

ELEVATION EHP REVIEW

December 2016 | Supplement No. E1.3

HMA EHP Review | Supplement Series

PURPOSE: Each Hazard Mitigation Assistance (HMA) application must comply with the requirements outlined in the HMA Guidance. According to the guidance, in addition to a general programmatic review, an Environmental Planning and Historic Preservation (EHP) review and a technical review must be performed by the Federal Emergency Management Agency (FEMA) for each proposed project. The EHP review will ensure that HMA grants use practical means and measures to protect, restore, and enhance the quality of the environment; avoid or minimize adverse environmental impacts; and preserve historic, cultural, and natural national heritage. Early submission of accurate and complete eligibility and pre-award information will facilitate FEMA's review process and the release of HMA funds. This Supplement augments the Elevation Job Aid No. 1.3 and provides additional information, examples, and potential sources of documentation for items listed in the Job Aid to help communities applying for HMA grants comply with application requirements.

ADDITIONAL RESOURCES:

- ✓ Hazard Mitigation Assistance Guidance Addendum, Part E
- ✓ Elevation Job Aid No. 1.3
- ✓ FEMA's Environmental and Historical Preservation Resources At-A-Glance Guide

IMPORTANT TERMS:

Advisory Base Flood Elevation (ABFE): An estimate for the Base Flood Elevation that is provided after a very significant flood event, but before a new Flood Insurance Rate Map (FIRM) has been developed. ABFEs are an interim product to assist communities in their rebuilding efforts.

Base flood elevation (BFE): The elevation shown on the Flood Insurance Rate Map (FIRM) for Zones AE, AH, A1-A30, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO, V1-V30, and VE that indicates the water surface elevation resulting from a flood that has a 1 percent chance of equaling or exceeding that level in any given year.

Coastal Zone Management Act (CZMA): Encourages the management of coastal zone areas and provides grants to be used in maintaining coastal zone areas. It requires that Federal agency actions be consistent with enforceable policies of state coastal zone management programs when conducting or supporting activities that affect a coastal zone. It is intended to ensure that Federal activities are consistent with state programs for the protection and, where possible, enhancement of the nation's coastal zones (16 U.S.C. §1451 et seq.).

Coastal Zone: CZMA's definition of a coastal zone includes coastal waters extending to the outer limit of state submerged land title and ownership, adjacent shorelines, and land extending inward to the extent necessary to control shorelines. A coastal zone includes islands, beaches, transitional and intertidal areas, and salt marshes.

Elevated building: A building that has no basement and a lowest floor that is elevated to or above the BFE by foundation walls, shear walls, posts, piers, pilings, or columns.

Endangered Species Act (ESA): Provides guidance for the conservation of Federally listed species, and the ecosystems on which they depend. Section 7 of the Act requires that Federal agencies prevent or modify any projects authorized, funded, or carried out by the agencies that are "likely to jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of critical habitat of such species." The Interior Department's U.S. Fish and Wildlife Service (USFWS) and the Commerce Department's National Marine Fisheries Service (NMFS) administer the ESA (16 U.S.C. §1531 et seq.).

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Environmental Planning and Historic Preservation

(EHP): Refers to FEMA's review process for ensuring the protection and enhancement of environmental, historic, and cultural resources, as required by Federal environmental and historic preservation laws and Executive Orders (EOs).

Finished Floor Elevation (FFE)/Lowest Floor: "The lowest floor of the lowest enclosed area (including a basement).

An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area, is not considered a building's lowest floor provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of §60.3" [the National Flood Insurance Program].

Freeboard: is a factor of safety usually expressed in feet above a flood level for purposes of floodplain management. 'Freeboard' tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed.

Flood Insurance Rate Map (FIRM): The official map of a community on which FEMA has delineated both the special hazard areas and the risk premium zones applicable to the community.

