (e.g., permit review, GGIS, education or outreach, inspections, engineering capability)	Community FPA	The Planning and Codes Depts. administer all aspects of the NFIP program, including permit review, GIS, education/outreach, & inspections		
What are the barriers to running an effective NFIP program in the community, if any?	Community FPA	None		
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 (4/20/1973)		
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	Regulations meet or exceed FEMA Requirements; additional foot of freeboard, ban on fill in the floodplain		
Describe the permitting process	Community FPA, State, FEMA NFIP	A Floodplain Development Permit is required for any work within the SFHA, reviewed for conformance with the floodplain requirements.		
4. Insurance Summary				
How many NFIP policies are in the community? What is the total premium and coverage?	State NFIP Coordinator or FEMA NFIP Specialist	As of 9/22/2023 – 52 policies & \$62,384 in premiums		
How many claims have been paid in the community? What is the total amount of paid claims? How many substantial damage claims have there been?	FEMA NFIP or Insurance Specialist	As of 9/22/2023 – 33 claims & \$503,852.04 paid to claims		
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	Easton Skill Nursing Center (2600 Northampton Street)

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

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

### **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 <sup>th</sup> Street Shopping Center
XPO Logistics	Palmer Town Center – Giant, Home Depot
Majestic Athletic	William Penn Plaza
HCR Manor Care	MCS Industries
Raub's Farm	Palmer Park Mall
UPS	Easton Area School District
Township Government	Grainger

#### 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.

Buxmont Academy	Hess Wood Recycling
Nazareth Borough Municipal Authority	Pallet Express
GJ Mills Apartments (serious flooding)	Blue Easel
Art's Toy Manufacturing (vacant)	Tower Products
Palmer Business Park	

#### **Community Assets – continued**

• 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)

 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
Tracy & Palmer Elementary Schools	Buxmont 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**

		Status			Effect on	Change		How can		
Capability	✓ Regulatory ✓ Tools ✓ Programs	In Place	Date Adopted or Updated	Under Development	Department / Agency Responsible	Hazard Loss Reduction: - <u>S</u> upports - <u>N</u> eutral - <u>H</u> inders	since 2018 Plan? + Positive - Negative	Has the 2018 Plan been integrated into the Regulatory Tool/Program? If so, how?	these capabilities be expanded and improved to reduce risk?	Additional Comments
	Comprehensive Plan	X	2018		Planning	S	+	Yes, recommends riparian buffer overlays		
	Capital Improvement Plan			X	Administration	S			Capital projects to address hazard mitigation	
	Economic Development Plan				Administration					Will consider
atory	Continuity of Operations Plan			X	Emergency Management	S	+	Yes, recognizes potential hazards		
1. Planning & Regulatory	Stormwater Management Plan / Ordinance	X	2007; updated 2023		Public Services, Engineer	S				
	Open Space Management Plan (or Parks/Rec., Greenways Plan)	X	2020; updated 2023		Recreation, Planning	S	+	Yes, recommendations for improved stormwater management in parks		
	Natural Resource Protection Plan				Planning					Will consider
	Transportation Plan	Х	2002		Planning	N				
	Historic Preservation Plan				Planning					Will consider
	Floodplain Management Plan				Planning					Will consider
	Farmland Preservation				Planning					Will consider
	Evacuation Plan			X	Emergency Management	S				

	✓ Regulatory         ✓ Tools         ✓ Programs             Date Adopted or Updated         Updated         Updated            Department / Agency Responsible			Effect on		Has the 2018	How can			
Capability			Hazard Loss Reduction: - <u>S</u> upports - <u>N</u> eutral - <u>H</u> inders	Change since 2018 Plan? + Positive - Negative	Plan been integrated into the Regulatory Tool/Program ? If so, how?	these capabilities be expanded and improved to reduce risk?	Additional Comments			
	Disaster Recovery Plan	X	Updated 2017, part of EOP		Emergency Management					
	Hazard Mitigation Plan	X	10/2023		Several	S	+	N/A		
2	Emergency Operations Plan	х	2003, last updated 2022	X	Emergency Management	S	+	Yes, recognizes potential hazards		
& Requiatory				Zoning, Planning	S	+	Yes, establishes riparian buffer overlay districts			
ing	Floodplain Regulations	Х	2023		Planning	S	+	Yes		
Planning	NFIP Participation	Х	1976		Planning	S	+			
<u>-</u>	Building Code	X	PA UCC		Codes					
_	Fire Code	х	Updated 5/2022		Fire Commissioner		+		Adopt a Fire Inspection Program	
	Other	х			Planning					Carbonate bedrock standards adopted 2003 as part of SALDO

