Wildfire: Information Required for Environmental Review

This Job Aid is to help communities applying for Hazard Mitigation Assistance grants for wildfire hazard mitigation projects. It outlines the required documentation needed for FEMA to carry out an Environmental Planning and Historic Preservation review of a project.

ABOUT THIS RESOURCE

It is required by law that all projects funded with Hazard Mitigation Assistance (HMA) grants comply with Environmental Planning and Historic Preservation (EHP) laws, regulations and Executive Orders (EOs). During the EHP review process, FEMA evaluates the potential impacts of the project on the human and natural environment.



Figure 1. A photo of workers dragging and carrying cut vegetation up a dirt road to a woodchipper.

FEMA begins the EHP review process once the project application is submitted. It is your responsibility as the subapplicant to provide documentation that accurately describes the project, its purpose, location, existing environmental conditions in the project area, potential project impacts, best management practices (BMPs), different alternatives considered for the project and mitigation strategies to address environmental impacts of the project.

FEMA will assess the potential impacts of the project. The applicant must wait until the EHP review has been completed by FEMA before starting work on the project. FEMA will also conduct a technical review to verify your project's technical feasibility and cost-effectiveness. Refer to the Wildfire Technical Review Job Aids.



Table of Contents

What is the EHP Review?	2
What Information is Required for the EHP Review of Wildfire Mitigation Projects?	2
1. Scope of Work	3
2. Project Area and Structure Information	6
3. Potential Impacts on People, the Environment, and Cultural Resources	8
What Happens Next?	13
Scope of Work Checklist	15

What is the EHP Review?

During the EHP review, FEMA assesses the potential impacts of your project on nearby physical, cultural (historic and archeological), biological and social resources. The National Environmental Policy Act (NEPA) requires FEMA and other federal agencies to assess the environmental impacts of proposed federal actions prior to making decisions. FEMA must also ensure your project is compliant with various federal laws and presidential EOs, such as the Clean Water Act (CWA), the Endangered Species Act (ESA), the National Historic Preservation Act (NHPA), EO 11988 on floodplains and EO 11990 on wetlands. The EHP review may include consultation with other federal and state agencies, which may add time to the review process.

Projects with less potential for impacts may be covered by a Categorical Exclusion (CATEX) under NEPA. Complex projects may need more extensive review through the preparation of an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). For your project, FEMA will prepare or provide support for the development of the NEPA-required documentation, and you can help by providing the information discussed in this Job Aid.

FEMA has predetermined that projects complying with certain criteria do not have significant environmental impacts and may be covered by a CATEX for NEPA compliance. Some fuels reduction and defensible space projects will meet the criteria for CATEX N11 *Federal Assistance for Wildfire Hazard Mitigation Actions* or N12 *Federal Assistance for Planting of Indigenous Vegetation*. CATEX 11 covers actions conducted on areas totaling less than 100 acres that (1) involve the creation of defensible space or hazardous fuel(s) reduction within 100 feet of at-risk structures and (2) include the selective removal of vegetation less than 12 inches in diameter through thinning, pruning, limbing, sawing or brush cutting. CATEX N12 covers the planting of indigenous vegetation. If your project meets the criteria of either CATEX, the environmental review may be less intensive. Ignition resistant construction projects may be covered by CATEX N7 for upgrades to existing facilities.

What Information is Required for the EHP Review of Wildfire Mitigation Projects?

This section outlines information that should be included in your application so that FEMA can review your project for EHP compliance. FEMA HMA program staff will conduct a review to make sure the project complies with HMA program eligibility. For each item, there is an explanation as to why it is needed, where you can find this information

and an example of how the information should be provided to FEMA. Each piece of information requested is needed to develop a comprehensive project description to be included with your application.

For post-fire soil stabilization projects, please consult the Soil Stabilization: Information Required for Environmental Review Job Aid.

