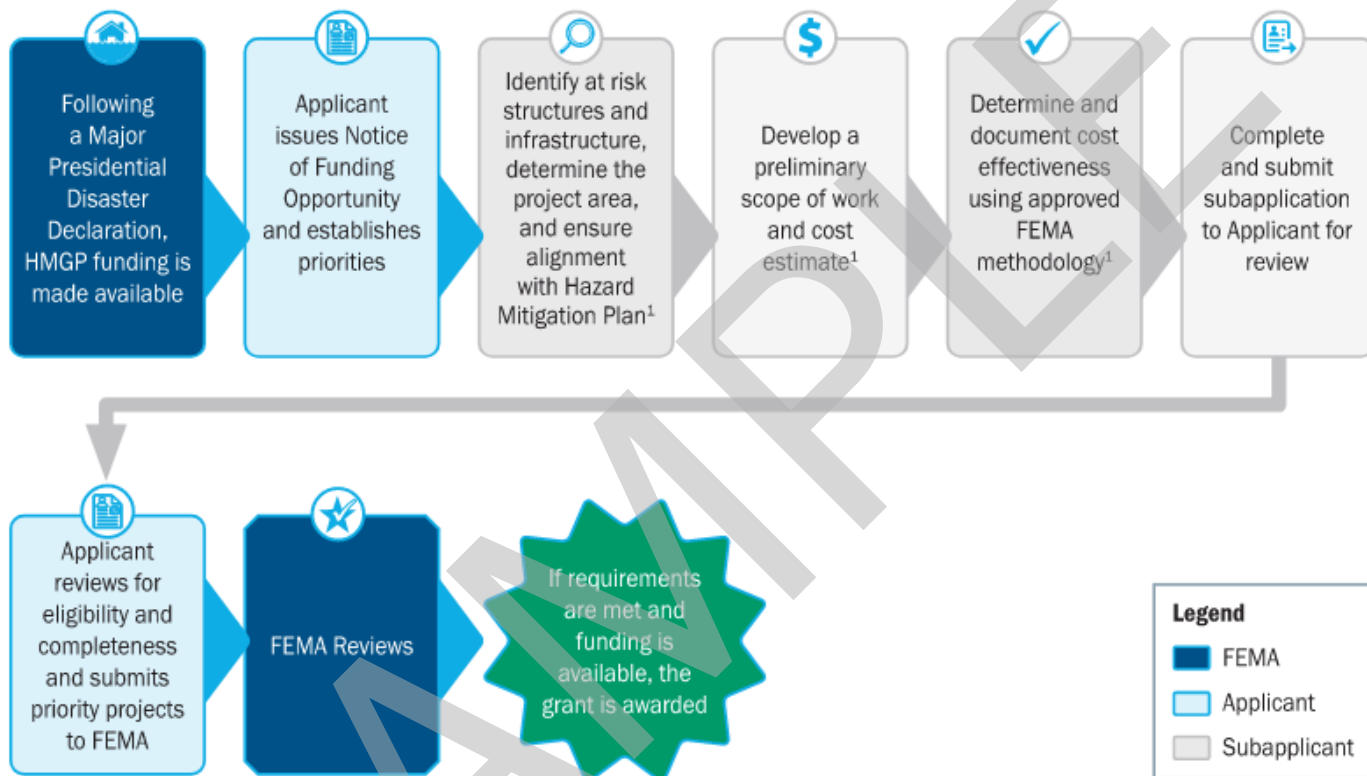


# Flood Risk Reduction: Overview

\*The following information is intended for guidance only and is not a request for information. The following template is only intended to help the reader understand the FEMA Hazard Mitigation Grant Program (HMGP) application process.

**Purpose:** Application templates have been developed to provide step-by-step instructions for specific project types. This application is intended to be used for projects that involve flood risk reduction. **Figure 1** shows the general process flow and decision points from a Major Presidential Disaster Declarations to grant award.



**Notes:**

- (1) These activities may also occur prior to the Disaster Declarations and/or the Notice of Funding Opportunity.

**Figure 1: Flood Risk Reduction Project Process Overview**

Prior to starting an application, it is recommended that you review the summary of data requirements (Table 1) needed to complete the application. Early submission of accurate and complete eligibility and pre-award information will facilitate FEMA’s review process and the release of Hazard Mitigation Grant Program (HMGP) funds

The methodology used to evaluate cost-effectiveness will affect data requirements for the application. There is one method to evaluate cost-effectiveness for a flood risk reduction project:

- Benefit-cost analysis (BCA) using the BCA Toolkit via: Flood Module (Modeled Damages) or the Damage-Frequency Assessment (Historical Damages or Professional Expected Damages).

