**Bushkill Township, Northampton County Annex**

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

|  |  |
| --- | --- |
| **Primary:** | **Alternate:** |
| Belinda RobertsTownship Manager1114 Bushkill Center Road, Nazareth, PA 18064484-747-8514belinda@bushkilltownship.com | Thomas BarnowskiEmergency Management Coordinator1114 Bushkill Center Road, Nazareth, PA 18064484-221-2160tbarnowski@northampton.edutbarnowski@bushkilltownship.com |

**Municipal Profile**

Bushkill Township is a rural township located in the north-central part of Northampton County. It encompasses an area of approximately 25.3 square miles and has a population of 8,482 (2020 Census). The township is bordered by Moore Township to the west, Upper Nazareth Township to the south, Plainfield Township to the east, and Ross Township (Monroe County) to the north.

The Bushkill Creek flows from the township’s higher elevations in the north and west, to the southeast corner of the township and into Upper Nazareth Township.

PA Route 512 (Moorestown Road) travels northeast through the township, from the center of the western border with Moore Township to the northern part of the eastern border with Plainfield Township. PA Route 33 travels north south along the township’s eastern edge before bending eastward into Plainfield 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.

|  |  |
| --- | --- |
| Belinda Roberts, Township ManagerRole: Primary Contact | Thomas Barnowski, Emergency Management CoordinatorRole: Secondary Contact |
| Kerry Reider, Open Space CoordinatorRole: Floodplain Administrator |

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.

Board of Supervisors

Planning Commission

Bushkill Township Volunteer Fire Company

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: Newsletter, Website, Municipal 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 | Yes |
| Provide an explanation of NFIP administration services (e.g., permit review, GGIS, education or outreach, inspections, engineering capability) | Community FPA | Permit Review, Education, Outreach, INspections |
| What are the barriers to running an effective NFIP program in the community, if any? | Community FPA | None |
| **2. Compliance History** |
| Is the community in good standing with the NFIP? | State NFIP Coordinator, FEMA NFIP Specialist, or community records | Yes |
| Are there any outstanding compliance issues (i.e., current violations)? |  | No |
| When was the most recent Community Assistance Visits (CAV) or Community Assistance Contact (CAC)? |  | Never |
| Is a CAV or CAC scheduled or needed? |  | No |
| **3. Regulation** |
| When did the community enter the NFIP? | NFIP Community Status Book | March 1988 |
| Are the Flood Insurance Rate Maps (FIRMs) digital or paper? How are residents assisted with mapping? | Community FPA | Paper |
| Do floodplain regulations meet or exceed FEMA or State minimum requirements? If so, in what ways? | Community FPA | Yes |
| Describe the permitting process | Community FPA, State, FEMA NFIP | Compliance with the ordinance. |
| **4. Insurance Summary** |
| How many NFIP policies are in the community?What is the total premium and coverage? | State NFIP Coordinator orFEMA 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 | 0-5 |
| 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.

William Manor (Personal Care Home0

Step by Step

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

Bushkill Township Volunteer Fire Company Annual Carnival

Bluegrass Festival

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

IU Kenneth Butz Elementary School

IU 20 Colonial Academy

Jennings Transportation Corporation (School Bus Operation)

BioSpectra Inc.

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.

Blue Mountain Rissmiller Landscape Corridor

Bushkill Creek Landscape Corridor

Knechts Landscape Corridor

Official Map Greenway Areas

Sobers Run Watershed

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.

West Douglassville Road near Penny Hole floods during heavy rain events and tops roadway.

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

Met Ed electrical transfer substation – Jacobsburg Road near Rose Inn

* 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.

Kenneth Butz Elementary School
 IU 20 Colonial Academy
 Bushkill Township Police Department
 Bushkill Township Volunteer Fire Company
 St. Luke's Wind Gap Medical Center

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

Jacobsburg Environmental Center (PA State Park DCNR)

