**Lower Saucon Township, Northampton County Annex**

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

|  |  |
| --- | --- |
| **Primary:** | **Alternate:** |
| Mark Hudson  Township Manager  3700 Old Philadelphia Pike, Bethlehem, PA 18015  610-865-3291  manager@lowersaucontownship.org | Bryan Evans  Emergency Management Coordinator  3700 Old Philadelphia Pike, Bethlehem, PA 18015  610-865-3291  emermgt@lowersaucontownship.org |

**Municipal Profile**

Lower Saucon Township is a rural township located in the southern part of Northampton County, on the border with Bucks County. It encompasses an area of approximately 24.3 square miles and has a population of 11,094 (2020 Census). The township is bordered by the City of Bethlehem to the north and northwest; Hellertown Borough (which is nearly surrounded by the township); Freemansburg Borough to the northwest; Bethlehem Township to the north; Easton to the northeast; Williams Township to the east; Durham Township and Springfield Township, both in Bucks County, to the south; Upper Saucon Township (Lehigh County) to the southwest; Salisbury Township (Lehigh County) to the west; and Fountain Hill (Lehigh County) to the northwest.

The Lehigh River forms the township’s northern border with Bethlehem Township.

Interstate 78 passes east-west through the eastern and western parts of the township around Hellertown. Major north-south roads through the township include PA Route 378 in the western part of the township, PA Route 412 in the south-central part of the township, the PA Route 33 interchange in the northeastern corner, and Lower Saucon Road in the eastern part of the township.

**Municipal Participation**

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

|  |  |
| --- | --- |
| Mark Hudson, Township Manager  Role: Township Manager | Bryan Evans, Emergency Management Coordinator  Role: EMC |
| Jim Young, Zoning Officer  Role: Zoning Officer | Roger Rasich, Director of Public Works  Role: Director of Public Works |
| James S. Young, Zoning Officer  Role: Floodplain Administrator, Building Code Official | Thomas H. Barndt, Chief of Police  Role: Administration and Preparation |
| Brien Kocher, Township Engineer  Role: Township Engineer | |

*\*please update table as needed*

1. 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.

None

1. Describe how the public **will be engaged** in the current planning process (examples, newsletters, social media, etc.), **and how they were engaged** since the 2018 Hazard Mitigation Plan.

Current: None

Past: Same

**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, GIS mapping, ordinance enforcement |
| What are the barriers to running an effective NFIP program in the community, if any? | Community FPA | N/A |
| **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)? |  | 2014 |
| Is a CAV or CAC scheduled or needed? |  | N/A |
| **3. Regulation** | | |
| When did the community enter the NFIP? | NFIP Community Status Book | 1978 |
| Are the Flood Insurance Rate Maps (FIRMs) digital or paper?  How are residents assisted with mapping? | Community FPA | Digital and paper, available for inspection at township offices |
| 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 | The zoning officer and township engineer reviews permits. The Zoning Hearing Board can grant relief. |
| **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 | N/A |
| 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 | N/A |
| How many structures are exposed to flood risk within the community? | Community FPA or GIS Analyst | N/A |
| Describe any areas of flood risk with limited NFIP policy coverage | Community FPA or  FEMA Insurance Specialist | Zone AE = 29; Zone A = 6 |
| **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.

Society Hill/4-Season Condominium Communities

Saucon Valley School District

Black River Apartments

Weston Senior Living

VNA – St. Luke’s Hospital Hospice

LifePath Group Homes

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

Saucon Valley School District – Sports Events, Performances, etc.

Saucon Valley Community Center – Sr. Program – Seidersville Hall

Town Hall – Sports

Polk Valley Park – Sports Events

Meadows Grove Banquet Facility

1. **Economy**

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

IESI Bethlehem Landfall

Saucon Valley Square

Creekside Marketplace

1. **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.

Black River, Saucon Creek, & east branch of Saucon Creek Corridors (wide and meandering allow for dissipation of force and velocity)

Hellertown Reservoir

1. **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.

Meadows Grove Banquet Facility

Black River Apartments

Scenic View Apartments

Exxon Gas Station

Speedway Gas Station

Limited Access to Steel City

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

No wells or treatment plants

Electric distribution is vulnerable due to slopes, trees, etc., and adjacent roadways.

