Navigating the Flood Mitigation Funding Programs at the Texas Water Development Board

Matching need with Funding Opportunities

Kathy Hopkins, CFM, CTCM
Texas Water Development Board
Hazard Mitigation Grant Programs

Grants
- Flood Mitigation Assistance
- Flood Protection Planning
- Hazard Mitigation Grant Program
- Pre-Disaster Mitigation

Texas Agency
- Texas Water Development Board
- Texas Division of Emergency Management

Key
- HMA Grant-Federal Grant Program
- State Grant Program

Graphic courtesy of TWDB
Flood Protection Grant
(Flood Protection Planning Grant)

General Information

• Biannual State grant program
• 1.8 million available
• 50% cost sharing requirement
Flood Protection Grant Program
Eligible Activities

• **Flood Protection Planning**
The intent of flood protection planning is to conduct detailed studies of known or potential floodplains to better inform the development of flood protection strategies for watersheds through structural and nonstructural measures before a flood event, such as
  – determining and describing problems from or related to flooding,
  – identifying and planning solutions to flooding problems, and
  – estimating the benefits and costs of these solutions.

• **Flood Early Warning Systems**
The intent of flood early warning systems is to provide a tool for communities to warn its constituents in the event of a flood. Examples include but are not limited to developing a plan for implementing or the installation of
  – sirens,
  – reverse 911 call systems,
  – automatic reporting for river and/or rainfall gauges, and
  – information technology to monitor, detect, and assimilate data for flood prediction.

• **Flood Response**
The intent of implementing local flood response strategies is to help communities better respond to a flood event on a local level to minimize long-term hardships associated with the event. Strategies can include but are not limited to
  – hazard analysis and remediation,
  – evacuation plans, and
  – outreach to constituents to relay information on mitigation and evacuation.
Hazard Mitigation Assistance Grant Programs
For Riverine Flood Mitigation, Federal Grants Provide $7 Benefit for Each $1 Invested

$83 BILLION IN SAVINGS

<table>
<thead>
<tr>
<th>National Benefit-Cost Ratio Per Peril</th>
<th>Federally Funded</th>
<th>Beyond Code Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Hazard Benefit-Cost Ratio</td>
<td>6:1</td>
<td>4:1</td>
</tr>
<tr>
<td>Riverine Flood</td>
<td>7:1</td>
<td>5:1</td>
</tr>
<tr>
<td>Hurricane Surge</td>
<td>Too few grants</td>
<td>7:1</td>
</tr>
<tr>
<td>Wind</td>
<td>5:1</td>
<td>5:1</td>
</tr>
</tbody>
</table>

(Graphics from Natural Hazard Mitigation Saves: 2017 Interim Reports, National Institute of Building Sciences)
In 2016, nearly **ONE BILLION DOLLARS** in Pre- and Post-Disaster Hazard Mitigation Assistance Grants was delivered to states, tribes, and communities that will result in mitigation actions that **reduce risk**

*Source: Mitigation Minute, FEMA*
Individual homeowners, businesses, and private nonprofits may apply for funding through eligible subapplicants.

Subapplicants:
- Federally-Recognized Tribes
- State Agencies
- Private Nonprofits (HMGP only)
- Tribal Agencies
- Local Governments/Communities

Applicants:
- Territories
- Federally-Recognized Tribes
- States

Graphic courtesy of FEMA
Hazard Mitigation Assistance
Funding Opportunity and Eligibility

Funding Opportunity

- Flood Mitigation Assistance (FMA-$175 Million) and Pre-Disaster Grant programs (PDM-$250 Million)
  - Upcoming application period: On or around October 1, 2018 through January 31, 2018.
- Hazard Mitigation Grant Program (HMGP-$1.2 Billion)
  - Currently opened

Eligibility Requirements

- FEMA approved Flood Mitigation Plan
- Benefit Cost Analysis with a ratio of 1.0 of higher
- ***Structure must be covered under NFIP policy***
# Hazard Mitigation Assistance Grant Programs

## Eligible Activities

<table>
<thead>
<tr>
<th>Eligible Activities</th>
<th>HMGP</th>
<th>PDM</th>
<th>FMA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Mitigation Projects</strong></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Property Acquisition and Structure Demolition</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Property Acquisition and Structure Relocation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Structure Elevation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Mitigation Reconstruction</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Dry Floodproofing of Historic Residential Structures</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Dry Floodproofing of Non-Residential Structures</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Generators</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Localized Flood Risk Reduction Projects</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Non-Localized Flood Risk Reduction Projects</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Structural Retrofitting of Existing Buildings</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Non-Structural Retrofitting of Existing Buildings and Facilities</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Safe Room Construction</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Wind Retrofit for One- and Two-Family Residences</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Infrastructure Retrofit</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Soil Stabilization</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Wildfire Mitigation</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-Disaster Code Enforcement</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advance Assistance</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Percent Initiative Projects*</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous/Other**</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>2. Hazard Mitigation Planning</strong></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Planning-Related Activities</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3. Technical Assistance</strong></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4. Management Costs</strong></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Source: Hazard Mitigation Assistance Guidance
Over the last 20 years, the **Flood Mitigation Assistance Grant Program** has provided

**MORE THAN $600 MILLION**

**FOR 2,031 GRANTS SUPPORTING 1,516 PROJECTS.**

FMA funding is available to **States, Tribes, Territories, AND Local Communities** with structures insured under the **National Flood Insurance Program.**

The **3 states** that have received the **MOST FMA FUNDING AWARDS** to date* include:

- **Texas** $118 million
- **New Jersey** $97 million
- **Louisiana** $129 million

* Not including planning or management costs

Source: Mitigation Minute, FEMA
Cost Share Requirements for Hazard Mitigation Grant Program and Pre-Disaster Mitigation Grants

Federal 75%
Local 25%
Cost Share Requirement - Flood Mitigation Assistance Grant Program

- Severe Repetitive Loss share
  Federal 100% and Local 0%
- Repetitive Loss share
  Federal 90% and Local 10%
- NFIP insured, drainage project, and plan share
  Federal 75% and Local 25%
Mitigation Action - Acquisition and Demolition

Photographs courtesy of TWDB

Photographs courtesy of TWDB

Photographs courtesy of HCFCD

Photographs courtesy of FEMA
Since the beginning of FEMA’s Hazard Mitigation Assistance programs in 1989, **FEMA has approved more than 134 coastal elevation projects.**

**ELEVATING STRUCTURES** in coastal areas **protects them from flooding impacts** caused by hurricanes and other coastal storms.

In total, **FEMA has provided more than $120 million** to elevate **1,581 structures** through the Hazard Mitigation, Pre-Disaster Mitigation, and Flood Mitigation Assistance grant programs.

Source: Mitigation Minute, FEMA
Mitigation Action - Elevation

Photographs courtesy of TWDB
Mitigation Action- Mitigation Reconstruction (AKA Demo- Rebuild)

Before

After

Source: J. Ward
Mitigation Action - Drainage Project

Photographs courtesy of TWDB
Other Financial Assistance at TWDB