

Post-Wildfire Flood Risk and Sediment 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 post-wildfire flood risk and sediment reduction projects, including modifying or removing culverts to allow drainage to flow freely, adding drainage dips and constructing emergency spillways to keep roads and bridges from washing out during floods, and constructing straw, rock, or log dams in small tributaries to prevent flooding. Mitigation projects are a long-term effort and require multiple steps. **Figure 1** shows the general process flow and decision points from a Major Presidential Disaster Declaration to grant award.

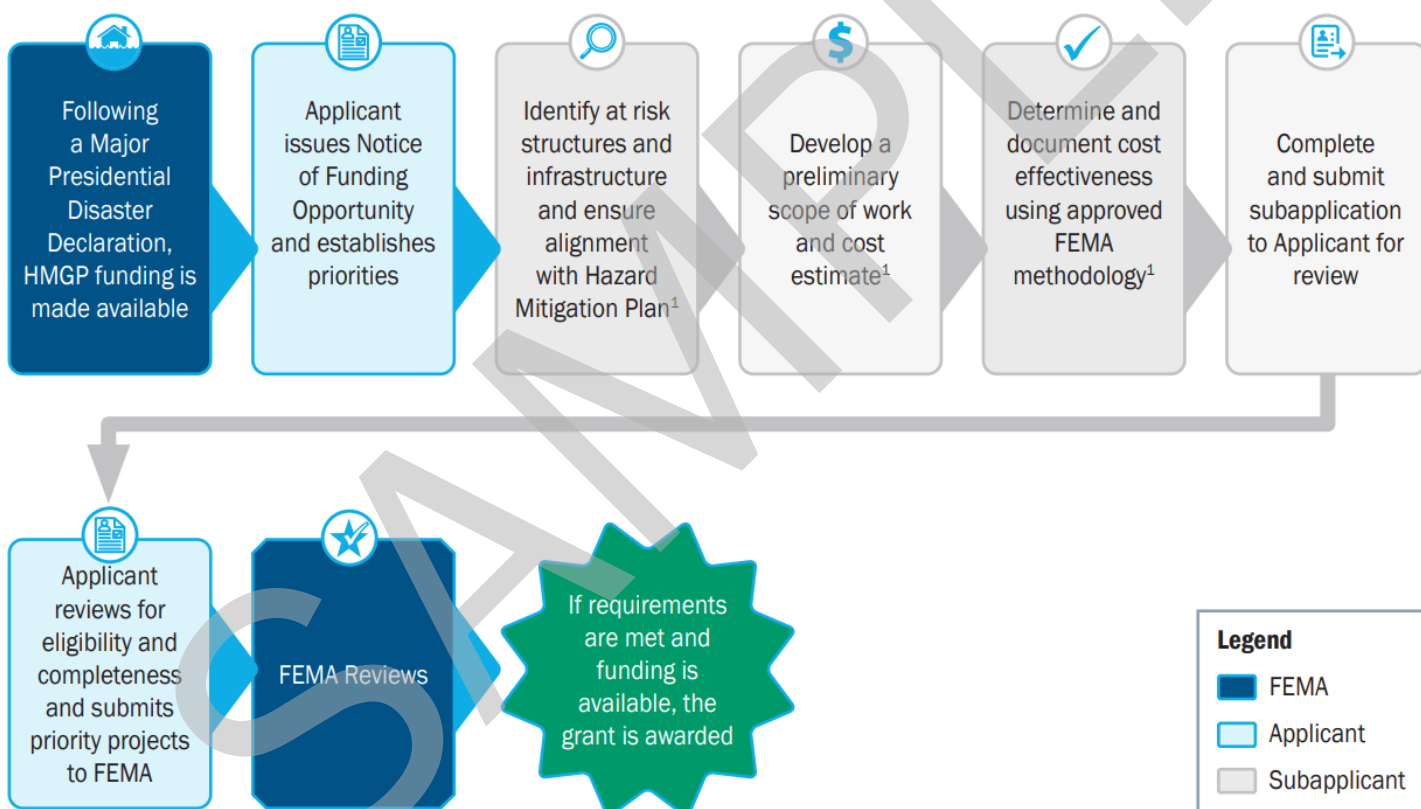


Figure 1: Generator Project Process Overview

Notes:

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

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 are two methods to evaluate cost-effectiveness for a post-wildfire flood risk and sediment reduction project:

- Pre-calculated benefits: Pre-Calculated benefits may be used to demonstrate cost-effectiveness for post-wildfire flood diversion projects that meet specific criteria and documentation requirements. A post-wildfire flood diversion project must cost less than \$5,250 per acre. The allowable pre-calculated benefits value is the total number of acres being mitigated multiplied by the total benefits per acre.
- Benefit-cost analysis (BCA) using the BCA Toolkit via: Modeled Damages or Historical Damages.