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

Hellertown Reservoir

PPL Electric Substations

IESI Bethlehem Landfill & Bethlehem Renewable Energy Gas-to-Energy Plant

Columbia Gas Substation

UGI LNG Storage Facility, Bethlehem (proposed)

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

Saucon Valley School Campus

Leithsville Fire Station

Se-Wy-Co Fire Station

Southeastern Fire Station

Steel City Fire Station

Lower Saucon Township Police Department

LifePath

Weston Senior Living

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

Town Hall Park

Polk Valley Park

Steel City Park

Southeastern Park

Bethlehem Park

Saucon Valley School District

Lehigh Mountaintop Campus

Michael Heller Homestead & park

Lutz-Franklin Schoolhouse

**Capability Assessment**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Capability** | * **Regulatory** * **Tools** * **Programs** | **Status** | | | **Department /**  **Agency**  **Responsible** | **Effect on Hazard Loss Reduction:**  **-Supports**  **-Neutral**  **-Hinders** | **Change since 2018 Plan?**  **+ Positive**  **- Negative** | **Has the 2018 Plan been integrated into the Regulatory Tool/Program? If so, how?** | **How can these capabilities be expanded and improved to reduce risk?** | **Additional Comments** |
| **In Place** | **Date Adopted or Updated** | **Under Development** |
| **1. Planning & Regulatory** | Comprehensive Plan | X | 2020 updated |  | Administration Zoning | N |  |  |  | Joint Plan w/Hellertown |
| Capital Improvement Plan |  |  |  |  |  |  |  |  |  |
| Economic Development Plan |  |  |  |  |  |  |  |  |  |
| Continuity of Operations Plan |  |  |  |  |  |  |  |  |  |
| Stormwater Management Plan / Ordinance | X | 2007 |  | Zoning, Engineer | S |  |  |  |  |
| Open Space Management Plan (or Parks/Rec., Greenways Plan) | X | 2008 |  | Administration |  |  |  |  | Joint Plan w/ Upper Saucon |
| Natural Resource Protection Plan | X | 2011 |  | Zoning |  |  |  |  | Part of Zoning Ordinance |
| Transportation Plan |  |  |  |  |  |  |  |  |  |
| Historic Preservation Plan |  |  |  |  |  |  |  |  |  |
| Floodplain Management Plan | X | 2014 |  | Zoning | S |  |  |  | Based on County Model |
| Farmland Preservation |  |  |  |  |  |  |  |  |  |
| Evacuation Plan |  |  |  |  |  |  |  |  |  |
| Disaster Recovery Plan |  |  |  |  |  |  |  |  |  |
| Hazard Mitigation Plan | X | 2018 |  | Administration | S |  | N/A |  |  |
| Emergency Operations Plan | X | 11/2019 |  |  |  |  |  |  |  |
| Zoning Regulations | X | 2016 |  | Zoning | N |  |  |  |  |
| Floodplain Regulations | X | 2014 |  | Zoning | S |  |  |  |  |
| NFIP Participation | X | 2017 |  | Zoning | S |  |  |  |  |
| Building Code | X | 2017 |  | Zoning | S |  |  |  | 2018 ICC Series; Standard PA UCC |
| Fire Code |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **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** |