Hazard Mitigation Assistance (HMA): Assistance provided by FEMA to reduce or eliminate long term risk to people and property from natural disasters. Hazard Mitigation planning is a process used by state, Tribal, and local governments to identify risks and vulnerabilities associated with natural disasters and develop mitigation strategies to reduce or eliminate long term risks. Examples funded by FEMA's HMA grant programs may include, but are not limited to, buy-outs, elevations, and safe rooms.

National Environmental Policy Act (NEPA): Requires all Federal agencies to give proper consideration to the environment prior to undertaking any major Federal action that could significantly affect the environment. NEPA is a procedural statute, and requires that an agency assess the environmental consequences of an action and its alternatives (42 U.S.C. §4321 et seq.).

National Historic Preservation Act (NHPA): Directs Federal agencies to take into account the effect of any undertaking (a Federally funded or assisted project) on historic properties. "Historic property" is any district, building, structure, site, or object that is eligible for listing in the National Register of Historic Places because the property is significant at the national, state, or local level in American history, architecture, archeology, engineering, or culture (54 U.S.C. §100101 et seq.).

State Historic Preservation Officer (SHPO): Administers the national historic preservation program at the state level, reviews National Register of Historic Places nominations, maintains data on historic properties that have been identified but not yet nominated, and consults with Federal agencies during Section 106 review. SHPOs are designated by the governor of their respective state.

Special Flood Hazard Areas (SFHA): The land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. Also, an area having special flood, mudflow, or flood-related erosion hazards and appearing on a Flood Hazard Boundary Map or a FIRM as Zone A, AO, A1-A30, AE, A99, AH, AR, AR/A, AR/AE, AR/AH, AR/AO, AR/A1-A30, V1-V30, VE, or V.

Tribal Historic Preservation Officer (THPO): An individual assuming the responsibilities and functions of a SHPO, who was designated by a federally-recognized Indian tribe to direct a program approved by the National Park Service on Tribal lands.

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Developing an Elevation Project Application for EHP Review

The following provides a details on the information that should be provided with the elevation project application, and recommended documentation and supplemental information for FEMA to conduct an EHP review. Additional resources are identified throughout this Supplement to provide further information on specific components, and the final section provides a comprehensive list of resources identified throughout this Supplement.

It should be noted that the information provided in this guide is intended to focus on Federal laws, regulations, and EOs that are generally applicable to FEMA's EHP review of an elevation project application. For each resource topic discussed, there are a variety of local, state, and Tribal laws and permits that may also apply. Please contact your local planning and permitting departments; and applicable local, state, and Tribal environmental agencies for more information about these requirements. State, Tribal and FEMA regional environmental staff are excellent sources of information, and we encourage you to collaborate with these professionals during elevation project development.

The specific guidance in this Supplement does not provide all of the information necessary to apply for funding through an HMA program or prepare all aspects of an elevation project application and must be read in conjunction with all other relevant guidance documents (e.g., Elevation Technical Review Supplement No. T1.3).



EHP Review Components

In order to aid FEMA in successfully completing their EHP review, a minimum amount of information is required for review. If the project impacts multiple structures, information must be provided for each structure. The following is a step-by-step approach to address the major components of FEMA's HMA EHP Process. **Identifying available information and documentation at the earliest stages of project development and throughout the grant process will facilitate FEMA's EHP review process and result in successful HMA projects.**

The three steps of FEMA's HMA EHP Process:



Items that must be included in the grant application to determine eligibility.

Information that FEMA will need to review prior to award. In addition to EHP and technical requirements, FEMA may have additional programmatic requirements.

Project Conditions specified in the Award Letter and Record of Environmental Considerations will be enforced during project Implementation and Closeout. Project Conditions are identified during EHP review and are not reflected in the Job Aid.

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EHP Review Components *(continued)*

PROPERTY INFORMATION

STEP 1: Eligibility

STEP 1A: Property Address

Description: Address of the elevation 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.

Potential Sources: Obtain the information from the property owner, local building inspector, tax assessor records, deed to the property, or engineering plans.

