**Whitehall Township, Lehigh County Annex**

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

|  |  |
| --- | --- |
| **Primary:** | **Alternate:** |
| Christopher Grim  Emergency Manager  3219 MacArthur Road, Whitehall, PA 18052  610-437-5524  cgrim@whitehalltownship.com | Sheldon Christman  Director of Public Works  3219 MacArthur Road, Whitehall, PA 18052  610-437-5524  schristman@whitehalltownship.com |

**Municipal Profile**

Whitehall Township is a rural-suburban township located in east-central Lehigh County, along the border with Northampton County. The township encompasses a land area of 12.8 square miles, and has a population of 29,173 (2020 Census). Whitehall Township is bordered by; Coplay Borough, Catasauqua Borough, Hanover Township, Northampton Borough, and North Catasauqua Borough (both Northampton County) to the east; the City of Allentown to the south; South Whitehall Township to the west and southwest; and North Whitehall Township to the west and northwest.

Whitehall Township is situated along the western bank of the Lehigh River. The township drains in the Lehigh River, which separates it from Northampton County and Catasauqua Borough. Three tributaries of the Lehigh River drain the township: Spring Creek in the northern-most area, Coplay Creek for the central and majority of the township, and Jordan Creek in the southern area bordering South Whitehall Township and Allentown.

The township’s main north-south road is Route 145 (MacArthur Road), which has an interchange with Highway 22 in the southern-most part of the township, and crosses Route 329 in the north. Route 329 runs east-west across the northern part of the township, connecting to Northampton County in the east and North Whitehall Township in the west. In the south, Route 22 crosses east-west through Whitehall Township, connecting points in eastern PA to Allentown, and continuing west through Pittsburgh and beyond. Locally, Mechanicsville Road and Lehigh Street bisect the center of the township, running east-west to points west to South Whitehall Township and east to North Catasauqua Borough (Northampton County), respectively.

**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.

|  |  |
| --- | --- |
| Jack Meyers, Deputy Mayor  Role: Deputy Mayor | Lee Rackus, Director of Zoning and Development  Role: Director of Zoning and Development |
| Christopher Grim, Emergency Management  Role: Emergency Management Coordinator | Sheldon Christman, Director of Public Works  Role: Public Works |
| Carl Lagler, Engineer  Role: 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: The public will be notified via the township newsletter and social media

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 | N/A |
| Is floodplain management an auxiliary function? | Community FPA | N/A |
| Provide an explanation of NFIP administration services (e.g., permit review, GGIS, education or outreach, inspections, engineering capability) | Community FPA | N/A |
| 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 | N/A |
| Are there any outstanding compliance issues (i.e., current violations)? |  | N/A |
| When was the most recent Community Assistance Visits (CAV) or Community Assistance Contact (CAC)? |  | N/A |
| Is a CAV or CAC scheduled or needed? |  | N/A |
| **3. Regulation** | | |
| When did the community enter the NFIP? | NFIP Community Status Book | N/A |
| Are the Flood Insurance Rate Maps (FIRMs) digital or paper?  How are residents assisted with mapping? | Community FPA | N/A |
| Do floodplain regulations meet or exceed FEMA or State minimum requirements?  If so, in what ways? | Community FPA | N/A |
| Describe the permitting process | Community FPA, State, FEMA NFIP | N/A |
| **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 | N/A |
| **5. Community Rating System (CRS)** | | |
| Does the community participate in CRS? | Community FPA, State, or FEMA NFIP | N/A |
| 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.

Whitehall Township has two nursing homes

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

Whitehall Township receives a large amount of visitors that are traveling through the township to get to northern destinations and due to the large shopping centers/malls that we have.

1. **Economy**

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

Whitehall Township has two major shopping malls and three major shopping centers in the community that would have a severe impact if there were losses. We have a large commercial base

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.

None

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.