Check the applicability of pre-calculated benefits prior to completing a BCA, as use of pre-calculated benefits will reduce data requirements.

Key Resources

POST-WILDFIRE FLOOD RISK AND SEDIMENT REDUCTION PROJECT APPLICATION AND INSTRUCTIONS

This application form designed specifically for post-wildfire flood risk and sediment reduction projects, including modifying or removing culverts to allow drainage to flow freely, adding drainage dips and constructing emergency spillways to keep roads and bridges from washing out during floods, and constructing straw, rock, or log dams in small tributaries to prevent flooding. 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 Job Aids and FEMA resources to help direct you to more detailed information, if needed.

HAZARD MITIGATION TECHNICAL ASSISTANCE REVIEW | JOB AID SERIES, POST-WILDFIRE FLOOD RISK AND SEDIMENT REDUCTION TECHNICAL REVIEW

This Job Aid describe the requirements for the technical review process for Hazard Mitigation Assistance funded post-wildfire flood risk and sediment reduction projects and provide a step-by-step approach to addressing each of the major components of a post-wildfire flood risk and sediment reduction 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 post-wildfire flood risk and sediment 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 ¹	Required Pre-Award Data ²	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 description of mechanisms to mitigate risk	✓		B2
Detailed scope of work including tasks and key milestones	✓		B3
Description of ground-disturbing activities and dimensions of ground disturbance	✓		B5
Map or image (e.g., geographic information system [GIS] file, Google Earth .kmz file) showing the boundaries of the project area and all project components including equipment staging	✓		B6
Technical data, such as engineering analyses, drawings, and/or plans, along with a list of the codes and standards the mitigation measures will adhere to	✓		B7
Documentation of any upstream or downstream impacts	✓		B8
Description of vegetation removal and other relevant project components, quantification of the project area	✓		B9
Representative photos of project area and surrounding area	✓		B10
Description of alternatives (no action, alternative action, proposed project)	✓		C
Description of operations and maintenance activities	✓		E
Schedule (schedule must be for 3 years or less)	✓		F
Project cost estimate with line items and supporting documentation	✓		G
Cost-Effectiveness: Information required depends upon the methodology used to show cost-effectiveness as described above			
<i>Note: This includes common data requirements to show cost-effectiveness; some projects may require additional documentation of damages to demonstrate a benefit-cost ratio over 1.0. The technical job aid provides step-by-step instructions and additional resources.</i>			
Pre-calculated Benefits for Post-Wildfire Flood Diversion Projects			
Project cost is less than \$5,250/acre for eligible activities.	✓		J
FEMA Benefit-Cost Analysis (BCA) Tool: Modeled Damages			
BCA narrative	Recommended		J
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	✓		
FEMA BCA Tool: Historical or Professional Expected Damages			
BCA narrative	Recommended		J
Project useful life	✓		
Documented Historical or Estimated Flood Damages	✓		
Estimated recurrence intervals for one or more damage event, or at least 3 historical damage events from different years	✓		
Export of the BCA tool, PDF of the BCA Report from the toolkit, and supporting documentation	✓		
Additional EHP Documentation: Needs vary based on potential impacts considerations include:			
Description of public outreach that has occurred.		✓	E
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?			

Location and Scope of Work Information	Required Eligibility Data ¹	Required Pre-Award Data ²	Application Section and Number
Are there nearby surface waters or wetlands?	If yes, additional documentation and discussion of impacts and potential mitigation measures will be required		
Are there known hazardous or contaminated materials at the project site?			
Does the project involve the use of imported fill?			
List any best management practices that will be used during construction	✓		
Other Required Documents			
Fund commitment letters	✓		K
Applicable signed SF-424 forms and Assurances	✓		
Designated authorized agent documentation	✓		

Notes:

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

² Pre-Award: Information that FEMA will need to review prior to award.