Capability	✓ Staff ✓ Personnel ✓ Resources	Yes	No	Department / Agency	Change since 2018 Plan? + Positive - Negative	How can these capabilities be expanded and improved to reduce risk?	Additional Comments
	Planners (with land use / land development knowledge)	X		Planning	+		Additional Planner hired
	Planners or engineers (with natural and / or human-caused hazards knowledge)	Х		Geotechnical Engineer (consultant)			
ogy	Engineers or professionals trained in building and / or infrastructure construction practices (including building inspectors)	Х		Codes, Engineer (consultant)	+		Additional engineers hired
Technology	Emergency Manager	X		Emergency Management	+		Fire Commissioner, Chief of Police
∞ర	Floodplain administrator / manager	X		Planning	+		CFM Planner hired
rative	Land surveyors	Х		Engineer (consultant)			
Administrative	Staff familiar with the hazards of the community	Х		Public Services, Emergency Management			
2. A	Personnel skilled in Geographical Information Systems (GIS) and / or FEMA's HAZUS program	Х		Planning	+		Additional Planner hired
	Grant writers or fiscal staff to handle large / complex grants	Х		Public Services, Emergency Management, Planning			
	Other						

Capability		Yes	No	Department / Agency	Change since 2018 Plan? + Positive - Negative	How can these capabilities be expanded and improved to reduce risk?	Additional Comments
	Capital improvement programming	X		Administration			
	Community Development Block Grants (CDBG)		X				
es	Special purposes taxes	X		Administration			North End Neighborhood Improvement District
ources	Gas / Electricity utility fees		X				
Reso	Water / Sewer fees	Х		Administration, Public Services, Planning			Sewer only
cial	Stormwater utility fees	Х		Public Services	+		Implementation for 2024
3. Finar	Development impact fees	X		Planning	+		Recreation fees, voluntary traffic contributions
	General obligation, revenue, and / or special tax bonds	X		Administration			
	Partnering arrangements or intergovernmental agreements	X		Emergency Management	+		Mutual Aid
	Other		X				

	Capability	✓ Program ✓ Organization	Yes	No	Department / Agency	Change since 2018 Plan? + Positive - Negative	How can these capabilities be expanded and improved to reduce risk?	Additional Comments
		Firewise Communities Certification	X		Fire Department			
		StormReady Certification		X	Fire Department			Under Consideration
	ıch	Natural disaster or safety-related school programs	Х		Fire Department			Fire Safety Programs to Community Educators and Daycare Staff
	Education & Outrea	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, Establishing environmental education webinars
	Educ	Public-private partnership initiatives addressing disaster related issues.	Х		Emergency Operations			Active shooter and other emergency drills
4. 6					Police and Fire Departments, Nurture Nature Center			Program Under Development Participate in the Create Resilience Project.
		Other						

Capability			Deg	ree of Capab	pility	Change since the 2018 Hazard Mitigation Plan?	Additional Comments		
	Сара		Limited	Moderate	High	If so, how?			
	nt	Planning and Regulatory		Х					
	Self – ssment	Administrative and Technical		X		Additional Staff hired			
	5. Sess	Financial		Х					
	Ä	Education and Outreach		Х					