| **2. Administrative & Technology** | Planners (with land use / land development knowledge) | X |  | Zoning & Consultant | No |  |  |
| Planners or engineers (with natural and / or human-caused hazards knowledge) |  |  |  |  |  |  |
| Engineers or professionals trained in building and / or infrastructure construction practices (including building inspectors) |  |  |  |  |  |  |
| Emergency Manager | X |  | Emergency Management Coordinator | No |  |  |
| Floodplain administrator / manager | X |  | Zoning | No |  |  |
| Land surveyors |  |  |  |  |  |  |
| Staff familiar with the hazards of the community | X |  | Police, Public Works, Zoning | No |  |  |
| Personnel skilled in Geographical Information Systems (GIS) and / or FEMA’s HAZUS program | X |  | Zoning, Public Works | No | Yes |  |
| Grant writers or fiscal staff to handle large / complex grants | X |  | Finance | No |  |  |
| Other |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **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** |
| **3. Financial Resources** | Capital improvement programming | X |  | Councill  Administration | Yes | Appropriated additional funding toward emergency reserves |  |
| Community Development Block Grants (CDBG) |  | X |  |  |  |  |
| Special purposes taxes | X |  | Council | Open Space | 0.25 EIT | Purchasing of property that could benefit both Open Space and Hazard Mitigation |
| Gas / Electricity utility fees |  | X |  |  |  |  |
| Water / Sewer fees |  | X |  |  |  |  |
| Stormwater utility fees |  | X |  |  |  |  |
| Development impact fees | X |  | Administration Council | None – Council has not adopted policy |  | Can impose developer fees by Ordinance |
| General obligation, revenue, and / or special tax bonds | X |  | Administration  Council | No need at this time |  | We do have borrowing base available if needed |
| Partnering arrangements or intergovernmental agreements | X |  | Council of Governments | Hellertown Borough; Saucon Valley School District | Take point on developing Comprehensive Plan |  |
| Other |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **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** |
| **4. Education & Outreach** | 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 |  |  |  | Capitalize on social media and township newsletter for regular communication and reminders with the community |  |
| 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 |  |  |  |  |  | N/A |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Capability** |  | **Degree of Capability** | | | **Change since the 2018 Hazard Mitigation Plan?**  **If so, how?** | **Additional Comments** |
| **Limited** | **Moderate** | **High** |
| **5. Self – Assessment** | Planning and Regulatory | X |  |  | No |  |
| Administrative and Technical | X |  |  | No |  |
| Financial | X |  |  | No |  |
| Education and Outreach | X |  |  | No |  |

