Hazard Mitigation Assistance Grants
What is hazard mitigation?

Hazard mitigation is defined as any *sustained action* taken to reduce or eliminate *long-term risk* to human life and property from a hazard event.
What is Hazard Mitigation?

- Sandbagging
- Acquisition
- Tarps
- Elevation
- Hurricane Straps
- Flood-proofing

Which activities are hazard mitigation?
What is Hazard Mitigation?

- Sandbagging: Incorrect
- Acquisition: Correct
- Tarps: Incorrect
- Elevation: Correct
- Hurricane Straps: Correct
- Flood-proofing: Correct

Which activities are hazard mitigation?
This is a post-disaster program.
Funding Programs - HMGP

Disaster

If the President signs a disaster declaration, programs offered will be specified such as HM Assistance (HMGP)

Governor requests Federal Assistance through the Regional Administrator

Preliminary Damage Assessments or PDAs
PDM & FMA are available annually, subject to Congressional appropriations.
Funding Programs – PDM & FMA

Congressional Appropriation ➔ Notice of Funds Opportunity (NOFO)

Applications are reviewed, projects are selected, and award notifications are sent ➔ Application Period Opens - Applicants submit applications
The Grant Life Cycle

1. Activity Identification
2. Application Development & Submission
3. App. Review and Evaluation
4. Grant Award & Obligation
5. Activity Implementation
6. Programmatic Closeout
Application Development

Applicants and Subapplicants

- Develop subapplications
- Submits to State (applicant)

- Coordinates & collects subapplications
- Selects subapplications to include in application
- Submits application to FEMA
<table>
<thead>
<tr>
<th>Eligible Applicants/Subapplicants</th>
<th>HMGP</th>
<th>PDM</th>
<th>FMA</th>
</tr>
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<tbody>
<tr>
<td>State Agencies</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Tribal Governments</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Local Governments/ Communities</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Private non-profit Organizations (PNPs)</td>
<td>✓</td>
<td>✗</td>
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</table>
## Hazard Mitigation Plan Requirement

<table>
<thead>
<tr>
<th>Grant Program</th>
<th>State /Tribal Plan Status</th>
<th>Local Plan Status</th>
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</thead>
<tbody>
<tr>
<td>HMGP</td>
<td>Approved at time of disaster declaration</td>
<td>Approved at time of obligation</td>
</tr>
<tr>
<td>PDM/FMA</td>
<td>Approved at application deadline and time of obligation</td>
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### Eligible Activities

<table>
<thead>
<tr>
<th>Eligible Activities</th>
<th>HMGP</th>
<th>POM</th>
<th>FMA</th>
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<tbody>
<tr>
<td>1. Mitigation Projects</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Property Acquisition &amp; Structure Demolition</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Property Acquisition &amp; Structure Relocation</td>
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<td>✔</td>
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<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>Minor Localized Flood 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 Bld. &amp; Facilities</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Eligible Activities</td>
<td>HMGP</td>
<td>PDM</td>
<td>FMA</td>
</tr>
<tr>
<td>-----------------------------------------</td>
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<tr>
<td>1. Mitigation Projects</td>
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<td>✓</td>
</tr>
<tr>
<td>Safe Room Construction</td>
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<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Infrastructure Retrofit</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>Soil Stabilization</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>Wildfire Mitigation</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
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<tr>
<td>Post-Disaster Code Enforcement</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
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<tr>
<td>5% Initiative Projects</td>
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<td>2. Hazard Mitigation Planning</td>
<td>✓</td>
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<tr>
<td>3. Management Costs</td>
<td>✓</td>
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</table>
Ineligible Activities

- Projects that do not reduce the risk to people, structures, or infrastructure
- Projects that are dependent on another phase of a project in order to be effective
- Projects for which actual physical work has occurred prior to award
- Projects constructing new buildings or facilities
  – Exception is Safe Rooms
- Projects that address operation, deferred or future maintenance, repairs, or replacement
- Studies not directly related to design and implementation of a proposed project
- Preparedness measures and response equipment
FMA Eligibility requirements

All subapplicants must be NFIP participants in good standing (not suspended)

All projects must benefit NFIP-insured properties

FMA funds cannot be used for non-localized flood risk reduction projects
FY17 FMA – Funding priorities

FY17 Flood Mitigation Assistance
$160 Million

$70 Million
1a Community Flood Mitigation Advance Assistance
1b Community Flood Mitigation Projects

$90 Million
2 Technical Assistance
3 Planning
4 SRL and RL Priorities
Community Flood Mitigation Project Types

Eligible community flood mitigation projects:

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

- Scope of Work
- Schedule
- Cost Estimate
- Feasibility & Effectiveness Documentation
- Benefit-Cost Analysis & Documentation
- EHP Documentation
Scope of Work (SOW)

Detailed description of the proposed project:

- Who is affected?
- Who is performing the work?
- What is the problem to be mitigated?
- What is the proposed project?
- Where is it located?
- How will it be implemented?
- How will it solve the problem?
SOW – Supporting Documentation

Topographic Maps

Pertinent Studies

Street Map

At least three photos
Cost Estimate/Budget

• Provides breakdown of costs for the activity
• Identifies contractor costs
• Includes management costs
• Documents sources for estimated costs
Cost Estimate/Budget, continued

- Project Manager
- Contractor
- Engineering/architectural designs
- Construction costs
- Equipment
- Permits/surveys
- Site preparation/restoration
City Administrative Expenses – This cost covers the City’s management cost of the project and grant. The Utilities Director will oversee the project ($35.21/h x 71 hours = $2,500) and City staff (3 staff x $22.22/h x 30 hours = $2,000) will provide inspection of the construction.

Engineering Fees – These fees will cover the cost for the City contracted engineering firm to oversee the design and contract documents for the construction. This also covers the cost for the Engineering firm to bid the project and perform contract and grant administration.

Equipment Costs – This cost covers the City’s equipment operating cost including a loader/excavator to assist in the installation of the check valves. ($200/h x 25 hours = $5,000)

Equipment purchase and installation – These amounts are averages of 3 quotes from suppliers and installers.
Pre-Award Costs

Costs incurred after the HMA application period has opened, but prior to the date of the grant award.

- Application Development
- Development of BCA
- Collection of EHP data
- Preparing for design specifications
- Community outreach & meetings related to the development of the application

Any work related to implementation is ineligible prior to award and may result in grant denial.
Cost-Share Requirements

Grant Funds: In general, FEMA Mitigation funds may be used to pay up to 75% of the eligible activity of the costs.

Matching Funds: The remaining 25% of eligible activity costs are derived from non-Federal sources.
Cost-Share Requirements, continued

However, there are some exceptions—FEMA will pay up to:

- **90%** under PDM for small, impoverished communities
- **90%** under FMA for Repetitive Loss Properties (RL)
- **100%** under FMA for Severe Repetitive Loss Properties (SRL)
Schedule

- Divides the activity into measurable tasks or milestones
- Includes all itemized tasks
- Provides a realistic schedule for each task

Projected time must not exceed the grant performance period
### Example of Scheduling Chart

<table>
<thead>
<tr>
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<tbody>
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<td>6</td>
<td>Approve Draft Design</td>
<td>5/6/2012</td>
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<td>5/6</td>
<td>5/11</td>
<td>6/5</td>
<td>7/5</td>
<td>8/1</td>
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<td>7</td>
<td>Develop Final Design</td>
<td>5/6/2012</td>
<td>5/25/2012</td>
<td>15d</td>
<td>5/6</td>
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<td>7/25/2012</td>
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<td>7/25</td>
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<td>14</td>
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<td>7/31/2012</td>
<td>7/31/2012</td>
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<td>7/31</td>
<td>7/31</td>
<td>8/2</td>
<td>9/3</td>
<td>10/3</td>
</tr>
</tbody>
</table>
Additional Project Application Elements

- Decision-making Process
- Damage History
- Property/Facility Data
- Engineering Feasibility
- Cost-Effectiveness
- Environmental/Historic Preservation
Cost-Effectiveness

Applications must demonstrate project **cost-effectiveness** through an acceptable Benefit Cost Analysis (BCA).

The Benefit Cost Ratio (BCR) is calculated by dividing the total annualized project benefits by total annualized project costs. **The BCR must be equal to or greater than 1 to be considered cost-effective.**

The State Hazard Mitigation Office can assist with the BCA portion of your application.
Cost-Effectiveness, continued

BCA Tools:

- BCA Software 5.3.0 (released Jan. 10, 2017)
- BCA Reference Guide, June 2009
- BCA Supplement to the BCA Reference Guide, June 2011
- Environmental Benefits Policy
- BCA Technical Assistance Helpline 1-855-540-6744

www.fema.gov/benefit-cost-analysis
Environmental Planning and Historic Preservation

EHP laws have different documentation requirements
Complete project application development and documentation may expedite the EHP review:

- SOW
- Property data
- Photos/maps
- Design/sketch/site plan
Technical Feasibility

FEMA accepts engineering designs for a project if a registered Professional Engineer (or other design professional) certifies that the design meets ASCE 24-14 criteria or its equivalent.

At closeout, verification is also required that the project was constructed as designed and in accordance with the approved SOW and provides the intended level of protections.
HMA Program Guidance

https://www.fema.gov/hazard-mitigation-assistance
HMA Guidance - Project Type Addendums

- Safe Rooms
- Wildfire Mitigation
- Property Acquisitions
- Structure Elevation
- Mitigation Reconstruction
State Hazard Mitigation Officer

Vera Small, State Hazard Mitigation Specialist
Bureau of Preparedness and Grants Administration
Illinois Emergency Management Agency
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Questions