**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 | 2023 |  |  |  |  |  |  | Nazareth Area Multi-Municipal Comprehensive Plan |
| Capital Improvement Plan |  |  |  |  |  |  |  |  |  |
| Economic Development Plan |  |  |  |  |  |  |  |  |  |
| Continuity of Operations Plan |  |  |  |  |  |  |  |  |  |
| Stormwater Management Plan / Ordinance | X |  |  |  |  |  |  |  | Ordinance |
| Open Space Management Plan (or Parks/Rec., Greenways Plan) | X | 2007 / 2017 |  | Open Space |  |  |  |  |  |
| Natural Resource Protection Plan | X | 2007 |  | Open Space |  |  |  |  | Included in OS Plan |
| Transportation Plan |  |  |  |  |  |  |  |  |  |
| Historic Preservation Plan |  |  |  |  |  |  |  |  |  |
| Floodplain Management Plan |  |  |  |  |  |  |  |  |  |
| Farmland Preservation | X | 2007 |  | Open Space |  |  |  |  | Included in OS Plan |
| Evacuation Plan |  |  |  |  |  |  |  |  |  |
| Disaster Recovery Plan |  |  |  |  |  |  |  |  |  |
| Hazard Mitigation Plan | X | 2018 |  |  |  |  | N/A |  |  |
| Emergency Operations Plan | X | 9/2020 |  |  |  |  |  |  |  |
| Zoning Regulations | X | 2012 |  |  |  |  |  |  |  |
| Floodplain Regulations | X | 2014 |  |  |  |  |  |  |  |
| NFIP Participation |  |  |  |  |  |  |  |  |  |
| Building Code |  |  |  |  |  |  |  |  |  |
| 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) |  |  |  |  |  |  |
| Planners or engineers (with natural and / or human-caused hazards knowledge) | X |  | Township Engineer |  |  |  |
| Engineers or professionals trained in building and / or infrastructure construction practices (including building inspectors) | X |  | Township Engineer |  |  |  |
| Emergency Manager | X |  | Emergency Management Coordinator |  |  |  |
| Floodplain administrator / manager | X |  | Open Space |  |  |  |
| Land surveyors | X |  | Township Engineer |  |  |  |
| Staff familiar with the hazards of the community | X |  | Public Works Department |  |  |  |
| Personnel skilled in Geographical Information Systems (GIS) and / or FEMA’s HAZUS program |  |  | Open Space |  |  |  |
| Grant writers or fiscal staff to handle large / complex grants | X |  | Township Manager |  |  |  |
| 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 |  |  |  |  | Mostly for roadway improvements |
| Community Development Block Grants (CDBG) |  |  |  |  |  |  |
| Special purposes taxes | X |  |  |  |  | Open Space Tax– 0.25% |
| Gas / Electricity utility fees |  |  |  |  |  |  |
| Water / Sewer fees |  |  |  |  |  |  |
| Stormwater utility fees |  |  |  |  |  |  |
| Development impact fees |  |  |  |  |  |  |
| General obligation, revenue, and / or special tax bonds |  |  |  |  |  |  |
| Partnering arrangements or intergovernmental agreements | X |  | Police |  |  |  |
| 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 |  | Township |  |  | Newsletter in Spring and Fall |
| 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 |  | Bushkill Stream Conservancy |  |  | Environmental Protection |
| 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** |
| Scenic View III | Residential | 14 | Clearview Avenue | No | In Progress |
| Vistas @ Bushkill | Residential | 36 | Cherry Hill Road | No | In Progress |
| Erhardt Tract | Commercial | 3 | State Route 512 | No | In Progress |

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

|  |  |  |
| --- | --- | --- |
| **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** | 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 |  |  |  |
| **2** | 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 |  |  |  |
| **3** | 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 |  |  | Adopted floodplain ordinance in 2014. |
| **4** | Conduct and facilitate community and public education and outreach for residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction:- 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 |  |  |  |
| **5** | Begin and/or continue the process to adopt higher regulatory standards to manage flood risk (i.e. increased freeboard, cumulative substantial damage/improvements). |  |  |  | X |  | See #3 |
| **6** | Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed. |  |  | X |  |  |  |
| **7** | Have designated NFIP Floodplain Administrator (FPA) become a Certified Floodplain Manager through the ASFPM and/or pursue relevant continuing education training such as FEMA Benefit-Cost Analysis. | X |  |  |  |  |  |
| **8** | Participate in the Community Rating System (CRS) to further manage flood risk and reduce flood insurance premiums for NFIP policyholders. This shall start with the submission to FEMA-DHS of a Letter of Intent to join CRS, followed by the completion and submission of an application to the program once the community’s current compliance with the NFIP is established. | X |  |  |  |  |  |
| **9** | Obtain and archive elevation certificates for NFIP compliance. | X |  |  |  |  |  |
| **10** | Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0. |  |  | X |  |  |  |
| **11** | Complete the ongoing updates of theComprehensive Emergency Management Plans. |  |  | X |  |  |  |
| **12** | Create/enhance/maintain mutual aid agreements with neighboring communities for continuity of operations. |  |  | X |  |  |  |
| **13** | Develop & 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 |  |  |  |
| **14** | Work with regional agencies (i.e. County and PEMA) to help develop damage assessment capabilities at the local level through such things as training programs, certification of qualified individuals (e.g. code officials, floodplain managers, engineers). |  |  | X |  |  |  |

