



FEMA

FEMA Hazard Mitigation: Opportunities for Natural Infrastructure

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What is Hazard Mitigation

Any **sustained action** taken to reduce or eliminate **long-term risk** to people and property from natural hazards and **their effects**



Risk Reduction & Hazard Mitigation Assistance

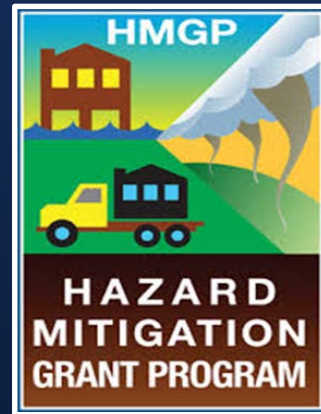
PA 406 Hazard Mitigation

- Post-Disaster
- Public Assistance
- Damaged Facility
- Damage-related



Hazard Mitigation Grant (404)

- Post-Disaster
- Disaster Dependent
- Impacted State
- Multi-hazard



Flood Mitigation Assistance

- Annual
- Hazard Mitigation Assistance
- Competitive
- Flood-related



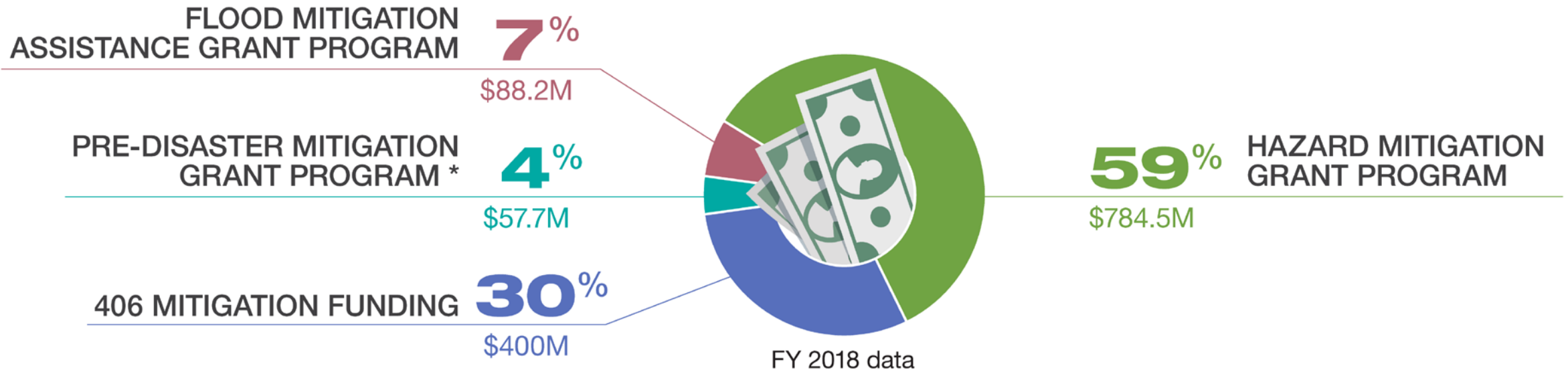
Pre-Disaster Mitigation

- Annual
- Hazard Mitigation Assistance
- Competitive
- Multi-hazard



FY2018 Mitigation Funding

In FY 2018 more than **\$1.3B** in pre- and post-disaster **Hazard Mitigation Assistance Grants** was delivered to states, tribes, and territories, resulting in mitigation actions that will **reduce risk**



* This figure includes legacy PDM program funding

Pre-Disaster Hazard Mitigation Grants

Pre-Disaster Mitigation Grant Program



Reducing Risk before a Disaster

\$90M in funding is available in **2017*** through FEMA's **Pre-Disaster Mitigation (PDM) grant program** to help **STATE, TRIBAL, AND LOCAL GOVERNMENTS** implement hazard mitigation planning and projects.

* This content applies to Fiscal Year 2017.

