Bringing Your Hazard Mitigation Plan to Life

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Maryland is Disaster Prone!

- Maryland susceptible to a variety of weather related emergencies
- 30 Federal Disaster Declarations state-wide since 1962.
  - Hurricane/Tropical Storm 9
  - Snow/Ice 9
  - Flooding 7
  - Severe Storms 3
  - Tornados 2

- Numerous local disasters
Solution: Hazard Mitigation

Break-the-Cycle
What is Hazard Mitigation?

Hazard Mitigation is any sustained action taken to reduce or eliminate long-term risk to people and property from natural & man-made hazards & their effects.
Flood Mitigation Options
Acquisition and Demolition or Relocation

- Acquisition of flood prone structures and removal from the floodplain
- Most effective solution, no residual risk
- Land protected in perpetuity as open space
Flood Mitigation Options

Elevation-In-Place

- Elevation of flood prone structures
- Still risk of flooding from severe events
- Must comply with local floodplain regulations
Flood Mitigation Options

Retrofitting

- Retrofitting existing buildings & facilities
- Any measure other than elevation-in-place to reduce risk of damage to structure
- Good for minor flooding
- Wet & dry floodproofing, backflow valves, sump pumps, flood resistant materials, anchors & tie downs, etc.
Flood Mitigation Options

Stormwater Management

- Must reduce flood risk & damage to existing infrastructure
- Cannot transfer the flood problem upstream or downstream
- Primary purpose is flood loss reduction, not water quality management
Flood Mitigation Options

Other flood mitigation options include:

- Infrastructure protection measures
- Minor structural flood control projects
- Major structural flood control projects such as levees and reservoirs (generally NOT eligible for FEMA HMA grant funding)
Other Mitigation Options

FEMA mitigation programs can fund other project types such as:

- Warning systems (under HMGP 5% Initiative)
- Lightning protection (surge protection)
- Seismic Retrofits
- State and Local Hazard Mitigation Planning
- Education & outreach (as part of a larger mitigation project)
- Infrastructure resiliency measures (406 mitigation following a Federal declaration)

As long as the mitigation action is a long-term solution to reduce risk of property or loss of life, it may be an eligible mitigation option!
Overview of FEMA Mitigation Assistance Programs

- 3 Unified HMA Programs
  - Post-Disaster
    - Hazard Mitigation Grant Program (HMGP)
  - Pre-Disaster
    - Pre-Disaster Mitigation Competitive (PDM)
    - Flood Mitigation Assistance (FMA)
Hazard Mitigation Grant Program (HMGP)

- Activated after a Presidential disaster declaration
- Funds allocated during the recovery period
- Intended for investment in long-term mitigation measures to reduce vulnerability to natural hazards
- Available funds equal up to 15% of the total Federal assistance for a disaster (20% for enhanced state)
- NFIP Participating Community
- Projects can be for any natural hazard
- States manage the program and set funding priorities
Pre-Disaster Mitigation Program (PDM)

- Authorized under Section 203 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act
- Nationally competitive funds
- Cost share 75% Federal / 25% Non-Federal
- Must be consistent with adopted local mitigation plan
- Must meet cost-effectiveness requirements
- Available annually based on Congressional appropriations
Flood Mitigation Assistance Program (FMA)

- Authorized under Section 1366 of the National Flood Insurance Act of 1968
- FMA funds are allocated to the State on an annual basis, based on the number of NFIP policies in effect
- Cost share 75% Federal / 25% Non-Federal (only one half of non-Federal share can be in-kind)
- Must be consistent with adopted flood mitigation plan (local all hazard mitigation plan can be revised to meet requirements)
- Community must participate in and be in good standing with the NFIP
What does “Unified HMA” exactly mean?

As of FY2007, FEMA offers hazard mitigation assistance grant programs with:

- Unique statutory authorities
- Program requirements and triggers for funding
- Common goal of providing funds to states and communities to reduce the loss of life and property from future hazard events

The goal of the Unified HMA is to have common:

- Application and eligibility determination process
- Program implementation/management processes
- Grant closeout processes
Hazard Mitigation
Application Development
Have an idea in mind? 
...scope it out!

Use the best information available to identify vulnerable areas, possible mitigation solutions & evaluate possible measures to mitigate the impacts of a particular hazard

- Local Hazard Mitigation Plan
- Special studies/reports

Steps Include:

- Review program eligibility requirements
- Compare project ideas using Benefit/Cost, feasibility, environmental & engineering screening
- Evaluate community support
- Select the appropriate mitigation measure/activity
Important Considerations for Application Development

- Assume the reviewer does not know anything about your area or region and may never be able to visit the project site

- Most of the information used to evaluate alternative projects will be needed in the application

- Fully describe the results of the project development process

- Read Program Guidance carefully and provide information accordingly!
Typical Application Shortcomings

- Project not eligible under FEMA grant programs
- Scope of work inadequate – too little detail, descriptions unclear, key data left out, no supporting maps/diagrams
- Not a well-developed, well-screened project
  - Addressed a ‘nuisance’ issue rather than a real property threat
  - Risk was not high
  - Mitigation measure did not provide adequate protection
  - Cost of measure was too high for level of protection provided
- Supporting documentation/detail was incomplete, inaccurate, and/or not credible
Essential Components of Application

- Hazard Description – define the problem
- Scope Of Work (SOW) – description of solution
- Cost Estimate
- Work Schedule
- Benefit-Cost Analysis (BCA)
- Engineering Review (if necessary)
- Environmental and Historic Preservation Review
Sources of Information

- Sources and types of information to include:
  - **Pictures** of project area; if possible, when flooded
  - **Newspaper articles** for information on past disaster events
  - **Reports** from police, fire, and/or emergency management to gather important data like water depths
  - FEMA has **repetitive loss** information and **flood insurance claim** information
  - **Diagram** or schematics of drainage project
  - **Map** of project area with project components clearly marked
Alternative Sources of Funding

Other sources:

- Local General or Capital Fund
- Revolving Loan Fund
- Storm Water Utility Fund
- Local Tax Funds
- Property Owner Responsibility
- In-Kind
  - Project Management
  - Labor, Equipment, Materials
Questions?

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