Example: 456 River Road NE, Martinsburg, Berkeley County, WV 25409

STEP 1B: Latitude and Longitude

Description: Latitude and longitude or geospatial coordinates for the project location.

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

- Use a Global Positioning System (GPS) device.
- Enter the property address into a mapping application to 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 an Internet search engine to find a mapping application.

Note: Latitude and longitude can be shown in either decimal degrees (e.g., 38.470126, -123.005798) or degrees, minutes, and seconds (38° 28’ 12.4” N, 123° 00’ 20.9” W). If your GPS or tool provides degrees, minutes, and seconds, you may need to convert this into decimal degrees in order to enter it into the eGrants. Several free tools are available on the Internet for this conversion. Enter “coordinate converter” into a search engine to find one of these tools.

Example: 39.470126, -123.005798

STEP 1C: Property map showing project location with boundaries (e.g., parcel maps, U.S. Geological Survey (USGS) topographic map) of all properties

Description: Provide an assessor’s map or site survey showing location and elevation project boundaries. Include GIS or computer-aided design (CAD) data, if available. Also, include a 1:24,000-scale USGS map showing the elevation project boundaries.

Potential Sources: Site survey conducted by a surveyor, assessor maps, and topographic maps. This information can be obtained internally from the project engineer or planner. Topographic maps can be ordered from USGS directly through the USGS online store or can be obtained free of charge online from the U.S. Department of Agriculture’s Geospatial Data Gateway.

Example: A property survey was conducted by a licensed surveyor to clearly establish property boundaries. The attached mapping shows the location of the elevation project {INCLUDE ADDRESS OR PARCEL NUMBERS}.

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EHP Review Components *(continued)*

STEP 1D: Photographs of all sides of the structure (showing foundation, wall, entrances, and roof) and surrounding area from all directions

Description: Show each side of the structure affected by the elevation project. In addition, provide photographs taken while standing at the existing structure showing the surrounding area in all directions. Provide photos with sufficient detail to explain the proposed elevation project. Label the photos to explain exactly what they show and include directions.

Potential Sources: Use a phone, tablet, or camera to take clear, good quality photos for inclusion in the application.

Examples: See figures 1-4.



Figure 1: Front and east side of the building



Figure 2: Back and west side of the house



Figure 3: View looking west toward adjacent properties on the bay



Figure 4: View looking east toward properties across the channel

STEP 1E: Date of structure (year built)

Description: The year the structure was originally constructed.

Potential Sources: Review tax records or talk with the property owner, if they are knowledgeable about the history of the structure.

Example: 1997

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EHP Review Components *(continued)*

STEP 1F: Finished Floor Elevation (FFE) of the existing structure

Description: The FFE is also referred to by FEMA as the lowest floor. For more information, see FEMA Lowest Floor Elevation Fact Sheet No. 14.

Potential Sources: There are several ways to determine the FFE, these include:

- Use Elevation Certificate. If a structure is in a high-risk area and has insurance, most likely it will also have an Elevation Certificate. To find out more about Elevation Certificates, visit FEMA's Federal Insurance and Mitigation Administration (FIMA Fact Sheet, Elevation Certificates: Who Needs Them and Why (April 2015). If you have an Elevation Certificate for the property, item C2aC2b, "Top of bottom floor (including basement, crawlspace, or enclosure floor the next higher floor)" shows the FFE.
- Use Surveyor. A surveyor can determine the elevation of the finished floor if an Elevation Certificate is not available.

Example: Finished Floor Elevation is 959.1 feet NAVD, source: Elevation Certificate

STEP 1G: Base Flood Elevation (BFE) or Advisory Base Flood Elevation (ABFE) at the existing structure

Description: The BFE is shown on the FIRM. An ABFE is an estimate for the BFE that is provided after a very significant flood event, but before a new FIRM has been developed.