None

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

A major pipeline traverses the township from west to east

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

None

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

1 police station

1 emergency operations center

4 fire stations

Whitehall/Coplay School District Campus – K-12 on one large campus

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

2 historic buildings

3 trail systems

**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 |  |  | Planning, Zoning &  Development |  |  |  |  |  |
| Capital Improvement Plan | X |  |  | Administration |  |  |  |  |  |
| Economic Development Plan |  |  |  |  |  |  |  |  |  |
| Continuity of Operations Plan |  |  | X | Emergency  Management Agency |  |  |  |  |  |
| Stormwater Management Plan / Ordinance | X |  |  | Planning,  Zoning &  Development |  |  |  |  |  |
| Open Space Management Plan (or Parks/Rec., Greenways Plan) | X |  |  | Planning,  Zoning &  Development |  |  |  |  |  |
| Natural Resource Protection Plan |  |  | X |  |  |  |  |  |  |
| Transportation Plan |  |  |  |  |  |  |  |  |  |
| Historic Preservation Plan |  |  |  |  |  |  |  |  |  |
| Floodplain Management Plan | X |  |  | Planning, Zoning & Development |  |  |  |  |  |
| Farmland Preservation |  |  | X | Planning, Zoning & Development |  |  |  |  |  |
| Evacuation Plan | X |  |  | Emergency  Management Agency |  |  |  |  |  |
| Disaster Recovery Plan |  |  | X | Emergency  Management Agency |  |  |  |  |  |
| Hazard Mitigation Plan | X | 2018 |  | Emergency  Management Agency |  |  |  |  |  |
| Emergency Operations Plan | X |  |  | Emergency  Management Agency |  |  |  |  |  |
| Zoning Regulations | X |  |  | Planning, Zoning & Development |  |  |  |  |  |
| Floodplain Regulations | X |  |  | Planning, Zoning & Development |  |  |  |  |  |
| NFIP Participation | X |  |  | Planning, Zoning & Development |  |  |  |  |  |
| Building Code | X |  |  | Planning, Zoning & Development |  |  |  |  |  |
| Fire Code | X |  |  | Planning, Zoning & Development |  |  |  |  |  |
| 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 |  | Planning,  Zoning &  Development |  |  |  |
| Planners or engineers (with natural and / or human-caused hazards knowledge) | X |  | Planning,  Zoning &  Development |  |  |  |
| Engineers or professionals trained in building and / or infrastructure construction practices (including building inspectors) | X |  | Planning,  Zoning &  Development |  |  |  |
| Emergency Manager | X |  | Emergency  Management Agency |  |  |  |
| Floodplain administrator / manager | X |  | Planning,  Zoning &  Development |  |  |  |
| Land surveyors | X |  | Planning,  Zoning &  Development |  |  |  |
| Staff familiar with the hazards of the community | X |  | Planning,  Zoning &  Development |  |  |  |
| Personnel skilled in Geographical Information Systems (GIS) and / or FEMA’s HAZUS program | X |  | Planning,  Zoning &  Development |  |  |  |
| Grant writers or fiscal staff to handle large / complex grants | X |  | Administration |  |  |  |
| 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 |  | Administration |  |  |  |
| Community Development Block Grants (CDBG) | X |  | Planning, Zoning & Development |  |  |  |
| Special purposes taxes |  |  |  |  |  |  |
| Gas / Electricity utility fees |  |  |  |  |  |  |
| Water / Sewer fees |  |  |  |  |  |  |
| Stormwater utility fees | X |  | Planning, Zoning & Development |  |  |  |
| Development impact fees | X |  | Planning, Zoning & Development |  |  |  |
| General obligation, revenue, and / or special tax bonds | X |  | Administration |  |  |  |
| Partnering arrangements or intergovernmental agreements | X |  | Administration |  |  |  |
| Other |  |  |  |  |  |  |
| **4. Education & Outreach** | Firewise Communities Certification |  |  |  |  |  |  |
| StormReady Certification |  |  |  |  |  |  |
| Natural disaster or safety-related school programs |  |  |  |  |  |  |
| Ongoing public education or information programs such as, responsible water use, fire safety, household preparedness, and environmental education. | X |  | Fire Dept, Emergency Management Agency |  |  |  |
| Public-private partnership initiatives addressing disaster related issues. | X |  | Emergency Management Agency |  |  |  |
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | X |  | Emergency Management  Agency, Recreation |  |  |  |
| Other |  |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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 |  |  |
| 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** |
| N/A |  |  |  |  |  |

**Natural & Non-Natural Event History Specific to Whitehall Township**

|  |  |  |
| --- | --- | --- |
| **Type of Event and Date(s)** | **FEMA Disaster #**  **(if applicable)** | **Local Damage(s) or Loss(es)** |
| Straight Line Winds – 7/2015 | N/A | Unknown |
| Winter Storm Jonas – 1/2016 | DR-4267-PA | Unknown |
| Pennsylvania COVID-19 Pandemic – 1/2020 | DR-4506-PA | Emergency Protective measures to combat COVID-19 Pandemic. |