**Notes:**

1. Actions not carried through to the 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** | 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 & Infrastructure | Flood | High | High | FEMAMitigation GrantPrograms and localbudget (or propertyowner) for cost share | Municipality(via MunicipalEngineer/NFIP FloodplainAdministrator) with support from PEMA,FEMA | Long-term(depending on funding) | Existing |
| **2** | 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 & Infrastructure | Flood | High | High | FEMAMitigation GrantPrograms and localbudget (or propertyowner) for cost share | Municipality(via MunicipalEngineer/NFIP FloodplainAdministrator) with support from PEMA,FEMA | Long-term(depending on funding) | Existing |
| **3** | 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, Windstorm / Tornado, Winter Storm  | High | Low -Medium | Municipal Budget | Municipality(via MunicipalEngineer/NFIP FloodplainAdministrator) with support from PEMA,ISO FEMA | Ongoing | New &Existing |
| **4** | Conduct and facilitate community and public education and outreach for residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction:- 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& Awareness | All Hazards | High | Low-Medium | Municipal Budget | Municipality with supportfrom Planning Partners,PEMA, FEMA | Short-term | N/A |
| **5** | Begin and/or continue the process to adopt higher regulatory standards to manage flood risk (i.e. increased freeboard, cumulative substantial damage/improvements). | 5 | Local plans& Regulations | Flood; Subsidence / Sinkholes | High | Low | Municipal Budget | Municipality(via MunicipalEngineer/NFIP FloodplainAdministrator) with support from PEMA, FEMA | Short-term | New &Existing |
| **6** | Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed. | 3 | Local plans& Regulations | Flood, Windstorm / Tornado, Winter Storm  | High | Low | Municipal Budget | NFIP FloodplainAdministrator with supportfrom PADEP,PEMA, FEMA | Short-term(1 year) | N/A |
| **7** | Have designated NFIP Floodplain Administrator (FPA) become a Certified Floodplain Manager through the ASFPM and/or pursue relevant continuing education training such as FEMA Benefit-Cost Analysis. | 6 | Local plans& Regulations | Flood, Windstorm / Tornado, Winter Storm | Medium | Low | Municipal Budget | NFIPFloodplainAdministrator | Short-term(depending on funding) | N/A |
| **8** | Participate in the Community Rating System (CRS) to further manage flood risk and reduce flood insurance premiums for NFIP policyholders. This shall start with the submission to FEMA-DHS of a Letter of Intent to join CRS, followed by the completion and submission of an application to the program once the community’s current compliance with the NFIP is established. | 7 | Local plans& Regulations | Flood, Windstorm / Tornado, Winter Storm | High | Low | Municipal Budget | NFIPFloodplainAdministrator with supportfrom PADEP,PEMA, FEMA | Short-term(1 year) | N/A |
| **9** | Obtain and archive elevation certificates for NFIP compliance. | 8 | Local plans& Regulations | Flood, Windstorm / Tornado, Winter Storm | Low | Low | Municipal Budget | NFIP FloodplainAdministrator | Ongoing | N/A |
| **10** | Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0. | 9 | AllCategories | All Hazards | High | Low – High (for5-year update) | Municipal Budget, possiblyFEMAMitigationGrantFunding for 5-year update | Municipality (via mitigation planning point of contacts) with support from Planning Partners(through their Points of Contact), PEMA | Ongoing | New &Existing |
| **11** | Complete the ongoing updates of the Comprehensive Emergency Management Plans. | 10 | Local plans& Regulations | All Hazards | Medium | Low | Municipal Budget | Municipality with support from PEMA | Ongoing | New &Existing |
| **12** | Create/enhance/maintain mutual aid agreements with neighboring communities for continuity of operations. | 11 | AllCategories | All Hazards | Medium | Low | Municipal Budget | Municipality with support fromsurroundingmunicipalities and County | Ongoing | New &Existing |
| **13** | Develop & 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 | Structure & Infrastructure | All Hazards | Low | Medium | Municipal Budget | Municipality with supportfrom County,PEMA, FEMA | Short-term | N/A |
| **14** | Work with regional agencies (i.e. County and PEMA) to help develop damage assessment capabilities at the local level through such things as training programs, certification of qualified individuals (e.g. code officials, floodplain managers, engineers). | 13 | Structure & Infrastructure | All Hazards | Medium | Medium | MunicipalBudget,FEMAHMA grant programs | Municipality with supportfrom County,PEMA | Short-, long-term (depending on funding) | 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