**Known or Anticipated Future Development / Redevelopment**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Development /**  **Property Name** | **Type of Development** | **Number of Structures** | **Location** | **Known Hazard Zone** | **Description / Status** |
| Saucon Overlook | Residential | 18 | Spring Valley Road | N/A | Plan Recorded |
| IESI Landfill Southeastern Realignment | Commercial | N/A | 2335 Applebutter Road |  | Final Approval 2017 |
| Majestic Bethlehem | Commercial | N/A | Commerce Center Boulevard |  | Final Approval Recorded |

**Natural & Non-Natural Event History Specific to Lower Saucon Township**

|  |  |  |
| --- | --- | --- |
| **Type of Event and Date(s)** | **FEMA Disaster #**  **(if applicable)** | **Local Damage(s) or Loss(es)** |
| Snow event, January 23-24, 2018 | DR-4267-PA | Township-wide historic snowfall - $51,071.74 |
| COVID-19 Pandemic – March, 2020 | DR-4506-PA | Emergency Protective measures to combat COVID-19 Pandemic. |
| Remnants of Hurricane Ida – August, 2022 | DR-4618-PA | Assistance to eligible individuals and families affected by this disaster. |

**2018 Municipal Action Plan Status**

| **Existing Mitigation Action**  **(from 2018 Hazard Mitigation Plan)** | | **Status** | | | | | **Additional Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No Progress /**  **Unknown** | **In Progress** | **Continuous** | **Completed** | **Discontinued** |
| **1** | Lower Saucon Road culvert replacement at Alpine Drive. |  |  |  | X |  |  |
| **2** | Reading Drive streambank stabilization at Saucon Creek east of Bingen Road. |  |  |  | X |  |  |
| **3** | Redington Road East - streambank stabilization. |  |  |  | X |  |  |
| **4** | Black River Road channel capacity improvements east of State Route 378. | X |  |  |  |  |  |
| **5** | Reading Drive culvert replacement at Creek View Drive. | X |  |  |  |  |  |
| **6** | Wassergass Road storm sewer improvements west of Wilhelm Road. | X |  |  |  |  |  |
| **7** | Retrofit structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Phase 1: Identify appropriate candidates for retrofitting based on cost-effectiveness versus relocation.  Phase 2: Where retrofitting is determined to be a viable option, work with property owners toward implementation of that action based on available funding from FEMA and local match availability. |  | X |  |  |  |  |
| **8** | Purchase, or relocate structures located in hazard- prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority.  Phase 1: Identify appropriate candidates for relocation based on cost-effectiveness versus retrofitting.  Phase 2: Where relocation is determined to be a viable option, work with property owners toward implementation of that action based on available funding from FEMA and local match availability. |  | X |  |  |  |  |
| **9** | Maintain compliance with and good-standing in the NFIP including adoption and enforcement of floodplain management requirements (e.g. regulating all new and substantially improved construction in Special Hazard Flood Areas), floodplain identification and mapping, and flood insurance outreach to the community. Further, continue to meet and/or exceed the minimum NFIP standards and criteria through the following NFIP-related continued compliance actions identified below. |  |  | X |  |  |  |
| **10** | 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 |  |  |  |  |  |
| **11** | Begin and/or continue the process to adopt higher regulatory standards to manage flood risk (i.e. increased freeboard, cumulative substantial damage/improvements). |  | X |  |  |  |  |
| **12** | Determine if a Community Assistance Visit (CAV) or Community Assistance Contact  (CAC) is needed, and schedule if needed. |  | X |  |  |  |  |
| **13** | Have designated NFIP Floodplain  Administrator (FPA) become a Certified Floodplain Manager through the ASFPM and/or pursue relevant continuing education training such as FEMA Benefit-Cost Analysis. |  | X |  |  |  |  |
| **14** | 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 |  |  |  |  |
| **15** | Obtain and archive elevation certificates for NFIP compliance. |  |  | X |  |  |  |
| **16** | Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0. |  |  | X |  |  |  |
| **17** | Complete the ongoing updates of the  Comprehensive Emergency Management Plans. |  |  | X |  |  |  |
| **18** | Create/enhance/maintain mutual aid agreements with neighboring communities for continuity of operations. |  |  | X |  |  |  |
| **19** | Develop and maintain capabilities to process FEMA/PEMA paperwork after disasters; qualified damage assessment personnel – Improve post-disaster capabilities – damage assessment; FEMA/PEMA paperwork compilation, submissions, record keeping. |  |  | X |  |  |  |
| **20** | 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 |  |  |  |
| **21** | 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. |  |  | X |  |  |  |
| **22** | Devise an employee vaccination and immunization plan to prevent an outbreak within the municipal employee ranks. |  |  | X |  |  |  |
| **23** | Devise a municipal continuity of operations plan to keep essential services running in the event that a significant portion of the workforce is affected. |  |  | X |  |  |  |
| **24** | Devise a public education and outreach plan regarding disease prevention. |  |  | X |  |  |  |
| **25** | Provide education and outreach to residents regarding how to prevent the spread of invasive species, including quarantine procedures. |  |  | X |  |  |  |
| **26** | Develop a neighborhood cleanup plan designed to remove discarded tires, trash and other items in which standing water can form. |  |  | X |  |  |  |
| **27** | Provide training and education for first responders to ensure effective emergency care. |  |  | X |  |  |  |
| **28** | Provide education and outreach, especially in K-12, regarding drug abuse prevention. |  |  | X |  |  |  |

**Notes:**

1. Actions not carried through to the 2023 Action Plan are so noted.
2. To maintain National Flood Insurance Program (NFIP) compliance, actions related to the NFIP were carried through to the 2023 Action Plan even if identified by the municipality as completed.