1. SCOPE OF WORK 1A: What are you proposing to do?

For projects that include hazardous fuels reduction and creation of defensible space:

- □ What type of vegetation would be removed (e.g., species, sizes, invasive/native) and where would it be removed from?
- □ What methods would you use to remove vegetation (e.g., herbicides, hand tools, mechanical equipment)?
- Describe any limits on vegetation removal (e.g., all trees less than 12 inches at diameter breast height would be removed, only juniper trees would be removed, all limbs up to 10 feet above the ground would be removed).
- □ How and where would the removed vegetation be disposed (e.g., burned on-site, chipped and mulched on-site and at other applicant properties, removed off-site to landfill or compost facility)?
- □ If burning is proposed, identify any state or local permits required.
- □ If your project involves the seeding or planting of vegetation, describe the species and the methods that would be used (e.g., by hand, with machinery, broadcast seeding, aerial application).
- Describe any techniques that would be used to ensure survival of seeds or plants (e.g., mulch, irrigation, protective fencing).
- □ If herbicide use if required, identify the types of herbicides you propose to use and describe whether the herbicides would be used in riparian areas near streams, wetlands or other waterbodies. Provide an estimate of the distance from the waterbody.
- □ Provide photographs of current vegetation conditions in the project area.
- For ignition-resistant construction projects:
- Describe the structural modifications proposed (e.g., roof, eave, overhang, soffit, exterior wall, vent, gutter, downspout, window, door modifications). See **Section 2** for required structural information.
- For all wildfire mitigation projects:
- □ If the project would disturb the ground for any reason (e.g., clearing a staging area), describe the activities (both temporary and permanent) that would require ground disturbance and show the locations on a map or plan view; include the length, width and depth of the ground disturbance.
- Describe the existing condition of the ground surface (e.g., pavement, landscape shrubs and trees, previously undisturbed soils with vegetation) that would be disturbed.

- Why It's Needed: Wildfire mitigation projects are intended to decrease the risk of damage or loss of life from wildfires by reducing the risk of wildfire spread, by creating defensible areas from which fire suppression activities may occur or by retrofitting structures with ignition-resistant materials. Post-fire mitigation projects are intended to reduce damage from post-fire effects such as erosion and landslides. A complete project description is essential for FEMA to understand how the project may impact human, environmental or cultural resources. Changes in vegetation (through removal and/or planting) may impact habitat, species, surface water, groundwater, floodplains or visual aesthetics. The methods used to manage vegetation may increase erosion and sedimentation, impact species or affect human communities. Ground disturbances could affect archaeological resources, soils or utilities. FEMA will use this information to evaluate impacts and it may affect the complexity of the EHP review.
- **Potential Sources:** Site observations, maps, past similar projects, project planners, construction contractors, engineers, advice from fire management professionals, fire mitigation reports from agencies

The proposed project would provide defensible space of 30 to 100 feet around 20 residential structures and reduce hazardous fuel(s) in the adjacent 100-acre county open space through the removal of (1) trees less than 12 inches diameter at breast height, (2) trees affected by drought or insect infestation and (3) underbrush. Cut vegetation would be placed in small piles (approximately $6 \times 6 \times 6$) by hand for burning. Stumps would be left in place, except where dozers are used to clear brush. No herbicides would be used. In the open space area, native, fire-resistant trees would be planted where vegetation was removed and the remaining tree spacing exceeds 16 feet.

A list of potential native species is included with this application. Each property would be accessed from existing roads and driveways. Vehicles would access the vegetation management areas using public roads. Work crews would carry equipment and access off-road (undisturbed) areas by foot.



Figure 2. A photo of workers burning a small pile of cut vegetation.

1B: How would the project area be accessed and where would the staging areas be located?

- Describe how the project area would be accessed. Show the boundaries of the access routes or points on a map or plan view of the project area and describe the surface type (e.g., asphalt, dirt, gravel).
- □ If any new access routes would need to be created for the work to be completed, show where the routes would be located on a map or plan view of the project area.
- Describe where materials and equipment would be stored and staged during construction. Show the boundaries of the staging areas on a map or plan view of the project area and describe the surface type (e.g., asphalt, dirt, gravel).
- □ If the creation of new access routes or staging areas would require ground disturbance or vegetation removal, describe the extent of the ground disturbance (see Item 1A) and vegetation removal (see Item 1A).
- Describe the vehicles and equipment that would be used to implement the project.
- Describe any local restrictions on equipment use (e.g., seasonal or daily restrictions, work hours, local noise ordinances).
 - Why It's Needed: Construction of the project may require a new access point or leveling a staging area for construction. FEMA will evaluate the potential for impacts from activities that disturb the ground or remove vegetation. Some types of equipment may have impacts related to erosion, noise, air pollution or accidental releases of fuel and lubricants. Vehicle and equipment use may cause ground disturbance that could impact archaeological resources.