Potential Sources: There are several ways to determine the BFE, these include:

- Use the FIRM. To learn how to use a FIRM, search for FEMA's Flood Insurance Rate Map (FIRM) Tutorial. To obtain copies of a FIRM, visit FEMA's online Map Service Center.
- Use an Elevation Certificate. If a structure is in a high-risk area and has insurance, most likely it will also have an Elevation Certificate. To find out more about Elevation Certificates, visit FEMA's Federal Insurance and Mitigation Administration (FIMA Fact Sheet, Elevation Certificates: Who Needs Them and Why (April 2015). If you have an Elevation Certificate for the property, under Section B, item B9 indicates the BFE.

Example: Base Flood Elevation is 41.9 feet NGVD29, source: Flood Insurance Rate Map Number 36039C0432E, May 16, 2008; or Base Flood Elevation is 963.7 feet NAVD, source: Elevation Certificate

STEP 1H: Existing foundation type (crawlspace, basement, slab-on-grade, or piers)

Description: Type of foundation of the existing structure. See Figure 5 for foundation types.

Potential Sources: Visual observation, photographs, or structure drawings.

Example: Crawlspace, basement, slab-on-grade, or piers.

STEP 1I: Construction material, size, function, and existing condition of the structure

Description: Indicate the construction material (e.g., wood frame), size, existing condition, and function (e.g., one story residential, apartment, police station, hospital) of the existing structure.

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EHP Review Components *(continued)*

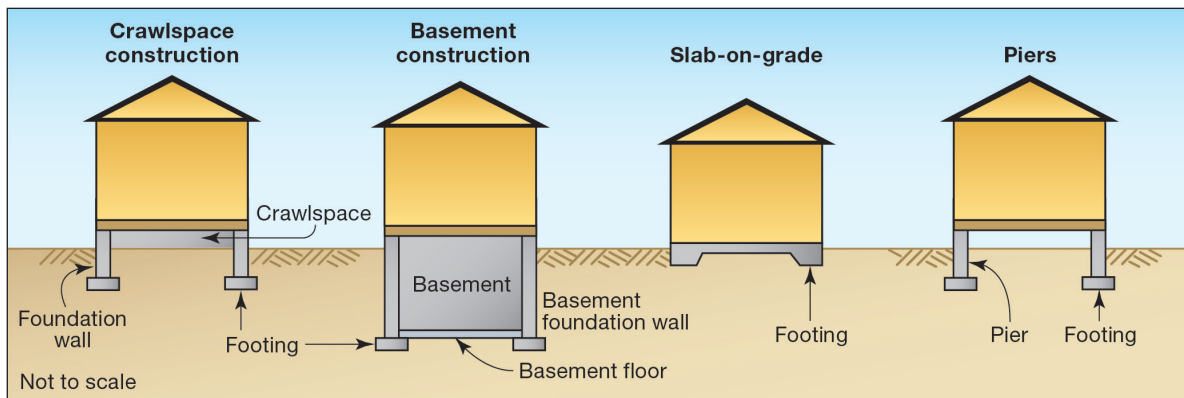


Figure 5: Examples of Foundation Types

Potential Sources: Review tax records, county tax assessor website, talk with the property owner, or some cities and counties have parcel databases with this information. Some information can be obtained from viewing current pictures of the structure (e.g., construction material or existing condition). Alternatively, online mapping programs with measuring features and high quality aerial photos may be used to estimate the size.

Example: One story residential structure constructed from masonry approximately 1,600 square feet. Structure is currently flood damaged.

STEP 2: Pre-Award

STEP 2A: List of outbuildings on the property, a photograph of each, and dates of construction

Description: List and photograph any barns, sheds, or other outbuildings on the property that will be affected by the project. Give the year each structure was built. Label the photos to explain exactly what they show.

Potential Sources: Use a phone, tablet, or camera to take clear, good quality photos for inclusion in the application. Talk to structure owner about the date of construction or consult tax records, as appropriate.

Example: See Figure 6.