**2023 Mitigation Action Plan**

| **Mitigation Action** | | **Mitigation Action Category** | **Mitigation Technique Category** | **Hazard(s) Addressed** | **Priority**  **(H / M / L)** | **Estimated Cost** | **Potential Funding** | **Lead Agency / Department** | **Implementation Schedule** | **Applies to New and / or Existing Structures** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | Lower Saucon Road culvert replacement at Alpine Drive. | 14 | Structure and Infrastructure | Flood | Medium | Medium | Municipal  Budget;  FEMA  Mitigation Grant  Programs | Municipal  Engineering and  Department of  Public Works | Long-term  (depending on funding) | Existing |
| **2** | Reading Drive streambank stabilization at Saucon Creek east of Bingen Road. | 14 | Structure and  Infrastructure,  Natural  Systems  Protection | Flood | Medium | High | Municipal  Budget;  FEMA  Mitigation Grant  Programs | Municipal  Engineering and  Department of  Public Works | Long-term  (depending on funding) | Existing |
| **3** | Redington Road East - streambank stabilization. | 14 | Structure and  Infrastructure,  Natural  Systems  Protection | Flood | Medium | High | Municipal  Budget;  FEMA  Mitigation Grant  Programs | Municipal  Engineering and  Department of  Public Works | Long-term  (depending on funding) | Existing |
| **4** | Black River Road channel capacity improvements east of State Route 378. | 14 | Structure and Infrastructure | Flood | Medium | Medium | Municipal  Budget;  FEMA  Mitigation Grant  Programs | Municipal  Engineering and  Department of  Public Works | Long-term  (depending on funding) | Existing |
| **5** | Reading Drive culvert replacement at Creek View Drive. | 14 | Structure and Infrastructure | Flood | Medium | Medium | Municipal  Budget;  FEMA  Mitigation Grant  Programs | Municipal  Engineering and  Department of  Public Works | Long-term  (depending on funding) | Existing |
| **6** | Wassergass Road storm sewer improvements west of Wilhelm Road. | 14 | Structure and  Infrastructure | Flood | Medium | Medium | Municipal  Budget; FEMA  Mitigation Grant  Programs | Municipal  Engineering and  Department of  Public Works | Long-term  (depending on funding) | Existing |
| **7** | Retrofit structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Phase 1: Identify appropriate candidates for retrofitting based on cost-effectiveness versus relocation.  Phase 2: Where retrofitting is determined to be a viable option, work with property owners toward implementation of that action based on available funding from FEMA and local match availability. | 1 | Structure and  Infrastructure | Flood | High | High | FEMA  Mitigation Grant  Programs and local budget  (or property  owner) for cost share | Municipality  (via Municipal  Engineer/NFIP Floodplain  Administrator) with support from PEMA,  FEMA | Long-term  (depending on funding) | Existing |
| **8** | Purchase, or relocate structures located in hazard- prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority.  Phase 1: Identify appropriate candidates for relocation based on cost-effectiveness versus retrofitting.  Phase 2: Where relocation is determined to be a viable option, work with property owners toward implementation of that action based on available funding from FEMA and local match availability. | 2 | Structure and  Infrastructure | Flood | High | High | FEMA  Mitigation Grant  Programs and local  budget (or property  owner) for cost share | Municipality  (via Municipal  Engineer/NFIP Floodplain  Administrator) with support from PEMA,  FEMA | Long-term  (depending on funding) | Existing |
| **9** | Maintain compliance with and good-standing in the NFIP including adoption and enforcement of floodplain management requirements (e.g. regulating all new and substantially improved construction in Special Hazard Flood Areas), floodplain identification and mapping, and flood insurance outreach to the community. Further, continue to meet and/or exceed the minimum NFIP standards and criteria through the following NFIP-related continued compliance actions identified below. | 3 | Local plans  & Regulations | Flood | High | Low -  Medium | Municipal Budget | Municipality  (via Municipal  Engineer/NFIP Floodplain  Administrator) with support from PEMA,  ISO FEMA | Ongoing | New &  Existing |
| **10** | 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. | 4 | Education and  Awareness | All Hazards | High | Low-  Medium | Municipal Budget | Municipality with support  from Planning Partners,  PEMA, FEMA | Short-term | N/A |
| **11** | Begin and/or continue the process to adopt higher regulatory standards to manage flood risk (i.e. increased freeboard, cumulative substantial damage/improvements). | 5 | Local Plans and  Regulations | Flood | High | Low | Municipal Budget | Municipality  (via Municipal  Engineer/NFIP Floodplain  Administrator) with support from PEMA,  FEMA | Short-term | New &  Existing |
