**City of Easton, Northampton County Annex**

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

|  |  |
| --- | --- |
| **Primary:** | **Alternate:** |
| Stephen Nowroski  Director of Planning & Codes  123 S. 3rd Street, Easton, PA 18042  610-250-6723  snowroski@easton-pa.gov | Carl Manges  Planning Administrator  123 S. 3rd Street, Easton, PA 18042  610-250-6609  cmanges@easton-pa.gov |

**Municipal Profile**

With an estimated population of 28,127 (2020 Census), the City of Easton is the smallest of three adjacent cities creating the urban core of the Lehigh Valley, encompassing an area of approximately 4.7 square miles. The City is bordered by Forks Township to the north; Palmer Township around Hackett Park and to the northeast; Wilson Borough and West Easton Borough to the west; Williams Township and Glendon Borough to the south; and the State of New Jersey to the east.

Easton is situated at the confluence of the Lehigh River and Delaware River. The Delaware River forms the city’s eastern border with the State of New Jersey. The Lehigh River flows into the city’s borders from the southwest and turns east through the city itself. The Bushkill Creek also flows through the city, meandering from the northwest corner eastward to the Delaware River.

Five major roadways serve the City. Interstate 78 passes just south of the city and is a major expressway in the area. US Route 22 passes east-west through the northern part of the city and connects Pennsylvania with New Jersey. PA Route 33 passes north south to the west of the city, though it does cross the city’s official borders when it crosses the Lehigh River just north of its interchange with Interstate 78. PA Route 248 (Northampton Street), a major roadway in the Lehigh Valley, enters the city from just north of the midpoint of the city’s western border, and terminates after crossing into New Jersey. PA Route 611 (Delaware Drive) travels north south along the Delaware River, changing names from South Delaware Drive south of the Lehigh River, crossing the Lehigh River as Third Street, continuing north as Larry Holmes Drive, Riverside Drive, and Garden Drive, and becoming North Delaware Drive after crossing the Bushkill Creek.

Lehigh Valley International Airport is located 15 miles west of Easton in Hanover Township, serving as the City’s primary airport. Easton is important to Norfolk Southern’s rail system, as it is home to three rail bridges between Pennsylvania and New Jersey

**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.

|  |  |
| --- | --- |
| Stephen Nowroski, Director of Planning and Codes  Role: Support | Carl Manges, Planning Administrator/Floodplain Administrator  Role: Data gathering |
| Mark Hammerstone, City Engineer  Role: Implementation | David Hopkins, Director of Public Works  Role: Implementation |

*\*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.

Easton Environmental Advisory Council

Lafayette College

Easton Housing Authority

City of Easton Public Works

Police Department

Fire Department

Easton Business Association

The Boys and Girls Club of Easton

Easton Main Street Initiative

ProJeCt of Easton

Third Street Alliance

Nurture Nature Center

College Hill Neighborhood Association

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: Social media, Communication with stakeholders, City website, Announcements with utility bills, Outreach through the city emergency alerts service NIXLE, and public meetings

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 | No |
| Provide an explanation of NFIP administration services (e.g., permit review, GGIS, education or outreach, inspections, engineering capability) | Community FPA | Zoning application review, GIS |
| 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)? |  | N/A |
| Is a CAV or CAC scheduled or needed? |  | No |
| **3. Regulation** | | |
| When did the community enter the NFIP? | NFIP Community Status Book | 10/17/1978 |
| Are the Flood Insurance Rate Maps (FIRMs) digital or paper?  How are residents assisted with mapping? | Community FPA | Digital 2014 |
| Do floodplain regulations meet or exceed FEMA or State minimum requirements?  If so, in what ways? | Community FPA | Yes, updated floodplain ordinance based on FEMA regulations. |
| Describe the permitting process | Community FPA, State, FEMA NFIP | Floodplain application has to be submitted. Includes an evacuation procedure and how a flood event or warning is monitored. Any new development is inspected to make sure of floodplain compliance. |
| **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 | 110 |
| 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 | 41 |
| How many structures are exposed to flood risk within the community? | Community FPA or GIS Analyst | 208 |
| Describe any areas of flood risk with limited NFIP policy coverage | Community FPA or  FEMA Insurance Specialist | None |
| **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.