Potential Sources: Project planners, construction contractors, engineers

EXAMPLE:

Bulldozers and tracked equipment would be used to clear vegetation in areas where the brush is dense and the topography is flat. In all other areas, the contractor would cut trees and brush with hand tools, such as chainsaws. Vehicles would access the project area on existing gravel roads. A staging area for bulldozers and tracked equipment would be created in an upland area and a few shrubs would need to be removed.

1C: What are alternatives to the project?

Describe what would happen if the project were not implemented.

- □ If any other alternatives were developed, describe how they would have achieved the same goal and explain why those options were dismissed. If the public (including groups and agencies) provided input on the alternative(s), include the feedback you received.
 - **Why It's Needed:** FEMA may need to compare the impacts of the project with the impacts of alternatives (including any alternatives that were dismissed).
- Potential Sources: Project planners, public outreach meetings, board meeting notes, preliminary designs

Three alternatives were considered during the project development: (1) no-action, (2) fuels reduction (proposed project) and (3) prescribed burning. Alternative 3 (prescribed burning) was dismissed because it is less effective in areas with heavy fuel loads, such as dense underbrush, because these loads increase the risk of escaped fire. If the fuels reduction project is not implemented (the no-action alternative), the risk of wildfire spread would remain high and threaten approximately 100 residential structures in the community. The fuels reduction project was selected because it addresses the wildfire risks to identified at-risk structures and can be implemented at a reasonable cost and in a reasonable time frame.

1D: What is the project schedule?

- Provide a schedule that includes construction, operation and maintenance activities, including the months or seasons when work would occur.
 - **Why It's Needed:** FEMA will use information on the timing and duration of different activities to evaluate the significance of impacts on people and the environment.

Potential Sources: Project engineer

EXAMPLE:

Ignition-resistant construction work is expected to take approximately 3 weeks, including 1 week to construct the rock wall, 1 week to construct the new deck and 1 week to conduct fuels management including pruning, trimming and planting of native plants within 30 feet of the structure. All work would occur outside of the fire season. See the attached project schedule (Gantt chart) for additional details.

2. PROJECT AREA AND STRUCTURE INFORMATION

2A: Where is the proposed project and/or affected structure(s) and infrastructure located?

- Provide the geographic coordinates (latitude and longitude) and the physical site address of the project area, if available.
- Provide a geographic information system (GIS), computer-aided design (CAD), Google Earth files (.kmz), or map or image that clearly shows the boundaries of the project area. If your project area has a complex boundary, a GIS or .kmz file is preferred. The information provided should show the boundaries of all temporary and permanent project activities including staging areas, access routes, vegetation removal and the affected structure(s).
- □ Provide an estimate of the area of ground disturbance in acres or square feet.
- □ Provide a few representative photographs of the surrounding area to the north, south, east and west of the project area.

□ For ignition-resistant construction projects, provide engineering drawings, if available.

Why It's Needed: FEMA needs the project location and boundaries to evaluate existing conditions in the project area and potential project impacts.

Potential Sources: Municipal GIS or CAD data or Google Earth files developed for the project design, local building inspectors, tax assessor records, property deeds and engineering plans. The geographic coordinates of your project area can be obtained using software such as GIS or Google Earth, websites such as Google Maps, Bing Maps or latlong.net, smartphone mapping apps or with a Global Positioning System (GPS) device.

EXAMPLE:

The project area encompasses 70 acres within Klamath County Park in Klamath County, Oregon. The general physical address for the park is 1000 Lakeshore Boulevard, Klamath Falls, OR. The center of the project area is at latitude, longitude: 42.6952767, -121.6142133. The map and GIS shapefile included with the application show the project boundary, treatment area boundaries, access routes, equipment staging locations and structure locations/footprints.

