



Pennsylvania
Emergency Management Agency

Mitigation for the Homeowner

Protecting the Community from Floods

Understanding Mitigation Strategies for
Flood Risk

Rick Deal & Corey Davenport
PEMA Mitigation



What is Mitigation?

- **Hazard Mitigation:** FEMA defines as “any cost-effective action taken to reduce or eliminate the long-term risk to life, property, and/or sense of place from natural and technological hazards.

What are the mitigation objectives?

• 01 •

Reduce future loss of life and property due to natural disasters.

• 02 •

Provide funding for previously identified mitigation measures that benefit the disaster area

• 03 •

Implement State, County and Municipal Hazard Mitigation Plans

• 04 •

Implement and enhance building and floodplain codes



So how is mitigation funded?

- **Disaster-funded:** Need to receive a Presidentially-declared disaster.
 - Hazard Mitigation Grant Program (HMGP)
 - Community Development Block Grant-Disaster Recovery (CDBG-DR)
 - Flood Mitigation Assistance Swift Current Initiative (FMA SCI)
- **Non-Disaster funded: Annual grant allocations from U.S. Congress**
 - Flood Mitigation Assistance (FMA)



Who is Eligible (as Applicant)?

State, County, & Municipal Governments

Certain private non-profit organizations or institutions that own or operate a private non-profit facility (Special Districts – Municipal Authorities)



As a private citizen, can I apply directly?

Short answer? No.

State, local, certain non-profits are eligible to apply for funding under HMGP.

Participation: 100% Voluntary for both citizen & applicant



Pennsylvania
Emergency Management Agency

Prerequisites

• 01 •

County must have an approved & adopted All-Hazard Mitigation Plan

• 02 •

Municipality must have participated & adopted the approved county plan

• 03 •

Project must meet the FEMA, State, and Local municipal strategies

• 04 •

Requested funding must have been identified as a mitigation activity in the county plan.

Application Process

• 01 •

**Letter of Intent
(LOI)
Pre-Application**

• 02 •

**PEMA
reviews/approv
es LOI and
provides access
application**

• 03 •

**Application
completion &
submittal**

• 04 •

**State
application
review and
submittal to
FEMA**

Typical Application Contents

Property information (owner, address, parcel)

Latitude/Longitude

Appraisal(s)

Site elevations

Budget breakdown

Damage history/information

Photos & maps,

FEMA Digital Flood Insurance Rate Maps (DFIRM)

FEMA Flood Insurance Study (FIS)

Local Mitigation Plan information

Acquisition & Elevation Special Concerns

Owners must be U.S. Citizens/legal aliens

Primary dwellings only

Project can include rentals, but must include relocation costs for tenants (Uniform Relocation Act, URA)

Payments to owners are exempt from Federal Income Tax

Only basic elevation costs to minimum level are eligible under most Hazard Mitigation Assistance (HMA) grants.

Uniform Relocation Act (URA)

Displaced tenants of rental properties acquired under HMGP are entitled to URA assistance. Eligible for up to \$7,200.

URA costs should be included in the application budget

URA procedures and provisions are responsibility of the local community

Duplication of Benefits

Duplication of Benefits (DOB): federal disaster assistance and other damage-related claims paid to homeowner following most recent disaster that have not been expended for the intended purposes.

In short: You can't make money off a disaster!



FEMA Cost-Effectiveness Policy

Properties within the Special Flood Hazard Area (SFHA)

- Acquisitions: Costs \$775,411 or less
- Elevations: Costs \$355,522 or less
- Mitigation/Reconstruction: Costs \$355,533 or less
 - Project considered cost-effective, no Benefit Cost Analysis (BCA) is required
- All other projects a BCA is required



What is a Benefit Cost Analysis?

Benefit Cost Analysis (BCA): is the federally-required method of determining the cost effectiveness of a hazard mitigation measure using a standardized method of determining avoided future damages.

Benefit Cost Ratio

Benefit Cost Ratio (BCR): numerical expression of the cost-effectiveness of the project.

This is derived by project benefits divided by overall project costs.

Minimum BCR: 1.0 or above



BCA/BCR Example

Single Home Acquisition: \$300,000

BCA – Benefits of \$450,000 over 100 years

BCR – Benefits (\$450,000) / Cost
(\$300,000) = **1.50**

Project Status: Cost-Effective



Environmental & Historic Preservation (EHP)

- All projects must be reviewed for environmental considerations
- Structures 50 years old or more must be reviewed for historic consideration
- Potential EHP impacts can require additional review time to determine eligibility

Home Acquisitions

What is an acquisition?: When the government purchases a property in a flood-prone area, and homeowner relinquishes ownership.

Structure(s) is then demolished and land is owned by local government and is deed-restricted and must remain in open space in perpetuity.

100% voluntary program for both homeowners and municipalities.



What are the benefits?

- Reduces long-term flood risk to not only homeowners/occupants but to first responders by permanently removing the structure(s) from the floodplain.
- May provide financial assistance to homeowners to move to safer location.



Home Elevations

What is a home elevation?: Project when a home is elevating (or raising) the structure's foundation above the base flood elevation.

Elevations will need design and engineer approval prior to construction.

100% voluntary program for both homeowners and municipalities.



What are the benefits?

- Reduces flood damage by keeping the home and its contents out of floodwaters.
- May qualify for reduced flood insurance premiums.
- Community keeps its tax-base.



Home Mitigation Reconstructions

What is a home mitigation reconstruction?: Project when a home is demolished and re-built to higher standard and above the Base Flood Elevation (BFE).

Needs to remain within the same footprint.

Mitigation Reconstructions will need design and engineer approval prior to construction.

100% voluntary program for both homeowners and municipalities.



What are the benefits?

- Reduces flood damage by keeping the home and its contents out of floodwaters.
- May qualify for reduced flood insurance premiums.
- Community keeps its tax-base.





Pennsylvania
Emergency Management Agency

Contact Us

Rick Deal, State Hazard Mitigation Officer

Corey Davenport, Deputy State Hazard Mitigation Officer



rdeal@pa.gov



pema.pa.gov



cordavenpo@pa.gov



Find us on social: @pemahq