Harlan House

Walters House

Bushkill House

Easton Home

Safe Harbor

Third Street Alliance

Transitional Housing

Northampton County Prison

Neston Heights Citizen Living

Public Housing Units on Rock, Milton, Union, St. Joseph, and

Elm Streets.

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

Crayola

State Theatre

Hotels

Lafayette College

Government Buildings

Annual Festivals

1. **Economy**

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

Lafayette College

City Government

Crayola

Housing Authority

City of Easton

Express Times

EPS Financial

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.

Lehigh / Delaware Dam

Chain Dam

Bushkill Creek Dam

Riparian buffer along Delaware & Lehigh Rivers

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.

Easton Downtown

Lehigh Drive

Bushkill Drive

The Flats including Lynn Street, Winter Street and Buttonwood Street

Route 611

N & S Delaware Drive

N. 3rd Street, north of Route 22

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

Sewage Treatment Plant

Water Treatment Plant

Intermodal Center

Met-Ed

Lafayette Substation

Lehigh Drive Pumping Station

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

Lehigh / Delaware Dam

Chain Dam

Bushkill Creek Dam

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

Easton Police Department

South Side Fire Station

College Hill Fire Station

Central Fire Station

Safe Harbor

Third Street Alliance

Lafayette College

Cheston Elementary School

Paxinosa Elementary School

March Elementary School

Easton Arts Academy Charter School

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

State Theatre

Riverside Park

Scott Park

Hugh Moore Park

Northampton County Historical and Genealogical Society (Sigal Museum)

Easton Public Library

Cottingham Stadium

Bachmann Publik House

Delaware Canal State Park

**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 | 2017 |  | Planning & Codes | Supports | Positive | Waterfront corridors provide information on appropriate design in flood zones |  |  |
| Capital Improvement Plan | X |  |  | Finance |  |  |  |  |  |
| Economic Development Plan | X |  |  | Economic Development |  |  |  |  |  |
| Continuity of Operations Plan | X |  |  | Administration |  |  |  |  |  |
| Stormwater Management Plan / Ordinance | X |  |  | Planning & Codes |  |  |  |  |  |
| Open Space Management Plan (or Parks/Rec., Greenways Plan) | X |  |  | Planning & Codes |  |  |  |  |  |
| Natural Resource Protection Plan | X |  |  | Planning & Codes |  |  |  |  |  |
| Transportation Plan | X |  |  | Planning & Codes |  |  |  |  |  |
| Historic Preservation Plan | X |  |  | Planning & Codes |  |  |  |  |  |
| Floodplain Management Plan | X |  |  | Planning & Codes |  |  |  |  |  |
| Farmland Preservation |  |  |  |  |  |  |  |  |  |
| Evacuation Plan | X |  |  | Police |  |  |  |  |  |
| Disaster Recovery Plan | X |  |  | Emergency Management |  |  |  |  |  |
| Hazard Mitigation Plan | X | 2018 |  | Planning & Codes |  |  |  |  |  |
| Emergency Operations Plan | X | 6/2020 |  | Emergency Management |  |  |  |  |  |
| **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** | Zoning Regulations | X |  |  | Planning & Codes |  |  |  |  |  |
| Floodplain Regulations | X | 2014 |  | Planning & Codes |  |  |  |  |  |
| NFIP Participation | X |  |  | Planning & Codes |  |  |  |  |  |
| Building Code | X |  |  | Codes |  |  |  |  |  |
| Fire Code | X |  |  | Codes |  |  |  |  |  |
| 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 |  |  |  |
| Planners or engineers (with natural and / or human-caused hazards knowledge) | X |  | Planning / Engineering |  |  |  |
| Engineers or professionals trained in building and / or infrastructure construction practices (including building inspectors) | X |  | Codes and Fire |  |  |  |
| Emergency Manager | X |  | Fire & Planning |  |  |  |
| Floodplain administrator / manager | X |  | Planning |  |  |  |
| Land surveyors |  |  |  |  |  |  |
| Staff familiar with the hazards of the community | X |  | All Departments |  |  |  |
| Personnel skilled in Geographical Information Systems (GIS) and / or FEMA’s HAZUS program | X |  | Planning |  |  |  |
| Grant writers or fiscal staff to handle large / complex grants | X |  | All Department |  |  |  |
| 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 |  | Finance & Administration |  |  |  |
| Community Development Block Grants (CDBG) | X |  | Economic Development |  |  |  |
| Special purposes taxes | X |  | Finance & Administration |  |  |  |
| Gas / Electricity utility fees | X |  | Finance & Administration |  |  |  |
| Water / Sewer fees | X |  | Finance & Administration |  |  |  |
| Stormwater utility fees | X |  | Finance & Administration |  |  |  |
| Development impact fees | X |  | Finance & Administration |  |  |  |
| General obligation, revenue, and / or special tax bonds | X |  | Finance & Administration |  |  |  |
| Partnering arrangements or intergovernmental agreements | X |  | Administration |  |  |  |
| Other |  |  |  |  |  |  |
| **4. Education & Outreach** | Firewise Communities Certification |  |  |  |  |  |  |
| StormReady Certification |  |  |  |  |  |  |
| Natural disaster or safety-related school programs | X |  | Fire | New Program |  |  |
| Ongoing public education or information programs such as, responsible water use, fire safety, household preparedness, and environmental education. | X |  | Fire | New Program |  |  |
| Public-private partnership initiatives addressing disaster related issues. |  |  |  |  |  |  |
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | X |  | Nurture Nature | New program for Environmental Education | They are studying City Vulnerability |  |
| 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** |
| None |  |  |  |  |  |