2B: Describe the structures in the project area.

For hazardous fuels reduction and defensible space projects, provide:

An inventory of the physical addresses of structures to be protected and any adjacent structures, or a general depiction of the location of the structure locations/project area shown as a polygon on a map or GIS shapefile.

For ignition-resistant construction projects, provide:

- A description of the structure(s) that would be protected by the ignition-resistant construction project (if applicable), including photographs of all sides and the year they were originally constructed.
- A description of a structure(s) flammable components and materials that are to be replaced (e.g., wood shake roofs).
- □ A description of any prior improvements or additions that have been made to the structure(s) to be altered (e.g., new windows, change in roofing material from original construction), changes to the original location (i.e., relocation) of the structure(s) or other changes to the original design of the structure(s).
- □ If the structure(s) is designated as historic or is in a designated historic district, provide information on the known historic property/district, as applicable.

- Why It's Needed: FEMA will use the date of construction to screen whether affected structures might be historic and to help determine the effect the project may have on historic properties. Structures that are 45 years or older at the time of application may be eligible for listing in the National Register of Historic Places. Older structures may require additional EHP review. Photographs of the structure(s) may allow FEMA to make a determination without needing to visit the site. Actions that change the character or setting of structures and buildings may also change the cultural value of a building. This could have a negative impact on structures, buildings, sites, objects or historic districts that may be eligible for listing or be listed in the National Register of Historic Places.
- Potential Sources: Tax assessor data (provide the URL for the tax assessor if possible), GIS-based tax assessor database

The hazardous fuels reduction project would protect 50 structures that are located within 2 miles of the treatment areas. These structures include 35 residences, 10 commercial buildings, 1 hospital, 2 schools/daycare facilities and 2 public buildings. Two of the residences were built in 1920, which makes them over 45 years old. See attached property inventory with the year constructed for each structure based on the county's tax assessor database. Photos of the structures are attached.

3. POTENTIAL IMPACTS ON PEOPLE, THE ENVIRONMENT AND CULTURAL RESOURCES 3A: Has the public been notified or provided input?

□ Explain any controversy that exists or could exist related to the project.

Describe any existing or planned public engagement activities for the project.

Why It's Needed: If there is or could be controversy around a project, FEMA may need to use a higher level of NEPA documentation. Public input can help identify potential impacts on environmental and cultural resources or low-income and minority communities. You may also be involved in the publication of public notices, in accordance with FEMA procedures.

Potential Sources: Notices in the local newspapers, public outreach meetings, website postings, project planners

EXAMPLE:

The project area is located within a census block group that is considered low-income. Residents have expressed concerns about the amount of vegetation being cleared near the local park. A public notice describing the proposed project and public engagement process was circulated in the Humboldt County Herald newspaper on March 2. A copy of the notice is included with the application materials.

Hazard Mitigation Assistance Environmental Planning and Historic Preservation Review Job Aid Series

3B: Did you coordinate with or consult regulatory agencies?

- Describe any agency coordination and permits you obtained from federal, state or local agencies to implement the project. Provide copies of any coordination materials, permit applications or approvals.
 - Why It's Needed: If you have already coordinated with an agency, then FEMA may be able to avoid duplication of effort. FEMA also may coordinate with state or federal agencies that have issued permits and approvals to confirm findings, identify BMPs or determine mitigation measures for project impacts. Many agencies, including the U.S. Army Corps of Engineers, offer a pre-application process where you can learn more about the permits and conditions that may be required for your project.

Potential Sources: Project planners

EXAMPLE:

In December, the County Parks Department obtained a nationwide permit from the U.S. Army Corps of Engineers (USACE) and a state wetland fill permit from the respective state's environmental agency for impacts on 0.4 acres of wetlands. See the attached permit application, permit approvals and related correspondence.

3C: Were environmental or cultural studies conducted?