### **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 (10 dwelling units)	Bushkill Drive	Flooding	Proposed
Palmer Residences	Multi-family residential	1 (84 dwelling units)	Milford Street	Sinkholes	Underway
MRP Industrial	Industrial	2	Van Buren Rd. & Main St.	Sinkholes	Underway
Carson 100/200	Industrial	5	Van Buren Rd. & Main St.	Sinkholes	Underway
First Park 33	Industrial	4	Tatamy Rd. & Newlins Mill Rd.	Sinkholes	Underway
48 Kunkle Drive Carwash	Commercial	1	Kunkle Drive	Flooding	Proposed

### **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)
Tropical Storm Isaias – August 4 <sup>th</sup> , 2020		Infrastructure damage (sewer & storm sewer) & Assistance to eligible individuals and families affected by this disaster.
COVID-19 Pandemic – March, 2020	DR-4506-PA	Financial Losses
Remnants of Hurricane Ida – August, 2022	DR-4618-PA	Assistance to eligible individuals and families affected by this disaster.
Flash Flooding – July 2023		Road damage, utility damage, park damage

## **2018 Municipal Action Plan Status**

			Status	•		
Existing Mitigation Action (from 2018 Hazard Mitigation Plan)	No Progress / Unknown	In Progress	Continuous	Completed	Discontinued	Additional Comments
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:  - 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.	x					Progress to continue with additional staffing recently hired in 2023
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:  - 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.	X					Progress to continue with additional staffing recently hired in 2023
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 4a-4d (below).			x			Ordinance adopted June 24, 2014. Action carried through to the 2018 Action Plan. Ordinance revised in 2023 Zoning Ordinance

				Status	i		
	Existing Mitigation Action (from 2018 Hazard Mitigation Plan)	No Progress / Unknown	In Progress	Continuous	Completed	Discontinued	Additional Comments
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			Increased freeboard regulations adopted
6	Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed.		Χ				CAV is needed, will need to schedule
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		CFM certified planner hired 2023
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				Reviewing potential for joining CRS
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			
12	Create/enhance/maintain mutual aid agreements with neighboring communities for continuity of operations.			X			

			Status			
Existing Mitigation Action (from 2018 Hazard Mitigation Plan)	No Progress / Unknown	In Progress	Continuous	Completed	Discontinued	Additional Comments
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		Х				Progress to continue with additional staffing recently hired in 2023
Work with regional agencies (i.e. County and PEMA) to help develop damage assessment capabilities at the local level through such things as training programs, certification of qualified individuals (e.g. code officials, floodplain managers, engineers).		Х				Progress to continue with additional staffing recently hired in 2023
Rewrite zoning ordinance and update SALDO regulations in accordance with newly adopted Comprehensive Plan and Parks & Open Space Plan		Х				Zoning Ordinance adopted 2023
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.		Х				Generators have been purchased, pending installation
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.		Х				Generators have been purchased, pending shipment and installation
Installation of a large, underground public stormwater culvert system parallel to existing culverts on Meadow Avenue, Seip Avenue and terminate along Nazareth Road.		X				Stormwater improvements planned for 2024 and beyond

Notes: \*\*Items 15-18 entered by Palmer Township, not in 2018 updated – added to capture for current update

- 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.

## **2024 Mitigation Action Plan**

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
1	Retrofit structures located in hazard- prone areas to protect structures from future damage, with repetitive loss & severe repetitive loss properties as priority. Specifically identified are the following:  - 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.	1	Structural Project	Flood, Windstorm/ Tornado, Winter Storm	High	High	FEMA Mitigation Grant Programs & property owner for cost share	Municipality w/ support from PEMA, FEMA	Long-term DOF	Existing

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
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).	3	Planning Mechanisms, Education & Outreach	Flood, Windstorm/ Tornado, Winter Storm	High	Low- Medium	Local Budget	Municipality (via NFIP Floodplain Administrator) w/ support from PEMA, ISO FEMA	Ongoing	New & Existing

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
4	Conduct & facilitate community & public education & outreach for residents & businesses to include, but not be limited to, the following to promote & effect natural hazard risk reduction:  a.) Provide & maintain links to the HMP website, & regularly post notices on the municipal website referencing the HMP webpages.  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.  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.  d.) Work with homeowners' associations, civic & business groups to disseminate information on flood insurance, & the availability of mitigation grant funding.	4	Education & Outreach	All Hazards	High	Low- Medium	Municipal Budget	Municipality w/ support from Planning Partners,	Short	N/A

Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
Begin and/or continue the process to adopt higher regulatory standards to manage flood risk (i.e. increased freeboard, cumulative substantial damage/improvements).	5	Planning Mechanisms, Education & Outreach	Flood, Windstorm/ Tornado, Winter Storm	High	Low	Municipal Budget	Municipality w/ support from PEMA, FEMA	Short	New & Existing
Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed.	3	Education & Outreach	Flood, Windstorm/ Tornado, Winter Storm	High	Low	Municipal Budget	NFIP Floodplain Administrator w/ support from PADEP, PEMA, FEMA	Short (year 1)	N/A
Have designated NFIP Floodplain Administrator (FPA) become a Certified Floodplain Manager through the ASFPM and/or pursue relevant continuing education training such as FEMA Benefit-Cost Analysis.	6	Education & Outreach	Flood, Windstorm/ Tornado, Winter Storm	Medium	Low	Municipal Budget	NFIP Floodplain Administrator	Short (DOF)	N/A

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
8	Participate in the Community Rating System (CRS) to further manage flood risk and reduce flood insurance premiums for NFIP policyholders. This shall start with the submission to FEMA-DHS of a Letter of Intent to join CRS, followed by the completion and submission of an application to the program once the community's current compliance with the NFIP is established.	7	Education & Outreach	Flood, Windstorm/ Tornado, Winter Storm	High	Low	Municipal Budget	NFIP Floodplain Administrator w/ support from PADEP, PEMA, FEMA	Short (year 1)	N/A
9	Obtain and archive elevation certificates for NFIP compliance.	8	Education & Outreach	Flood, Windstorm/ Tornado, Winter Storm	Low	Low	Local Budget	NFIP Floodplain Administrator	Ongoing	N/A
10	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0	9	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) w/ support from Planning Partners (through their Points of Contact), PEMA	Ongoing	New & Existing
11	Complete the ongoing updates of the Comprehensive Emergency Management Plans.	10	Planning Mechanisms	All Hazards	Medium	Low	Local Budget	Municipality w/ support from PEMA	Ongoing	New & Existing

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M /L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
12	Create/enhance/maintain mutual aid agreements with neighboring communities for continuity of operations.	11	Planning Mechanisms, Education & Outreach	All Hazards	Medium	Low	Local Budget	Municipality w/ support from surrounding municipalities and County	Ongoing	New & Existing
13	post-disaster capabilities  – Damage assessment; FEMA/PEMA paperwork compilation, submissions, record keeping.	12	Education & Outreach	All Hazards	Low	Medium	Local Budget	Municipality w/ 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)	13	Education & Outreach	All Hazards	Medium	Medium	Local budget, FEMA HMA grant programs	Municipality w/ support from County & PEMA	Short-, Long- term DOF	N/A
15	Rewrite zoning ordinance and update SALDO regulations in accordance	22	Local Plans & Regulations	Flood, Sinkholes, Environmental Hazards/ Explosion	High	\$70,000	General funds grants	Planning	One Year	N/A

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M /L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
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 / nonweather related incidents.	17	Structure & Infrastructure	All Hazards	High	High	FEMA Mitigation Grant Programs, Municipal Budget	Municipality w/ support from Local & 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.	17	Structure & Infrastructure	All Hazards	High	High	FEMA Mitigation Grant Programs, Municipal Budget	Municipality w/ support from Local & County EM	Short-term	New & Existing

	Mitigation Action	Mitigation Action Category	Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M /L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and / or Existing Structures
18	Installation of a large, underground public stormwater culvert system parallel to existing culverts on Meadow Avenue, Seip Avenue and terminate along Nazareth Road.	15	Structure & Infrastructure	Flooding	Medium	High	FEMA Mitigation Grant Programs, Municipal Budget	Municipality w/ support from Local & County EM	Long-Term (3years) 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 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