**Emmaus Borough, Lehigh County Annex**

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

|  |  |
| --- | --- |
| **Primary:** | **Alternate:** |
| Keith Miller  EMC  28 South 4th Street, Emmaus, PA 18049  610-421-6874  kmiller@emmauspa.gov | Adam Priest  Assistant EMS Chief  28 South 4th Street, Emmaus, PA 18049  610-421-6874  EMSchief@emmauspa.gov |

**Municipal Profile**

Emmaus Borough is located in the southern part of Lehigh County. It encompasses a land area of 2.9 square miles and has a population of 11,652 (2020 Census). The borough is bordered by Upper Milford Township to the south; Lower Macungie Township to the west; Salisbury Township and Allentown to the north; and Upper Saucon Township to the east.

Leibert Creek, a tributary to Little Lehigh Creek, runs through the western part of the borough, and another unnamed creek runs north through the eastern part of the borough. A small dam and stocked fishing pond are located in the southwestern area of the borough at Furnace Dam recreation area.

State Route 476 / PA Turnpike cuts through the southwest corner of the borough. Route 329 runs southwest-northeast as Chestnut Street, Main Street, and State Avenue through the borough, changing to north-northeast direction as Lehigh Street as it exits the northeastern part of the borough. Harrison Street also runs southwest-northeast through the borough, intersecting with SR 29 (State Avenue) just east of the Norfolk Southern Railroad tracks. Both the Norfolk Southern and East Penn Railroad run through the Borough.

**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.

|  |  |
| --- | --- |
| James Krippe, Emergency Management Coordinator  Role: Coordinates EMA function | Shane Pope, Borough Manager  Role: Oversight of the entire planning process |
| Brad Youst, Hanover Engineering, Engineer  Role: All engineering and floodplain management | John Dychala, Public Works Director  Role: Planning, Infrastructure, Resources |
| James Farnsworth, Planner  Role: Zoning, planning, codes, inspection | John Price, Director of Emergency Services  Role: Ambulance and fire services |

*\*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.

East Penn School District – houses over 2,800 students every day in schools. Need to be part of planning process for evacuation, transportation and other reasons.

Emmaus Main Street Partners – local business organization

Emmaus Board of Health – inspectors

Local churches – provide resources and shelters

Lehigh County Housing Authority – own several housing units and serve as a resource

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: Borough quarterly newsletters

Social Media – Borough Facebook page

Borough website

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 | Codes Enforcement reviews and approves permits. |
| What are the barriers to running an effective NFIP program in the community, if any? | Community FPA | Flooding is not a high hazard in the community. |
| **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 | Unknown |
| Are the Flood Insurance Rate Maps (FIRMs) digital or paper?  How are residents assisted with mapping? | Community FPA | Paper – distributed to residents in areas, especially when conducting construction projects or building. |
| Do floodplain regulations meet or exceed FEMA or State minimum requirements?  If so, in what ways? | Community FPA | Yes – follow all state and federal regulations. |
| Describe the permitting process | Community FPA, State, FEMA NFIP | Building permits – apply through codes enforcement, also reviewed by Lehigh County Conversation District and PA DEP. |
| **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 | 25 unknown |
| 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 | None; $0 |
| How many structures are exposed to flood risk within the community? | Community FPA or GIS Analyst | 103 parcels |
| Describe any areas of flood risk with limited NFIP policy coverage | Community FPA or  FEMA Insurance Specialist | Unknown |
| **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.

School-aged children – schools house nearly 3,000 students per day in the Borough. Schools include Seven Generations, St. Ann’s Elementary, Emmaus High School, Lincoln Elementary and Jefferson Elementary.

Elderly – several assisted living facilities in the Borough, including Ridge Manor, South Mountain Memory Care, Weston Senior Living, and East Penn High Rises Mentally handicapped – group home.

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

Emmaus High School – population each day over 2,000. In addition, football fields and other athletic venues at the school.

Emmaus Community Park – location of swimming pool, athletic facilities including football and baseball fields, pavilions, and other facilities drawing large numbers of people.

Williams Street Playground – houses athletic fields where many tournaments occur.

Triangle Park – large downtown celebrations and gatherings

1. **Economy**

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

Cintas

CVIP

Strip malls on both sides of Chestnut Street

East Penn School District

Impress Packaging

East Penn Commerce Center

Vinart

Downtown business district

Rodale facility (formerly owned by Rodale) – new prospective buyer has a potential for many jobs

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.