- □ If any environmental or cultural studies were completed either for this project or for other projects in the same area by local, state or federal entities, please provide copies. Studies could include evaluations of cultural resources (e.g., historic, archaeological) or environmental resources (e.g., threatened and endangered species, wetlands, hydrology, geotechnical).
 - Why It's Needed: FEMA may use the findings during the EHP review to avoid duplicating efforts.
- **Potential Sources:** Project contractor or engineer, EHP studies required by state law or local ordinances, environmental studies completed within or near the project area

EXAMPLE:

For a prior project along the State Route 60 corridor that passes through the project area, the County Department of Transportation conducted a biological survey for the threatened California red-legged frog, as well as an architectural and archaeological survey. The reports from those studies are attached. Those prior studies overlap with the current project area and cover about half of the project area. In addition, in anticipation of this project, the county conducted a wetland delineation to locate wetlands within the entire project area. The wetland delineation report is attached.

Hazard Mitigation Assistance Environmental Planning and Historic Preservation Review Job Aid Series

3D: Would your project encroach on floodplains?

Describe the project activities in the floodplain, if applicable.

- Why It's Needed: FEMA needs to understand whether your proposed project will physically impact a floodplain or whether the project could be impacted by flooding pursuant to EO 11988 Floodplain Management. If the project has the potential to impact floodplains, you may be involved in the publication of public notices required by FEMA regulation.
- Potential Sources: Local floodplain agency/administrator, history of flooding/flood claims, <u>FEMA Flood Map</u> <u>Service Center</u>

EXAMPLE:

Based on a review of FIRM Map #06087C0357F effective 9/27/2017, a 2-acre portion of the project area is in Flood Zone AE (100-year floodplain). The project would be limited to vegetation management activities in the floodplain and would not involve the placement of fill in those areas.

3E: Are there surface waters or wetlands in the project area?

- Describe any surface waters in or near the project area (e.g., ponds, lakes, rivers, streams, wetlands, other waterbodies).
- Describe any measures that would be used to avoid waterbodies or avoid impacting water (e.g., setbacks, cofferdams, silt fence).
- □ If a delineation of surface waters (including wetlands) was completed for the project area, please provide a copy of the report.
- □ Provide any permits or applications that were developed related to project impacts on surface waters.
 - Why It's Needed: FEMA needs to evaluate existing conditions and potential project impacts on water resources regulated by the CWA, the Coastal Zone Management Act and EO 11990 Protection of Wetlands. If the project has the potential to impact wetlands, you may be involved in the publication of public notices required by FEMA procedures. Temporary construction measures, such as silt fencing, and their manner of placement, may cause ground disturbance and could affect archaeological resources or Waters of the U.S.
- Potential Sources: CWA permits and approvals, wetland delineations of the site, <u>National Wetlands Inventory</u> (NWI) <u>Mapper</u>

Three freshwater wetlands were identified in the project area through a review of NWI Mapper and a wetland delineation completed in October. All vegetation management activities would be set back from the edge of the wetlands by 100 feet. No vegetation clearing or herbicide use would occur within the 100-year setback.

3F: What are the soil and topographic conditions in the project area?

Describe any erosion conditions in the project area or post-fire impacts on soils (e.g., burn scars, cleared fire breaks).

Are there any restrictions related to slope where the project activities would occur (e.g., bulldozers would only be used on gentle slopes)?

Why It's Needed: After a wildfire, soil conditions may harden or become more prone to erosion, thus preventing the regrowth of vegetation. This information helps FEMA understand whether BMPs to prevent erosion are needed to comply with the CWA.

Potential Sources: Site visits, <u>Natural Resources Conservation Service (NRCS) Web Soil Survey</u>, U.S. Geological Survey

EXAMPLE:

The topography of the project area is rugged and mountainous with steep canyons, but project activities would be limited to relatively flat terraces above the canyon. Project area soils were burned during the 2017 wildfire, greatly damaging the soils and resulting in substantial erosion following rain events. Below the burn scar, the underlying soils have a high potential for erosion, based on a review of NRCS Web Soil Survey information.

3G: Would your project have an impact on hazardous or contaminated materials?