**Natural & Non-Natural Event History Specific to the City of Easton**

|  |  |  |
| --- | --- | --- |
| **Type of Event and Date(s)** | **FEMA Disaster #**  **(if applicable)** | **Local Damage(s) or Loss(es)** |
| Pennsylvania COVID-19 Pandemic – 1/2020 | DR-4506-PA | Emergency Protective measures to combat COVID-19 Pandemic. |
| Remnants of Hurricane Ida | 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** | Dam removals from Bushkill Creek. |  |  | X |  |  |  |
| **2** | 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:  - Movement of mechanicals to floors above flood elevations  - Strict enforcement of statewide building codes  - Flood notifications  - Post flood assessments  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 |  |  |  |
| **3** | 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:  - Purchase properties by eminent domain  - Acquire blighted properties  - Prevent inappropriate re-development through zoning & codes  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 |  |  |  |
| **4** | Maintain compliance with and 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 and criteria through the following NFIP-related continued compliance actions identified below. |  |  | X |  |  |  |
| **5** | Conduct and facilitate public education & outreach for residents & businesses to include, but not be limited to, the following to promote & effect natural hazard risk reduction:  - Provide & maintain links to the HMP website, & regularly post notices on the County/municipal homepage(s) referencing the HMP webpages.  - Prepare & distribute informational letters to flood vulnerable property owners & neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, & 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 |  |  |  |
| **6** | Begin and/or continue the process to adopt higher regulatory standards to manage flood risk (i.e. increased freeboard, cumulative substantial damage/improvements). |  |  | X |  |  |  |
| **7** | Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed. |  |  | X |  |  |  |
| **8** | 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 |  |  |  |
| **9** | 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 |  |  |  |
| **10** | Obtain and archive elevation certificates for NFIP compliance. |  |  | X |  |  |  |
| **11** | Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0. |  |  | X |  |  |  |
| **12** | Complete the ongoing updates of the Comprehensive Emergency Management Plans. |  |  | X |  |  |  |
| **13** | Create/enhance/maintain mutual aid agreements with neighboring communities for continuity of operations. |  |  | X |  |  |  |
| **14** | 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 |  |  |  |
| **15** | 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 |  |  |  |
| **16** | PA-611 Bushkill Creek Bridge – Continue to petition state DOT to perform necessary mitigation of bridge. |  |  | X |  |  |  |
| **17** | Cemetery Bridge – Identify appropriate mitigation, secure funding, implement mitigation project. |  |  | X |  |  |  |
| **18** | Hugh Moore Park Bridge– Identify appropriate mitigation, secure funding, implement mitigation project. |  |  | X |  |  |  |
| **19** | Glendon Bridge– Identify appropriate mitigation, secure funding, implement mitigation project. |  |  | X |  |  |  |
| **20** | Relocate City Services Center (500 Bushkill Drive) - currently in Bushkill Creek flood area. Studying feasibility and potential relocation sites. |  |  | 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** | Dam removals from Bushkill Creek. | 24 | Structure & Infrastructure | Flood | Medium | Medium - High | FEMA Mitigation Grant Programs & Municipal Budget (or Property Owner) for cost share | Engineering / Public Works | Long-term  (depending on funding) | Existing |
| **2** | 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:  - Movement of mechanicals to floors above flood elevations  - Strict enforcement of statewide building codes  - Flood notifications  - Post flood assessments  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,  Windstorm/ Tornado,  Earthquake | Medium- High | High | FEMA  Mitigation Grant  Programs & Municipal  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 |