Leibert’s Creek

Little Lehigh Creek

South Mountain

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.

Downtown business district

Older buildings along railroad tracks

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

Sewer lines

Water wells

PPL substation – located on Furnace Street

Communications repeater towers – town hall and central station, as well as on the high rises and Meineke Muffler

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

Furnace Dam

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

Emmaus Police Station

Town Hall

Jefferson Elementary

Lincoln Elementary

Emmaus High School

Seven Generations Charter School

St. Ann’s Elementary School

Fire Department Training Grounds/EMA headquarters

Central Station – houses fire and ambulance

Lehigh Valley Physicians Group, 1040 Chestnut Street

East Penn Urgent Care, 1003 Chestnut Street

Dr. Barnes, 723 Chestnut Street

St. Luke’s Medical, 619 Dalton Street

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

1803 House

Shelter House

Knauss Homestead

Historical Society

Emmaus Community Park

Williams Street Playground

Boroline Park

4th Street Park

Lions Field and 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 | 12/18/17 |  | Multi-jurisdictional |  |  |  |  |  |
| Capital Improvement Plan |  |  |  |  |  |  |  |  |  |
| Economic Development Plan |  |  |  |  |  |  |  |  |  |
| Continuity of Operations Plan |  |  |  |  |  |  |  |  |  |
| Stormwater Management Plan / Ordinance | X |  |  |  |  |  |  |  |  |
| Open Space Management Plan (or Parks/Rec., Greenways Plan) | X |  |  |  |  |  |  |  |  |
| Natural Resource Protection Plan | X |  |  |  |  |  |  |  |  |
| Transportation Plan |  |  |  |  |  |  |  |  |  |
| Historic Preservation Plan |  |  |  |  |  |  |  |  |  |
| Floodplain Management Plan |  |  |  |  |  |  |  |  |  |
| Farmland Preservation |  |  |  |  |  |  |  |  |  |
| Evacuation Plan |  |  |  |  |  |  |  |  |  |
| Disaster Recovery Plan |  |  |  |  |  |  |  |  |  |
| Hazard Mitigation Plan | X | 2018 |  |  |  |  |  |  |  |
| Emergency Operations Plan | X |  |  |  |  |  |  |  |  |
| Zoning Regulations | X |  |  |  |  |  |  |  |  |
| Floodplain Regulations | X |  |  |  |  |  |  |  |  |
| NFIP Participation |  |  |  |  |  |  |  |  |  |
| Building Code | X |  |  |  |  |  |  |  |  |
| Fire Code | X |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Capability** | * **Staff** * **Personnel** * **Resources** | **Yes** | **No** | **Department / Agency** | **Change since 2018 Plan?**  **+ Positive**  **- Negative** | **How can these capabilities be expanded and improved to reduce risk?** | **Additional Comments** |
| **2. Administrative & Technology** | Planners (with land use / land development knowledge) | X |  | Zoning |  |  |  |
| Planners or engineers (with natural and / or human-caused hazards knowledge) | X |  | Hanover Engineering |  |  |  |
| Engineers or professionals trained in building and / or infrastructure construction practices (including building inspectors) | X |  | Hanover Engineering |  |  |  |
| Emergency Manager | X |  | Emergency Management Agency Coordinator |  |  |  |
| Floodplain administrator / manager | X |  | Hanover Engineering |  |  |  |
| Land surveyors | X |  | Hanover Engineering |  |  |  |
| 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 |  | Administration and Hanover Engineering |  |  |  |
| Grant writers or fiscal staff to handle large / complex grants | X |  | Administration |  |  |  |
| Other |  |  |  |  |  |  |
| **3. Financial Resources** | Capital improvement programming | X |  | Administration |  |  |  |
| Community Development Block Grants (CDBG) | X |  | Administration |  |  |  |
| Special purposes taxes | X |  | Administration |  |  |  |
| Gas / Electricity utility fees |  |  |  |  |  |  |
| Water / Sewer fees | X |  | Administration |  |  |  |
| Stormwater utility fees |  |  |  |  |  |  |
| Development impact fees |  |  |  |  |  |  |
| General obligation, revenue, and / or special tax bonds | X |  | Administration |  |  |  |
| Partnering arrangements or intergovernmental agreements | 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** |
| **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 |  | All Departments |  |  |  |
| Public-private partnership initiatives addressing disaster related issues. | X |  |  |  |  |  |
| Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. | X |  |  |  |  |  |
| Other |  |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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** |
| Fields at Indian Creek | Residential 55+ | 50 | Indian Creek Golf Course | Creek/1-476 | Entire project includes 200+ houses spread over 2 communities |
| Wawa | Commercial | 1 | Cedar Crest Boulevard/S 11th Street | Creek | Gas station/convenience store |
| South Mountain Village | Residential 55+ | 40 | PA Avenue/Tilghman/Arch Streets | Railroad | Housing development |
| Borough Administration Building | Institutional | 1 | 33 E Minor Street | Railroad | 58,000 sq ft. relocation of major borough operations |