STEP 2B: Is the structure listed, or been determined eligible for listing, in any local, state, or National Historic Register(s)? Please describe

Description: Please describe and indicate if any structures affected by the elevation project are listed in any local, state, or National Historic Register.



Figure 6: Outbuilding constructed in 1975 is located 55 feet west of the back of the house. This structure will be removed as part of the mitigation project.

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EHP Review Components *(continued)*

Potential Sources: Contact the local community planning office and SHPO.

Example: The project is 0.2 miles from the Old State House, the oldest surviving state capital building west of the Mississippi River.

STEP 2C: Is the project located within a 0.5 mile radius of a local, state, or National Historic District(s)? Please describe

Description: Please describe and indicate if the elevation project is within 0.5 mile radius of a local, state, or National Historic District.

Potential Sources: Contact the local community planning office and SHPO.

Example: The property is a contributing resource to the Mayfield Historic District. The District is located 0.5 miles from the project area.

STEP 2D: Proposed architectural renderings

Description: The original architectural renderings show the current structure, if applicable. The proposed architectural renderings show the structure after it has been mitigated.

Potential Sources: Obtain from the homeowner, architect, or engineer.

Example: The original architectural renderings of the current structure were obtained from the {HOMEOWNER, ARCHITECT, OR ENGINEER} and are attached. In addition, attached are the proposed architectural renderings depicting what the structure will look like after the elevation process has been completed.

OR

SCOPE OF WORK

STEP 3: Eligibility

STEP 3A: Flood Insurance Rate Map (FIRM) showing project location

Description: Provide a map showing the FEMA flood zone designations and elevation project location. In addition, describe the flood zone within which the elevated structure is located and whether the structure is located in a regulatory floodway.

Potential Sources: FEMA FIRMs and Letters of Map Revisions can be found on FEMA's Map Center website or through the local floodplain regulatory agency.

Example: Based on the FEMA Flood Map {IDENTIFY FEMA MAP PANEL NO.#}, the project will be constructed in the flood zone designation of AE {IDENTIFY FLOOD ZONE DESIGNATION}, which are areas subject to inundation by the 1-percent-annual-chance flood event {DESCRIPTION OF THE FLOOD ZONE DESIGNATION}.

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EHP Review Components *(continued)*

STEP 3B: Number of feet the FFE is being raised above Base Flood Elevation

Description: For a FEMA-funded Elevation Mitigation project, the FFE must be raised to be at or above the Base Flood Elevation. Raising the FFE to above the Base Flood Elevation provides freeboard. Freeboard is a factor of safety to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for the Base Flood Elevation. See Figure 7 for more information.

Potential Sources: Consult the architectural renderings or engineering drawings to determine.

Example: 3.0 feet

STEP 3C: Proposed elevation method and steps required to implement the activities

Description: Describe the existing condition and proposed lower floor elevation of the property as it related to the elevation of the floodplain. Include a description of the elevation methodology (e.g., continuous foundation walls, raised foundation, etc.) that will be used and the building code standards that will be followed.

Potential Sources: This information will be obtained internally from the project engineer or planner.

Example: The residence will be elevated by 8 feet to prevent damage from future floods and to comply with {LIST CODES AND STANDARDS REGARDING ELEVATION HEIGHT MINIMUM REQUIREMENTS}. The structure will be raised and moved to one side while new piles are driven into the ground. The structure will then be moved back onto the site and lowered onto the new foundation supports. The pile design will be based on the geotechnical report prepared by a registered geotechnical/structural engineer and comply with all applicable standards {LIST STANDARDS}.

STEP 3D: Amount and depth of ground disturbance associated with this project (e.g., grading; digging for buried lines; new, temporary, and permanent access roads; staging areas)

Description: Provide the total amount of ground disturbance including amount of cut and fill, areas and location of temporary and permanent encroachment, depth of trenches, undergrounding of utility lines, etc. Provide a map, GIS, or CAD, when possible.

