

Hazard Mitigation Assistance (HMA) Update



An Overview of HMA Topics from FEMA HQ



FEMA

Karen Helbrecht
May 2, 2017

2018 President's Budget Blueprint

Topics

► Overview

- The Administration is still finalizing the details of the fiscal year 2018 President's Budget, including the final funding amounts for each specific grant program.

Non Disaster Grants: Pre-Disaster Mitigation (PDM)

Key Points

- ▶ The FY17 Appropriations includes \$100 Million for the FY17 PDM application cycle.
- ▶ Priorities will be similar to FY 2016.
- ▶ Multi-State or Multi-Tribal activities will be considered to allow for more comprehensive mitigation solutions.

Flood Mitigation Assistance (FMA)

Key Points

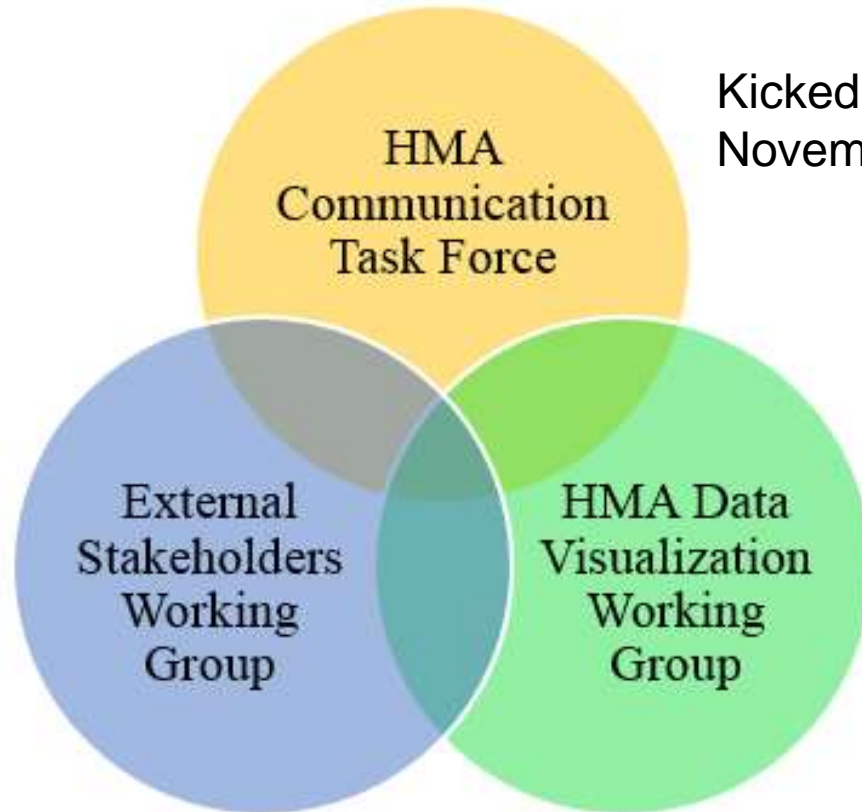
- ▶ The FY17 budget includes \$175Million for the FY17 FMA application cycle.
- ▶ Two-tiered competition:
 - Priority given to severe repetitive loss (SRL) and repetitive loss (RL) properties, followed by other insured properties.
 - Community Resilience Competition – to fund flood mitigation projects that address risk on a community level.

PDM and FMA Continued

Key Points

- ▶ For both FMA and PDM
 - finalize its Notice Of Funding Opportunity (NOFO),
 - Outreach on new priorities, including webinars
 - Application period will likely close early in FY 2018
- ▶ NOFO will be posted on www.Grants.gov at least one month in advance of opening the application period.

Working Groups



Kicked Off
November 22, 2016

Kicked Off
January 9, 2017

Kick Off TBD

Communications Task Force

Three Main Goals:

1. Increase awareness and participation in HMA grant program resources;
2. Promote the success of HMA and how HMA contributes to improved resilience; and
3. Develop and ensure consistent, accurate, and meaningful messaging to a variety of stakeholders.



Hazard Mitigation Assistance Website Update

Topics

- ▶ Concept and Phases
- ▶ Layout/Design
- ▶ HMA Documents Library

External Stakeholders Workgroup

- Kickoff meeting held in January, first in-person meeting in April

- Membership:

State Representatives

Miles Anderson, Florida

Tom Hughes, Pennsylvania

Sarah White, Massachusetts

Indian Tribal Representatives

Tracy De Pew, Cow Creek Band of Umpqua (OR)

Kaylynn Gresham, Oneida Nation Emergency Management (WI)

Paula Gutierrez, Santa Clara Pueblo (NM)

FEMA Representatives

Dorothy Cook, Region VI

Karen Helbrecht, FEMA HQ

Donna Boreck, Region VIII Mark Schneider, Cedar, Clinton, Delaware, Dubuque & Jackson Co, Iowa

