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

Matching need with Funding Opportunities

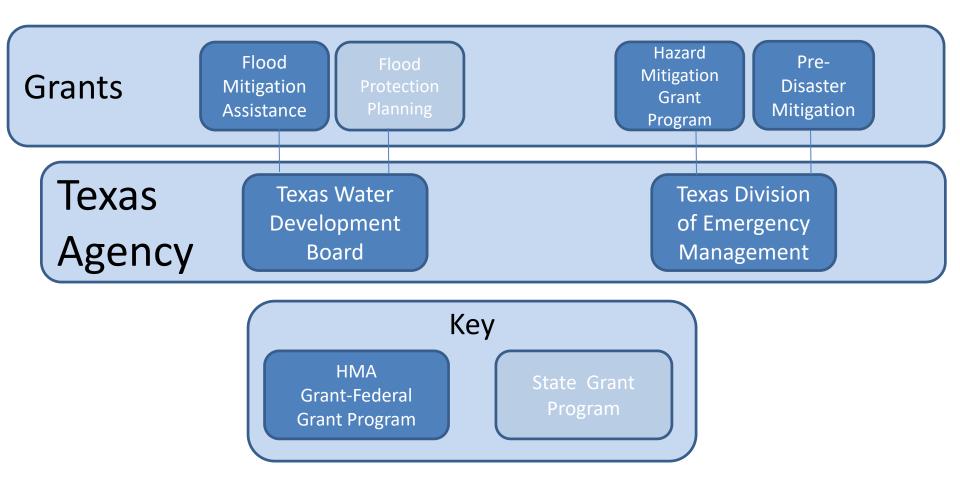
### Kathy Hopkins, CFM, CTCM

Texas Water Development Board





### Hazard Mitigation Grant Programs



**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

National Benefit-Cost Ratio Per Peril *BCR numbers in this study have been rounded  Overall Hazard Benefit-Cost Ratio	Federally Funded 6:1	Beyond Code Requirements
Riverine Flood	7:1	5:1
Hurricane Surge	Too few grants	7:1
Wind	5:1	5:1

Graphics from Natural Hazard Mitigation Saves: 2017 Interim Reports, National Institute of Building Sciences





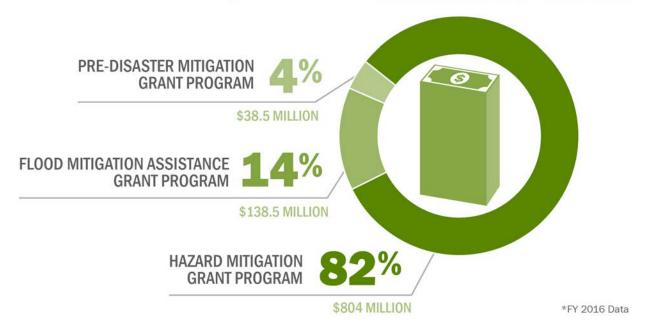


In 2016, nearly

# **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



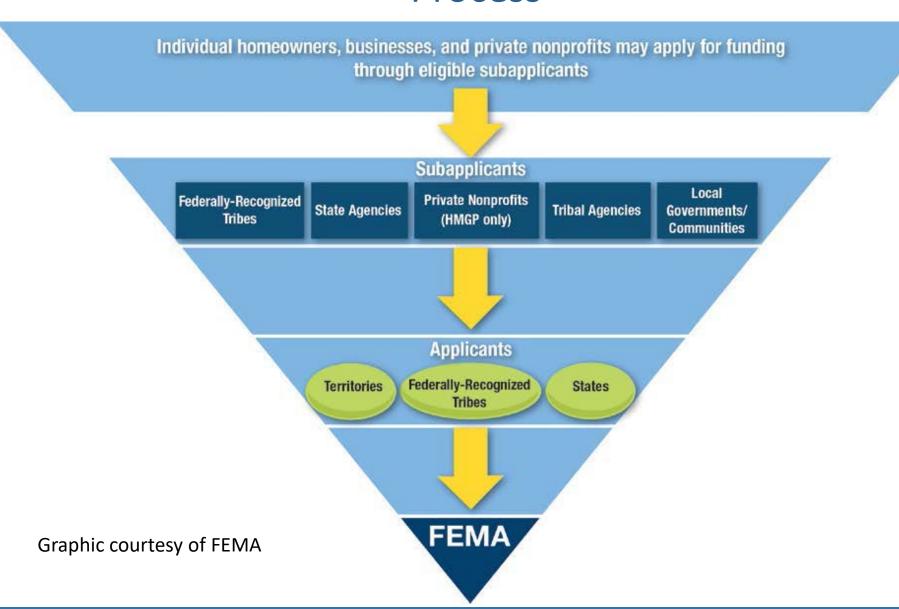
Source: Mitigation Minute, FEMA







# Hazard Mitigation Assistance Application Process



# 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**

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

Source: Hazard Mitigation Assistance Guidance



Over the last 20 years, the

#### Flood Mitigation Assistance Grant Program has provided

MORE \$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.



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













Since the beginning of

FEMA's Hazard Mitigation Assistance programs

in 1989, **FEMA** has approved

#### **ELEVATING STRUCTURES** in coastal areas protects them from flooding impacts



In total, FEMA has provided

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**