Potential Sources: This information will be obtained internally from the project engineer or planner.

Example: The proposed elevation project will result in {INSERT AREA OF GROUND DISTURBANCE} of ground disturbance. Approximately {INSERT AREA} will be temporary disturbance and {INSERT AREA} will be permanent disturbance. Temporary disturbance will include areas for construction vehicle access and staging. Existing power lines will be placed underground in trenches {INSERT TRENCH DEPTH} feet deep.

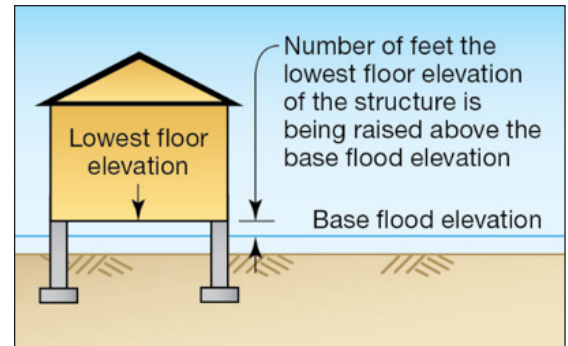


Figure 7: Depiction of the number of feet the structure is being raised above the Base flood elevation

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STEP 3E: Identify all known contaminated materials located on-site (e.g., asbestos, lead-based paint, underground storage tanks (USTs), chemical storage containers)

Description: Describe all known site contamination, including data source, contaminants, and existing or planned remediation efforts.

Potential Sources: Obtain the information from the property owner, local building inspector, local enforcement agency, property environmental assessments, and visual inspections. Alternatively, EPA has a variety of websites that provide environmental information on properties with potential hazardous materials or cleanup issues. The EPA shows potential hazardous materials sites, at the following websites:

- EPA's EnviroMapper - <https://www.epa.gov/emefdata/em4ef.home>
- EPA's NEPAAssist - <https://www.epa.gov/nepa/nepassist>
- EPA's Superfund website - <https://www.epa.gov/superfund>

Example: Based on the review of the {LIST AVAILABLE RECORDS SUCH AS PHASE I SITE ASSESSMENT}, the following contaminants {IDENTIFY CONTAMINANTS} were found on the property. Clean-up actions will require {LIST ACTIONS TO BE TAKEN (e.g., removal of USTs)}.

STEP 4: Pre-Award

STEP 4A: Describe other alternatives to elevation that were considered and why they were dismissed from further consideration

Description: Describe other feasible alternatives that would address the purpose of the elevation project. Include a description regarding why these alternatives have been dismissed and not pursued for FEMA funding as well as a statement supporting the reason that the proposed elevation project is the most practicable, cost effective, and environmentally sound alternative. Include information on the No Action Alternative as it reflects conditions expected to exist if the elevation project is not completed. For projects that could affect wetlands or the floodplain, include a description of alternatives that would meet the purpose of the project, but would not affect wetlands or the floodplain. For projects that will inherently occur in wetlands or the floodplain, because of the nature of the project, include a clear statement that this is the case.

Potential Sources: This information from the project engineer/planner.

Example: The following alternatives were considered in the grant application: {LIST ALL ALTERNATIVES CONSIDERED}. Alternative {IDENTIFY ALTERNATIVE} was not considered practicable because of the increased costs resulting from the inability of the Public Works Department to provide the labor and equipment necessary for construction. The No Action Alternative was not considered as it does not meet the {STATE PROJECT OBJECTIVE (e.g., increase flood protection)}. The proposed elevation project was considered the only practicable alternative, as it provides {IDENTIFY PROJECT OBJECTIVE (e.g., increase flood protection)} and was found to be the most cost-effective and environmentally sound. {PROVIDE REASONING}.

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EHP Review Components *(continued)*

STEP 4B: List of construction equipment that will be used for the project

Description: Describe any construction equipment that will be used for the elevation project. Include the likely maximum usage of construction equipment, if available, at least on an annual basis. Include any details about known or planned restrictions to the construction equipment, such as seasonal or daily restrictions.