- Describe any known hazardous or contaminated materials that may be present in the project area or that are needed to implement the project (i.e., herbicides).
- □ If your project would use any hazardous materials, such as herbicides, describe the BMPs that would be used to minimize exposure of people and the environment to those materials and how the materials would be discarded.
 - Why It's Needed: The presence, management, use or generation of hazardous materials can impact the natural and human environment. FEMA needs to evaluate potential project impacts from (or use of) hazardous and contaminated materials regulated by federal and state law including the Comprehensive Environmental Response, Compensation, and Liability Act and the Resource Conservation and Recovery Act. Any site that has or has had recorded hazardous waste issues will require a Clean Site Certification prior to grant approval.

Potential Sources: Environmental site assessments, site visits, state environmental agencies/databases, EPA Envirofacts

EXAMPLE:

Vegetation management would involve spot-spraying of herbicides, including glyphosate and clethodim, in areas where invasive species have spread. Herbicides would be applied per label instructions, transporting only the quantities of herbicide needed for work in a given day to the project site, not applying herbicides when precipitation is likely in the next 48 hours or when wind speeds exceed 10 mph, and having a trained applicator apply all herbicides. Fueling and parking of equipment would not occur within 150 feet of streams and a spill prevention plan would address any potential effects from spills during construction.

3H: Would your project use imported fill?

□ If your project involves the use of fill, describe the type and source of the fill material.

Why It's Needed: FEMA needs to confirm that the fill used is free from contaminants and is compliant with federal and state hazardous and contaminated materials laws. FEMA also needs to evaluate the source of fill for potential effects to historic properties. If a borrow site is being used, it is also important to ensure that the area is not archaeologically sensitive.

Potential Sources: Project planner or engineer, and similar completed projects

EXAMPLE:

Trees and their root balls would be removed to create defensible space around the residences. The voids (where the root balls were) would be backfilled with a mixture of existing soil and clean fill obtained from a commercial source.

3I: What Best Management Practices would the project use?

□ List all BMPs to be implemented, as part of the project, to reduce potential impacts.

- Why It's Needed: Most projects require BMPs to limit noise, dust and erosion while the project is being implemented. FEMA needs to document BMPs that will be used to ensure the project's environmental impacts will be avoided and minimized, where possible, in compliance with federal and state environmental laws.
- Potential Sources: Project engineers, BMP guidance provided by federal, state or local environmental agencies, BMPs specified in permit approvals issued by federal, state or local agencies

The city would implement the following BMPs during project implementation:

Air Quality/Smoke Management: All burning would comply with Oregon Department of Forestry's burn requirements and would only be conducted with a burn permit. Contractors would keep all vehicle and maintenance equipment running times to a minimum and all engines would be properly maintained.

Water Resources: The off-road equipment would use rubber tires to reduce potential erosion and sedimentation into streams and wetlands. Cut vegetation would be chipped and spread on-site for temporary erosion control to prevent soil from reaching waterways.

Water Quality: To reduce erosion and sedimentation impacts, vegetation removal would not occur within 150 feet of streams or wetlands. The riparian zone buffers would conform with state requirements.

Hazardous Materials: Equipment and vehicles would be inspected daily for fuel and fluid leaks. Any spills or leaks would promptly be contained and cleaned up and the equipment would be replaced. A spill prevention plan would be developed for hazardous materials to be used during project implementation. Storage and handling of hazardous and toxic materials would occur at least 150 feet from streams and waterbodies.

Noise: No project activities would occur between the hours of 10:00 p.m. and 7:00 a.m. in compliance with the county's noise ordinance.

What Happens Next?

The EHP review process occurs throughout the life cycle of the HMA project and has three specific steps where different aspects of the review process occur. The three steps are detailed below.