## Key Resources

### FLOOD RISK REDUCTION PROJECT APPLICATION AND INSTRUCTIONS

This application form is designed specifically for projects that involve flood risk reduction. The accompanying instructions provide definitions, explanations, and clarification on the information requested in each section of the application. This step-by-step guidance references additional FEMA resources to help direct you to more detailed information, if needed.

### HAZARD MITIGATION ASSISTANCE TECHNICAL REVIEW JOB AID SERIES, FLOOD RISK REDUCTION TECHNICAL REVIEW

This Job Aid describes the requirements for the technical review process for Hazard Mitigation Assistance-funded flood risk reduction projects and provides a step-by-step approach to addressing each of the major components of an elevation project application.

### HAZARD MITIGATION ASSISTANCE ENVIRONMENTAL PLANNING AND HISTORIC PRESERVATION (EHP) REVIEW JOB AID SERIES, FLOOD RISK REDUCTION: INFORMATION REQUIRED FOR ENVIRONMENTAL REVIEW

This Job Aid provides detailed guidance regarding information that should be included for flood risk reduction project applications, including recommended documentation and supplemental information needed to help FEMA conduct an EHP review. This Job Aid categorizes the components considered within FEMA’s EHP review process, describes the information needed under each component, identifies potential sources of documentation, and provides examples.

**Table 1: Summary of Data Requirements**

Location and Scope of Work Information	Required Eligibility Data <sup>1</sup>	Required Pre-Award Data <sup>2</sup>	Application Section and Number
Applicant/subapplicant contact information	✓		A
Project narrative describing the flood risk in the area	✓		B1
Location of proposed project, description of existing conditions, and structures and infrastructures to be mitigated	✓		B2
Detailed scope of work including tasks and key milestones	✓		B3
Technical data to support SOW, such as available design plans, specifications, and engineering analyses	✓		B5
Verification that the project will be designed and constructed to meet industry standards	✓		B3
Documentation demonstrating that the project will not cause adverse effects upstream or downstream of the project site	✓		B6
Description of alternatives (no action, alternative action, proposed project)	✓		C
Schedule (schedule must be for 36 months or less)	✓		E
Project cost estimate with line items and supporting documentation	✓		F
Representative photos of project area and surrounding area	✓		J

Location and Scope of Work Information	Required Eligibility Data <sup>1</sup>	Required Pre-Award Data <sup>2</sup>	Application Section and Number
<p><b>Cost-Effectiveness: Information required depends upon the methodology used to show cost-effectiveness</b>                      Note: This includes common data requirements to show cost-effectiveness; some projects may require additional information to demonstrate a benefit-cost ratio over 1.0. The technical job aid provides step-by-step instructions and additional resources.</p>			
<p><b>FEMA BCA Tool: Historical or Professional Expected Damages</b></p>			
BCA Narrative	Recommended		I
Annual maintenance cost	✓		
Project useful life	✓		
Documented Historical or Estimated Damages	✓		
Estimated recurrence intervals for one or more damage event, or at least 3 historical damage events from different years	✓		
For historical damages, year property was built	✓		
Documentation of proposed level of protection	✓		
Basis for determining the loss of function to the infrastructure benefitting from the project	Include if applicable		
Export of the BCA tool, PDF of the BCA Report from the toolkit, and supporting documentation	✓		
<p><b>FEMA BCA Tool: Modeled Damages</b></p>			
BCA Narrative	Recommended		I
Annual maintenance cost	✓		
Project useful life	✓		
Structure information: lowest floor elevation, building type, and building size	✓		
Flood hazard data	✓		
Export of the BCA tool, PDF of the BCA Report from the toolkit, and supporting documentation	✓		
<p><b>Additional EHP Documentation: Needs vary based on potential impacts considerations include:</b></p>			
Description of ground disturbance activities and extent	✓		D
Description of public outreach that has occurred.		✓	
Description of any federal, state, or local agency coordination, and permitting		✓	
Provide any environmental and/or cultural studies that have been conducted in the area.		✓	
Is the project in a known floodplain?	If yes, additional documentation and discussion of impacts and potential mitigation measures will be required		
Are there nearby surface waters or wetlands?			
Are their known hazardous or contaminated materials at the project site?			
Does the project involve the use of imported fill?			
Will the project remove vegetation?			
List any best management practices that will be used during construction	✓		
<p><b>Other Required Documents</b></p>			
Fund commitment letters	✓		J
Applicable signed SF-424 forms and Assurances	✓		
Designated authorized agent documentation	✓		

Notes:

<sup>1</sup> Eligibility: Items that must be included in the grant application to fully evaluate eligibility.

<sup>2</sup> Pre-Award: Information that FEMA will need to review prior to award.