| **12** | Determine if a Community Assistance Visit (CAV) or Community Assistance Contact  (CAC) is needed, and schedule if needed. | 3 | Local Plans and  Regulations | Flood | High | Low | Municipal Budget | NFIP  Floodplain  Administrator with support  from PADEP,  PEMA, FEMA | Short-term | N/A |
| **13** | Have designated NFIP Floodplain  Administrator (FPA) become a Certified Floodplain Manager through the ASFPM and/or pursue relevant continuing education training such as FEMA Benefit-Cost Analysis. | 6 | Local Plans and  Regulations | Flood | Medium | Low | Municipal Budget | NFIP  Floodplain  Administrator | Short-term  (depending on funding) | N/A |
| **14** | Participate in the Community Rating System (CRS) to further manage flood risk and reduce flood insurance premiums for NFIP policyholders. This shall start with the submission to FEMA-DHS of a Letter of Intent to join CRS, followed by the completion and submission of an application to the program once the community’s current compliance with the NFIP is established. | 7 | Local Plans and  Regulations | Flood | High | Low | Municipal Budget | NFIP Floodplain  Administrator with support  from PADEP,  PEMA, FEMA | Short-term | N/A |
| **15** | Obtain and archive elevation certificates for NFIP compliance. | 8 | Local Plans and  Regulations | Flood | Low | Low | Municipal Budget | NFIP Floodplain Administrator | Ongoing | N/A |
| **16** | Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0. | 9 | All  Categories | All Hazards | Medium | 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 |
| **17** | Complete the ongoing updates of the Comprehensive Emergency Management Plans. | 10 | Local Plans and  Regulations | All Hazards | Medium | Low | Municipal Budget | Municipality with support from PEMA | Ongoing | New &  Existing |
| **18** | Create/enhance/maintain mutual aid agreements with neighboring communities for continuity of operations. | 11 | All  Categories | All Hazards | Medium | Low | Municipal Budget | Municipality with support from  surrounding  municipalities and County | Ongoing | New &  Existing |
| **19** | Develop and maintain capabilities to process FEMA/PEMA paperwork after disasters; qualified damage assessment personnel – Improve post-disaster capabilities – damage assessment; FEMA/PEMA paperwork compilation, submissions, record keeping. | 12 | Education and  Awareness | All Hazards | Low | Medium | Municipal Budget | Municipality with support  from County,  PEMA, FEMA | Short-term | N/A |
| **20** | 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 and  Awareness | All Hazards | Medium | Medium | Municipal  Budget,  FEMA  HMA grant programs | Municipality with support  from County,  PEMA | Short-, long-term (depending on funding) | N/A |
| **21** | Coordinate with the County Emergency Management Agency and PA Department of Health, which is responsible for setting up points of distribution and providers for immunizations. | 11 | Local Plans and  Regulations | Pandemic and  Infectious  Disease | Medium | Low | Municipal Budget | Municipality, working with  County EMA and PA  Department of Health | Ongoing | N/A |
| **22** | Devise an employee vaccination and immunization plan to prevent an outbreak within the municipal employee ranks. | 27 | Local Plans and  Regulations | Pandemic and  Infectious  Disease | High | Low | Municipal Budget | Municipality | Short-term | N/A |
| **23** | Devise a municipal continuity of operations plan to keep essential services running in the event that a significant portion of the workforce is affected. | 11 | Local Plans and  Regulations | Pandemic and  Infectious  Disease | Medium | Low | Municipal Budget | Municipality | Short-term | N/A |
| **24** | Devise a public education and outreach plan regarding disease prevention. | 27 | Education and  Awareness | Pandemic and  Infectious  Disease | High | Low | Municipal Budget | Municipality | Ongoing | N/A |
| **25** | Provide education and outreach to residents regarding how to prevent the spread of invasive species, including quarantine procedures. | 27 | Education and  Awareness | Invasive Species | High | Low | Municipal Budget | Municipality | Ongoing | N/A |
| **26** | Develop a neighborhood cleanup plan designed to remove discarded tires, trash and other items in which standing water can form. | 27 | Education and  Awareness | Invasive Species | High | Low | Municipal Budget | Municipality | Short-term | N/A |
| **27** | Provide training and education for first responders to ensure effective emergency care. | 27 | Local Plans and  Regulations | Drug  Overdose  Crisis | High | Low | Municipal Budget | Municipality | Ongoing | N/A |
| **28** | Provide education and outreach, especially in K-12, regarding drug abuse prevention. | 27 | Education and  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 andCommunities
* **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