Eligible PDM activities include:

-  **Wind, seismic, wildfire, landslide and drought mitigation projects**
-  **Hazard mitigation planning**
-  **Stormwater management and flood control measures**
-  **Generators for critical facilities**

Flood Mitigation Assistance Grant Program



NEW THIS YEAR: Funding for Community Flood Mitigation Projects

Of the **\$160M** available in **2017*** for **Flood Mitigation Assistance Grants...**

\$70M is prioritized for **community flood mitigation activities**

\$90M is allocated to **other eligible FMA project types**

\$2M Advance Assistance (seed money)

\$68M Mitigation Projects, including:

- ✓ Infrastructure protective measures
- ✓ Floodwater storage and diversion
- ✓ Utility protective measures
- ✓ Stormwater management
- ✓ Wetland restoration/creation
- ✓ Aquifer storage and recovery
- ✓ Floodplain and stream restoration
- ✓ Localized flood control to protect critical facility
- ✓ Water/sanitary sewer system protective measures

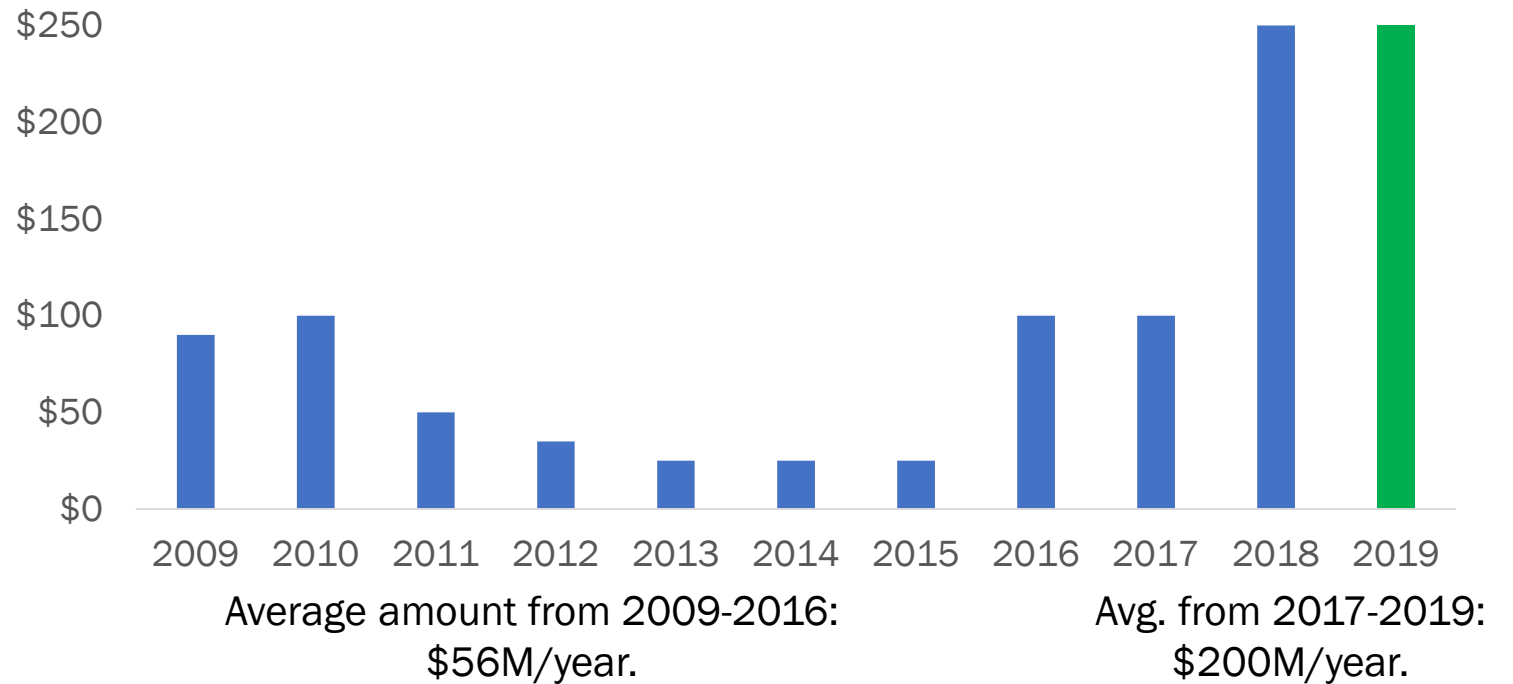
To apply for an FMA grant, your community must be a **participant** of and **in good standing** with the **National Flood Insurance Program**

Visit Grants.Gov for more information.