Local Representatives

Chris Blinzinger, Provo City, Utah

George De La O, County of Los Angeles, California

- Developing work plan based on member priorities and 2016 Workshop

2017 Annual Hazard Mitigation Stakeholder Workshop

Topics

- ▶ E0169 Annual Hazard Mitigation Stakeholder Workshop: May 31, 2017 – June 2, 2017 at EMI
- ▶ Theme – Mitigate Together: Coordinating Resources for Resilient Communities
 - Video Booth – to share success stories and lessons learned for the website.
- ▶ 2018 Workshop: March 12-16, 2018

Grants Management Modernization (GMM)

Topics

- ▶ Concept
- ▶ Prototype team is conducting interviews for grant reporting features.
 - Regional Engagement
 - Session at EMI Workshop

Mitigating Flood and Drought Conditions Under Hazard Mitigation Assistance

- In September 2015, FEMA announced the following project types:
 - ▶ Aquifer Storage & Recovery
 - ▶ Floodwater Diversion & Storage
 - ▶ Floodplain & Stream Restoration
- Can be used for all hazards, when appropriate
- Leverage traditional risk reduction benefits and applicable ecosystem services
- Ecosystem service tools released in May 2016
- Includes using Green Infrastructure/nature-based design to develop and implement mitigation actions

Mitigating Flood and Drought Conditions

Aquifer Storage and Recovery

- Considerations and Challenges

- ▶ Proper siting for the project is critical

- Aquifer may span multiple jurisdictions or communities
- Aquifer is accessible
- Ensure appropriate geologic conditions are present and understood
- Identify any potential contaminants within aquifer

- ▶ Compliance with Underground Injection Control Program

- Regulated by the EPA, which is responsible for regulating the construction, operation, permitting, and closure of injection wells that place fluids underground for storage or disposal

Mitigating Flood and Drought Conditions

Flood Diversion and Storage

■ Considerations and Challenges

- ▶ Project type lends itself readily to green infrastructure methods of design and implementation, maximized ecosystem services

- ▶ Projects can vary in complexity and size
 - Affects project costs, design, and environmental impacts
 - Consider project impacts on riparian system, watershed, and environment
 - Projects can be scaled for different events or protection level
 - Project site conditions and community needs will determine project scoping
 - Likely to require an analysis of water behavior and project impacts

Mitigating Flood and Drought Conditions Floodplain and Stream Restoration



Ecology Park, Valley Creek – East Whiteland Township, Chester County
(Pennsylvania)

Mitigating Flood and Drought Conditions Floodplain and Stream Restoration

■ Considerations and Challenges

- ▶ Green infrastructure methods of design and implementation, maximize ecosystem services and environmental benefits
 - Examples: flood setbacks, two stage channels, relief channels, restoring native vegetation
 - Can combine green infrastructure and “traditional” methods (e.g., riprap)
- ▶ Projects can vary in complexity and size, scale for site and need
 - Likely to require an analysis of water behavior and project impacts especially downstream impacts



Longview Stream System (Raleigh, NC)

Source: CDM 2008a

Mitigating Flood and Drought Conditions Green Infrastructure/Nature-Based Design

- Green infrastructure or nature-based design under HMA
 - ▶ Projects that use an integrated, natural systems-based design approach in hazard mitigation actions
 - ▶ Restore or replicate a site's natural function
 - ▶ Reconnect disrupted natural systems (e.g., reconnect interrupted watersheds or drainage systems)
 - ▶ For HMA application
 - Project must demonstrate measurable natural hazard risk reduction
 - Should also provide additional ecosystem services
 - Encourage most sustainable design and method

Mitigating Flood and Drought Conditions Green Infrastructure/Nature-Based Design



Commercial Rain Garden (Rain Garden Preserve Park) in Cuyahoga Falls, OH

- \$160,000 total project cost (mostly funded by FEMA HMA grant)
- City acquired four residential properties damaged by flooding
- Serves tributary area of 3.2 acres -30,000 gallons of holding/filtering capacity

Mitigating Flood and Drought Conditions Ecosystem Service Benefits

- All HMA projects must demonstrate they **reduce risk** and are **cost effective**
- **75%** of benefits must derive from **risk reduction** benefits
- May 2016, released tools for ecosystem services in HMA
 - ▶ Aquifer Storage and Recovery BCA Tool
 - ▶ Ecosystem Service Benefits Calculator
 - ▶ Supplemental BCA Guidance for Floodwater Diversion and Storage Projects
 - ▶ Supplemental BCA Guidance for Floodplain and Stream Restoration Projects
 - ▶ Pre-calculated benefits for post-wildfire mitigation actions
- BCA software update incorporates all ecosystem services into the BCA Toolkit




Resources

Mitigating Flood and Drought Conditions Under Hazard Mitigation Assistance

Aquifer storage and recovery, floodplain and stream restoration, flood diversion and storage, and green infrastructure methods are eligible under the Hazard Mitigation Assistance programs to support communities in reducing the risks with mitigating the impacts of flood and drought conditions.