**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** | Norfolk Southern Culvert over Coplay Creek – Engineering and removal of flow restriction from the original 1910 design of the culvert. At present, SR 1010 ADT of 15,000 closes. Water Street homes are without fire services during flooding due to the weight restriction and poor condition of the bridge to the north (SR 1014) that is the only other access to  Water Street. 5 businesses in the area of Eberhart Road must close during times of flooding. | X |  |  |  |  |  |
| **2** | Overlook Basin Upgrades at Overlook Road – Upsize the existing outfall piping to keep flows underground to the Jordan Creek. The emergency spillway for this basin uses three township roads and Rt.145 to convey the stormwater to the Jordan Creek during overtop conditions. The roadways are mass transit and school bus routes coupled with high pedestrian traffic; such exposure in this corridor would be eliminated. | X |  |  |  |  |  |
| **3** | Whitehall Police Department Emergency Generator replacement / upgrade - Presently the PD emergency generator only provides emergency lighting during power outages. The goal is to replace the generator upgrading to full stand-alone operation of the PD with 24 hours operation of 50 employees. |  |  |  |  | X |  |
| **4** | Traffic/Evacuation/Emergency Route flooding. | X |  |  |  |  |  |
| **5** | Development of Emergency Mgt. Office and EOC. |  |  | X |  |  |  |
| **6** | Work with PennDOT to conduct additional studies of the impacts of removing the 5th Street bridge, which is adjacent and parallels SR 1015. |  |  | 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. Specifically identified are the following: - Residences on Creekside Road (incl. 2 Repetitive Loss)  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. Specifically identified are the following:  - Residences on Creekside Road (incl. 2 Repetitive Loss)  - Sinkhole remediation to protect infrastructure near private home, which has suffered significant sinkhole damage. Twp will follow procedures to mitigate future involvement of neighboring homes, streets, and infrastructure.  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.  - Have already recommended sinkhole insurance to residents through the Township Newsletter. |  |  | 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 |  |  |  |

**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** | | **Regional 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** | Norfolk Southern Culvert over Coplay Creek – Engineering and removal of flow restriction from the original 1910 design of the culvert. At present, SR 1010 ADT of 15,000 closes. Water Street homes are without fire services during flooding due to the weight restriction and poor condition of the bridge to the north (SR 1014) that is the only other access to  Water Street. 5 businesses in the area of Eberhart Road must close during times of flooding. | 25 | Structure & Infrastructure | Flood | Medium | Medium | TBD | Township with support from  Township  Public Works | Long-term  (depending on funding) | Existing |
| **2** | Overlook Basin Upgrades at Overlook Road – Upsize the existing outfall piping to keep flows underground to the Jordan Creek. The emergency spillway for this basin uses three township roads and Rt.145 to convey the stormwater to the Jordan Creek during overtop conditions. The roadways are mass transit and school bus routes coupled with high pedestrian traffic; such exposure in this corridor would be eliminated. | 24 | Structure & Infrastructure | Flood | Medium | High | TBD | Township | Long-term  (depending on funding) | New |
| **3** | Traffic/Evacuation/Emergency Route flooding. | 16 | Education & Awareness | All Hazards | High | Low | Federal,  State,  Municipal funding | Township  Police, Fire and Public  Works | Long-term | Existing |
| **4** | Development of Emergency Mgt. Office and EOC. | 18 | Structure & Infrastructure | All Hazards | High | Low | TBD | Township  Office of  Emergency  Management | Long-term  (depending on funding) | N/A |
| **5** | Work with PennDOT to conduct additional studies of the impacts of removing the 5th Street bridge, which is adjacent and parallels SR 1015. | 25 | Structure & Infrastructure | Traffic  Accidents | Medium | Low | Federal,  State funding | Township  Engineering with  PennDOT | Long-term  (depending on funding) | Existing |
| **6** | 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: - Residences on Creekside Road (incl. 2 Repetitive Loss)  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 & Infrastructure | Flood | High | Medium | 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 |
| **7** | 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:  - Residences on Creekside Road (incl. 2 Repetitive Loss)  - Sinkhole remediation to protect infrastructure near private home, which has suffered significant sinkhole damage. Twp will follow procedures to mitigate future involvement of neighboring homes, streets, and infrastructure.  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 & 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** | 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 |
| **9** | 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.  - Have already recommended sinkhole insurance to residents through the Township Newsletter. | 4 | Education  & Awareness | All Hazards | High | Low-  Medium | Municipal Budget | Municipality with PEMA,  FEMA | Short-term | N/A |
| **10** | 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  & Regulations | Flood | High | Low | Municipal Budget | Municipality  (via Municipal  Engineer/NFIP Floodplain  Administrator) with support from PEMA,  FEMA | Short-term | New &  Existing |
| **11** | Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed. | 3 | Local plans  & Regulations | Flood | High | Low | Municipal Budget | NFIP  Floodplain  Administrator with support  from PA DEP,  PEMA, FEMA | Short-term | N/A |
| **12** | 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  & Regulations | Flood | Medium | Low | Municipal Budget | NFIP  Floodplain  Administrator | Short-term  (depending on funding) | N/A |
| **13** | 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  & Regulations | Flood | High | Low | Municipal Budget | NFIP  Floodplain  Administrator with support  from PA DEP,  PEMA, FEMA | Short-term | N/A |
| **14** | Obtain and archive elevation certificates for NFIP compliance. | 8 | Local plans  & Regulations | Flood | Low | Low | Municipal Budget | NFIP  Floodplain  Administrator | Ongoing | N/A |
| **15** | Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0. | 9 | All  Categories | All Hazards | High | Low – High (for  5-year update) | Municipal Budget, possibly  FEMA  Mitigation  Grant  Funding for 5-year update | Municipality (via mitigation planning point of contacts)  with support  from Planning Partners  (through their Points of  Contact),  PEMA | Ongoing | New &  Existing |

**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