| **3** | 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:  - Purchase properties by eminent domain  - Acquire blighted properties  - Prevent inappropriate re-development through zoning & codes  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. | 1 | Structure & Infrastructure | Flood | High | High | FEMA  Mitigation Grant  Programs & Municipal 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 |
| **4** | Maintain compliance with and 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 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 |
| **5** | public education & outreach for residents & businesses to include, but not be limited to, the following to promote & effect natural hazard risk reduction:  - Provide & maintain links to the HMP website, & regularly post notices on the County/municipal homepage(s) referencing the HMP webpages.  - Prepare & distribute informational letters to flood vulnerable property owners & neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, & 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. | 27 | Education  & Awareness | All Hazards | High | Low-  Medium | Municipal Budget | Municipality with support  from Planning Partners,  PEMA, FEMA | Short-term | N/A |
| **6** | 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 |
| **7** | 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 PADEP,  PEMA, FEMA | Short-term  (year 1) | N/A |
| **8** | 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 |
| **9** | 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 PADEP,  PEMA, FEMA | Short-term  (year 1) | N/A |
| **10** | Obtain and archive elevation certificates for NFIP compliance. | 8 | Local plans  & Regulations | Flood | Low | Low | Municipal Budget | NFIP  Floodplain  Administrator | Ongoing | N/A |
| **11** | 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) w/  support from  Planning Partners  (through their Points of Contact), PEMA | Ongoing | New &  Existing |
| **12** | Complete the ongoing updates of the Comprehensive Emergency Management Plans. | 10 | Local plans  & Regulations | Flood | Medium | Low | Municipal Budget | NFIP Floodplain  Administrator with support  from PADEP,  PEMA, FEMA | Ongoing | New & Existing |
| **13** | 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 |
| **14** | 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 & Awareness | All Hazards | Low | Medium | Municipal Budget | Municipality with support from County, PEMA, FEMA | Short-term | N/A |
| **15** | 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 & 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 |
| **16** | PA-611 Bushkill Creek Bridge – Continue to petition state DOT to perform necessary mitigation of bridge. | 25 | Structure & Infrastructure | Flood | Mediem | High | State Infrastructure Budget | State DOT | Long-term (depending on funding) | Existing |
| **17** | Cemetery Bridge – Identify appropriate mitigation, secure funding, implement mitigation project. | 25 | Structure & Infrastructure | Flood | Medium | High | Municipal  Budget;  Grant funding as available | Engineering / Public Works | Long-term  (depending on funding) | Existing |
| **18** | Hugh Moore Park Bridge– Identify appropriate mitigation, secure funding, implement mitigation project. | 25 | Structure & Infrastructure | Flood | Medium | High | Municipal  Budget;  Grant funding as available | Engineering / Public Works | Long-term  (depending on funding) | Existing |
| **19** | Glendon Bridge– Identify appropriate mitigation, secure funding, implement mitigation project. | 25 | Structure & Infrastructure | Flood | Medium | High | Municipal  Budget;  Grant funding as available | Engineering / Public Works | Long-term  (depending on funding) | Existing |
| **20** | Relocate City Services Center (500 Bushkill Drive) - currently in Bushkill Creek flood area. Studying feasibility and potential relocation sites. | 2 | Structure & Infrastructure | Flood | High | High | Municipal  Budget;  Grant funding as available | Engineering / Public Works | Long-term  (depending on funding) | 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