Multiple tools have been developed to assist with the development of these activities, to include fact sheets, benefit guidance and job aids to help development of Hazard Mitigation Assistance applications. These activities are available through Hazard Mitigation Grant Program funding resulting from a major disaster declared on or after September 30, 2015, and funding for which the application period opens on or after September 30, 2015.

[Hazard Mitigation Products](#)  [FEMA Fact Sheets](#) 

	Size	Publi Date
 Aquifer Storage and Recovery Job Aid This Job Aid is a tool to support developing Aquifer Storage & Recovery (ASR) projects by providing a checklist of information to include in an ASR project application to support the technical feasibility and effectiveness, and environmental and historic preservation evaluation.	0.22M	August 2016
 Aquifer Storage and Recovery Supplemental This supplemental document is a tool to provide more detailed information on the ASR projects by providing a description of the information needed, potential resources, and examples.	3.00M	February 2017
 Flood Diversion and Storage Job Aid This Job Aid is a tool to support developing Flood Diversion & Storage (FDS) projects by providing a checklist of information to include in an FDS project application to support the technical feasibility and effectiveness, and	0.29M	August 11, 2016

Information for Hazard Mitigation Assistance Reviews

JOB AID: AQUIFER STORAGE AND RECOVERY



Aquifer Storage and Recovery (ASR) projects serve primarily as a drought management tool, but can also be used to reduce flood risk, mitigate salt water intrusion, and restore aquifers that have been subject to overdraft. The concept is to capture water when there is an abundant supply, store the water in subsurface aquifers, and recover water from the storage aquifer if and when there is a need. Storing water underground can help protect it from pollutants, evaporation, and relative sea-level rise to ensure access for long periods of low flow.

AQUIFER STORAGE & RECOVERY

December 2016

Information for HMA Review | Data Supplement

Each Hazard Mitigation Assistance (HMA) application must comply with the requirements outlined in the HMA Guidelines. According to the guidelines, in addition to a general conceptual design, an Environmental Planning and Historic Preservation (EPH) review and a technical review must be performed by the Federal Emergency Management Agency (FEMA) for each project (stage). Early submission of accurate information will facilitate FEMA's review process and the release of HMA funds. This Data Supplement supports the Aquifer Storage and Recovery Job Aid by providing additional information, examples, and practical issues or documentation for items listed in the Job Aid to help communities applying for HMA grants comply with application requirements. For more information, Subapplicants and Applicants are encouraged to refer to FEMA's Hazard Mitigation Assistance Guidelines and Implementation and Technical Preservation Handbook: A Volume Guide.

PROVIDE A VORACITY MAP WITH ADDRESS AND PROJECT BOUNDARIES

Potential Issues: Provide a map showing project location. Provide a clear delineation of areas identified to construct the project, including potential white space such as undeveloped lots.

Include the address(es) of the mitigation project. This includes street name and number, city, county or parish, state and zip code for the property. A post office box number is not an acceptable address.

Map(s) and/or site sketch(es) should show the project boundaries and identify all key property parcels that are included in the project area, as well as adjacent parcels. See Parcel maps, Property Survey Map, US Geological Survey (USGS) topographic maps, aerial photography or other acceptable resources. Obtain the information from the property owner, local building department, or another records held by the property or engineering firm.

Example: 6 also verify the consistency of a licensed surveyor to clearly outline project and property boundaries. Attached map shows the location of the project located at 4445 River Road NE, Manassas, Virginia County, VA 20108.

IDENTIFY PROJECT LOCATION BY LATITUDE AND LONGITUDE IN DECIMAL DEGREES

Potential Issues: There are several ways to obtain the latitude and longitude of a property. Options include:

- Use a Global Positioning System (GPS) device.
- Enter the property address into a mapping application or find the coordinates. Several free tools are available that generate the latitude and longitude coordinates when you type in an address. Enter "How to find GPS coordinates" into a search engine to find out more about this.

Note: Note that latitude and longitude are shown in either decimal degrees (e.g., 38.916667, -77.033333) or degrees, minutes, and seconds (38°54' 00" N, 77°02' 00" W). If you obtain and provide degrees, minutes, and seconds, you may need to convert the non-decimal degrees to order to enter a data of column. Several free tools are available on the Internet for this conversion. Enter "Conversion converter" into a search engine to find out more about this.

Example: Coordinates for the Washington Monument, Washington, DC, MARINA, 38.889510, -77.033333, See Figure 1.

Figure 1. Washington Monument, Washington, DC
 Source: <http://www.fema.gov/hazardmitigationassistance>



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Mitigating Flood and Drought Conditions Resources

- Hazard Mitigation Assistance website:
<https://www.fema.gov/hazard-mitigation-assistance>
- Mitigating Flood and Drought Conditions website:
<https://www.fema.gov/Mitigating-Flood-and-Drought-Conditions-Under-Hazard-Mitigation-Assistance>
- Benefit Cost Analysis:
<https://www.fema.gov/benefit-cost-analysis>
- Sign-up for FEMA GovDelivery Notifications:
<https://subscriberhelp.govdelivery.com/hc/en-us>

Questions?

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