**Natural & Non-Natural Event History Specific to Emmaus Borough**

|  |  |  |
| --- | --- | --- |
| **Type of Event and Date(s)** | **FEMA Disaster #**  **(if applicable)** | **Local Damage(s) or Loss(es)** |
| Winter Storm Jonas – 1/2016 | DR-4267-PA | $51,587.55 in FEMA-approved costs |
| Flash Flooding – February 2016 | N/A | Flooded and caused damage to Emmaus Community Pool, concession stand, bathhouse, and workshop areas. Total damage – approximately $18,000 |
| 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** | Implement stormwater management projects to alleviate street flooding. |  | X | X |  |  | The Borough is in the process of additional strategic planning to address this. In addition, we have conducted several stream bank restoration projects, as well as pipe repairs, grate repairs, and pipe camera work. |
| **2** | Work with local electric utility to improve utility line clearing. |  |  |  | X |  | PPL built 2 new lines into the community to deal with severe storms and power outages. Action carried through to 2018 Action Plan. |
| **3** | Maintain adequate fleet of vehicles and equipment to handle emergency response. |  |  | X |  |  |  |
| **4** | 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 |  |  |  |
| **5** | 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.  Phase1: 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 |  |  |  |  |  |
| **6** | 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 |  |  |  |
| **7** | 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:  - 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.  - Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding. |  |  | X |  |  |  |
| **8** | Obtain and archive elevation certificates for NFIP compliance. |  |  | X |  |  |  |
| **9** | Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0. |  |  | X |  |  |  |
| **10** | Complete the ongoing updates of the Comprehensive Emergency Management Plans. |  |  | X |  |  |  |
| **11** | 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** | | **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** | Implement stormwater management projects to alleviate street flooding. | 14 | Structure and  Infrastructure | Flood | Medium | High | Borough Budget | Engineering/  Public Works | Long-term (depending upon funding) | Existing |
| **2** | Work with local electric utility to improve utility line clearing. | 21 | Structure and  Infrastructure | Windstorm/  Tornado,  Winter  Storm,  Utility  Interruption | High | Medium | Borough Budget | Borough working with electric utilities | Short-term | Existing |
| **3** | Maintain adequate fleet of vehicles and equipment to handle emergency response. | 19 | Structure and  Infrastructure | All | High | Medium | Borough  Budget; public  protection and  emergency  services grant programs | Borough | Ongoing | N/A |
| **4** | 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, Windstorm/  Tornado,  Winter  Storm,  Earthquake | 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 upon funding) | Existing |
| **5** | 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 | 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 upon funding) | Existing |
| **6** | 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 | Local Budget | Municipality  (via Municipal  Engineer/NFIP Floodplain  Administrator) with support from PEMA,  ISO FEMA | Ongoing | New & Existing |
| **7** | 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:  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. 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 support  from Planning Partners,  PEMA, FEMA | Short-term | N/A |
| **8** | Obtain and archive elevation certificates for NFIP compliance. | 8 | Local plans & Regulations | Flood | Low | Low | Local Budget | NFIP Floodplain Administrator | Ongoing | N/A |
| **9** | 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) | Local 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 |
| **10** | Complete the ongoing updates of the Comprehensive Emergency Management Plans | 10 | Local plans & Regulations | All Hazards | Medium | Low | Local Budget | Municipality with support from PEMA | Ongoing | New & Existing |
| **11** | Work with regional agencies (i.e. County and PEMA) to help develop damage assessment capabilities at the local level through such things as training programs, certification of qualified individuals (e.g. code officials, floodplain managers, engineers). | 13 | Education and  Awareness | All Hazards | Medium | Medium | Local budget,  FEMA  HMA grant programs | Municipality with support from County, PEMA | Short-, long- term (depending upon 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