- Pre-Award: This is the information and documentation gathering stage of the EHP grant review process. Following the directions provided in this Job Aid will help you create a comprehensive application that includes all foreseeable required information needed for the EHP review. Providing this information as quickly and as accurately as possible will help expedite the next steps and reduce the need for FEMA to request additional information. The need for additional information may significantly impact the length of time for the EHP review by up to 60 days, if not more, for every request for information sent.
- □ Formal EHP Review: Once the required information and documentation is gathered, FEMA will review the project to ensure it is compliant with all EHP-related laws, EOs and regulations. The level of EHP review necessary for a particular project will depend on the type of project, its complexity and the potential impacts it may have on the human and natural environment. Less complex projects with no potential impacts may undergo a short EHP review, while more complex projects with several potential impacts may take longer to review and may require consultation with other federal/state agencies and/or the creation of an EA or EIS. At the end of this process, a Record of Environmental Consideration (REC) will be completed, itemizing the project conditions that will be included with your award packet. These conditions could include measures such as reaching out to other federal agencies for potential permits, ensuring proper documentation is followed during waste disposal and stopping work if a sensitive historic resource is discovered. You will want to carefully review all the conditions in your award packet during project implementation to remain compliant with the grant.

Closeout: Once the project is complete, the applicant (State/Tribe) will request project closeout from FEMA. FEMA will begin closing out the project and, during this time, will follow up on all the conditions stipulated in the REC. If any condition required you to document activities or outcomes, FEMA will request that documentation during closeout. If FEMA discovers that any of the conditions were not met, the project could be found noncompliant, and FEMA may seek to recover the grant money.

If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation or result in any other unanticipated changes to the physical environment, you must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws would be conducted.

ADDITIONAL RESOURCES:

- Supplemental Job Aid Wildfire Technical Review
- FEMA's Office of Environmental and Historic Preservation Home page of FEMA's EHP office
- HMA EHP At-a-Glance Guide Provides a general overview of EHP review considerations
- FEMA Directive 108-1 Legal document that directs how FEMA EHP reviews projects
- DHS Instruction Manual 023-01-001-01, Rev 01 Appendix A lists CATEXs

Scope of Work Checklist

Below is a summary checklist of all the questions from the previous sections. Use this checklist to help you as you complete your information packet.

1. SCOPE OF WORK

For all wildfire mitigation projects:

- □ If the project would disturb the ground for any reason (e.g., clearing a staging area), describe the activities (both temporary and permanent) that would require ground disturbance and show the locations on a map or plan view; include length, width and depth of the ground disturbance.
- Describe the existing condition of the ground surface (e.g., pavement, landscape shrubs and trees, previously undisturbed soils with vegetation) that would be disturbed.
- Describe how the project area would be accessed. Show the boundaries of the access routes or points on a map or plan view of the project area and describe the surface type (e.g., asphalt, dirt, gravel).
- □ If any new access routes would need to be created for the work to be completed, show where the routes would be located on a map or plan view of the project area.
- Describe where materials and equipment would be stored and staged during construction. Show the boundaries of the staging areas on a map or plan view of the project area and describe the surface type (e.g., asphalt, dirt, gravel).
- □ If the creation of new access routes or staging areas would require ground disturbance or vegetation removal, describe the extent of the ground disturbance (see Item 1A) and vegetation removal (see Item 1A).
- Describe the vehicles and equipment that would be used to implement the project.
- Describe any local restrictions on equipment use (e.g., seasonal or daily restrictions, work hours, local noise ordinances).
- Describe what would happen if the project were not implemented.
- □ If any other alternatives were developed, describe how they would have achieved the same goal and explain why those options were dismissed. If the public (including groups and agencies) provided input on the alternative(s), include the feedback you received.
- Provide a schedule that includes construction, operation and maintenance activities, including the months or seasons when work would occur.
- For hazardous fuels reduction and defensible space projects:
- □ What type of vegetation would be removed (e.g., species, sizes, invasive/native) and where would it be removed from?
- □ What methods would you use to remove vegetation (e.g., herbicides, hand tools, mechanical equipment)?
- Describe any limits on vegetation removal (e.g., all trees less than 12 inches diameter at breast height would be removed, only juniper trees would be removed, all limbs up to 10 feet above the ground will be removed).