DRRA Section 1234: Building Resilient Infrastructure and Communities (BRIC)

- ✓ **Leverage 6% set-aside funding mechanism**
- ✓ **Encourage community-wide mitigation of critical lifelines**
- ✓ **Prioritize resilient infrastructure projects**
- ✓ **Competitive, risk-informed projects**
- ✓ **Build capacity and capability**
- ✓ **Support building code efforts**

Since 2009, FEMA has received approximately \$1 billion in Pre-Disaster Mitigation grant appropriations, of which 48% has been in the last 2 years.



Funds will vary based on disasters. FIMA estimates that annual funds will average \$300-500M per year, with significantly greater amounts following years with catastrophic disasters.

BRIC Feedback Requested

Ideascale:

- Comments will be accepted from May 20 through July 15, 2019, on IdeaScale at <https://fema.ideascale.com/a/campaign-home/61112>

Email:

- BUILDBRIC@fema.dhs.gov

For More Information:

- Visit <https://www.fema.gov/drra-bric>

Post-Disaster Grants: 404 HMGP and 406 HM

Broad Eligibility

75% Fed. Share Max

Disaster-limited



PA Perm. Work Only

75% Fed. Share Min

Vulnerability-limited

Key Program Requirements

ELIGIBLE

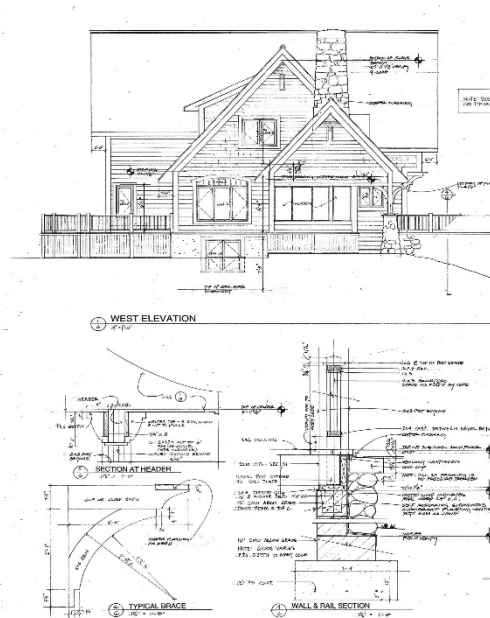


Hazard Mitigation Assistance Guidance

Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program, and Flood Mitigation Assistance Program

February 27, 2015

TECHNICALLY FEASIBLE



COMPLIANT



COST EFFECTIVE



Cost-effectiveness

- **Net Benefit to Society**
- **Attributable to the Project**
- **Benefits Primarily from Reducing Disaster Impacts**
- **General Values for Environmental Benefits**

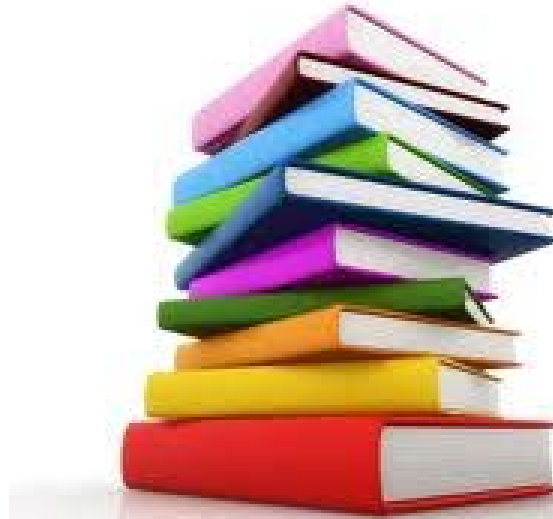


Cost-effectiveness - Common Challenges

Supporting Documentation



Assessing Frequency



Clear Narrative of Methodology

Potential Opportunities for Natural Infrastructure

- **Under HMA grants**

- PDM
- FMA
- HMGP

- **Under 406 Hazard Mitigation**

- 15% Rule
- BCA

- **Under PA Eligibility**

- Natural infrastructure as 'eligible facility' like engineered beaches



Green Infrastructure – PDM & FMA

With support from

Hazard Mitigation Assistance,

31,000 RESIDENTS in Puerto Rico's Salinas Municipality will have access to **high-quality freshwater**

through an Aquifer Storage & Recovery (ASR) project.



Cuyohoga County
Planning Commission



Natural Infrastructure with PA 406 Mitigation

- Ogunquit, ME
- March 2018, winter storm damage



Lessons Learned

USVI St Thomas – Hurricane Maria



Contacts

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