- How and where would the removed vegetation be disposed (e.g., burned on-site, chipped and mulched on-site and at other applicant properties, removed off-site to landfill or compost facility)?
- □ If burning is proposed, identify any state or local permits required.
- □ If your project involves the seeding or planting of vegetation, describe the species and the methods that would be used (e.g., by hand, with machinery, broadcast seeding, aerial application).
- Describe any techniques that would be used to ensure survival of seeds or plants (e.g., mulch, irrigation, protective fencing).
- □ If herbicide use is required, identify the types of herbicides you propose to use and describe whether the herbicides would be used in riparian areas near streams, wetlands or other waterbodies. Provide an estimate of the distance from the waterbody.
- □ Provide photos of current vegetation conditions in the project area.
- For ignition-resistant construction projects:
- Describe the structural modifications proposed (e.g., roof, eave, overhang, soffit, exterior wall, vent, gutter, downspout, window, door modifications).

2. PROJECT AREA AND STRUCTURE INFORMATION

For all wildfire mitigation projects:

- Provide the geographic coordinates (latitude and longitude) and the physical site address of the project area, if available.
- Provide a geographic information system (GIS), computer-aided design (CAD), Google Earth files (.kmz), or map or image that clearly shows the boundaries of the project area. If your project area has a complex boundary, a GIS or .kmz file is preferred. The information provided should show the boundaries of all temporary and permanent project activities including staging areas, access routes, any vegetation removal and the affected structure(s).
- □ Provide an estimate of the area of ground disturbance in acres or square feet.
- □ Provide a few representative photographs of the surrounding area to the north, south, east and west of the project area.
- For hazardous fuels reduction and defensible space projects:
- Provide an inventory of the physical addresses of structures to be protected and any adjacent structures or a general depiction of the location of the structure locations/project area shown as a polygon on a map or GIS shapefile.

For ignition-resistant construction projects:

- □ Provide engineering drawings, if available.
- □ Provide a description of the structure(s) that would be protected by the ignition-resistant construction project (if applicable), including photographs of all sides and the year they were originally constructed.

- Provide a description of a structure(s) flammable components and materials that are to be replaced (e.g., wood shake roofs).
- Describe any prior improvements or additions that have been made to the structure(s) to be altered (e.g., new windows, change in roofing material from original construction), changes to the original location (i.e., relocation) of the structure(s) or other changes to the original design of the structure(s).
- □ If the structure(s) is designated as historic or is in a designated historic district, provide information on the known historic property/district, as applicable.

3. POTENTIAL IMPACTS ON PEOPLE, THE ENVIRONMENT AND CULTURAL RESOURCES

- □ Explain any controversy that exists or could exist related to the project.
- Describe any existing or planned public engagement activities for the project.
- Describe any agency coordination and permits you obtained from federal, state or local agencies to implement the project. Provide copies of any coordination materials, permit applications or approvals.
- □ If any environmental or cultural studies were completed either for the project or for other projects in the same area by local, state or federal entities, please provide copies. Studies could include evaluations of cultural resources (e.g., historic, archeological) or environmental resources (e.g., threatened and endangered species, wetlands, hydrology, geotechnical).
- Describe the project activities in the floodplain, if applicable.
- Describe any surface waters in or near the project area (e.g., ponds, lakes, rivers, streams, wetlands, other waterbodies).
- Describe any measures that would be used to avoid waterbodies or avoid impacting water (e.g., setbacks, cofferdams, silt fence).
- □ If a delineation of surface waters (including wetlands) was completed for the project area, please provide a copy of the report.
- □ Provide any permits or applications that were developed related to project impacts on surface waters.
- Describe any erosion conditions in the project area or post-fire impacts on soils (e.g., burn scars, cleared fire breaks).
- Are there any restrictions related to slope where the project activities would occur (e.g., bulldozers would only be used on gentle slopes)?
- Describe any known hazardous or contaminated materials that may be present in the project area or that are needed to implement the project (i.e., herbicides).
- □ If your project would use any hazardous materials, such as herbicides, describe the BMPs that would be used to minimize exposure of people and the environment to those materials and how the materials would be discarded.
- □ If your project involves the use of fill, describe the type and source of the fill material.
- □ List all BMPs to be implemented as part of the project to reduce potential impacts.