Potential Sources: This information will be obtained internally from the project engineer or planner.

Example: The following construction equipment will be used during the elevation project {LIST EQUIPMENT, INCLUDING MAXIMUM HOURS OF ANNUAL USAGE}. The use of the following heavy machinery will be restricted to occur only during the dry season {LIST LOCALLY-BASED DRY SEASON} due to the standard regulatory environment to minimize potential effects to water quality from sedimentation and sensitive wildlife species who may be found in the project area during the wet season. Additionally, equipment usage will be limited daily from {INSERT DAILY AND WEEKLY EQUIPMENT RESTRICTIONS} to comply with local noise ordinances.

STEP 4C: Description of construction activities and all debris/infrastructure/utility removal activities

Description: Provide a description of construction, including details on property preparation, the sequence of construction, equipment used, and the handling requirements for materials and debris to be generated during the construction or retrofitting activities. Also describe any required notifications and permits, and utility identification and decommissioning.

Potential Sources: Project engineer or planner and the disposal facility.

Example: The work that will be performed consists of {DESCRIBE CONSTRUCTION ACTIVITIES}. Property preparation activities include {DESCRIBE ACTIVITIES (e.g., securing permits, health and safety activities, construction equipment, establishing work zones, utility identification, etc.)}.

STEP 4D: Map showing the type and location of any vegetation that will be affected (e.g., removed, cut, pruned, replanted)

Description: Describe the treatment or landscaping plan for all vegetation that will be removed or affected (e.g., trimmed) by the elevation project. Include a description of the types of vegetation that will be removed; the method of removal (e.g., herbicide, hand tools, bulldozer); and the overall goal of the vegetation removal (e.g., decrease vegetation density, removal of ladder fuels, create a level and vegetation free site). If vegetation will be planted, include details about the types of vegetation that will be planted and the general method of planting. For multiple project areas, include this information in similar detail for each project area.

Potential Sources: Consult the project engineer, landscape architect, restoration ecologist, or forester assisting in project design and implementation.

Example: Kudzu will be removed at the elevation project site using herbicide. All vegetation will be removed in areas with large colonies of invasive plants and will be replanted with {INSERT PLANTS TYPES}.

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EHP Review Components *(continued)*

STEP 4E: A description of debris or other materials that will be removed and hauled off-site, and information on where it will be disposed (including temporary staging areas), in accordance with local and state requirements

Description: Indicate all potential construction debris, including vegetation, which could be generated by the elevation project. Provide details of the disposal, including potential locations and the legal status of disposal sites (e.g., is the site a licensed landfill.)

Potential Sources: Project engineer or planner and the disposal facility.

Example: Construction debris generated by the elevation project will include soil material from excavation and vegetative material from plants and trees that will be removed. A Phase 1 Environmental Site Assessment has already been completed (attached) and the site has been determined to be clean and contain no potential contaminated soils. Construction debris and vegetation debris will be disposed of at the local licensed transfer station {INSERT DETAILS OF FACILITY}, which has adequate capacity as described in the attached letter. All soil that will be excavated has been determined through geotechnical testing to be suitable for use in the detention basin berms. No excavated soil will be disposed of off-site.

STEP 4F: Type and source of fill that will be imported to the project area from an off-site source (e.g., existing borrow pit)

Description: Indicate type, amount, and source(s) (including location addresses) of fill that will be imported. Identify whether each quarry is currently licensed and permitted to operate for this intended use and whether the quarry's source(s) contain enough fill to complete the project.

Potential Sources: Project engineer and various quarry companies

Example: All fill material (concrete, aggregate rock, and rock riprap) will be provided by {NAME OF PROVIDER}, which stockpiles all the necessary materials at their processing plant located at {ADDRESS}. All materials will originate from one of three quarries operated by {NAME OF COMPANY}. These existing quarries operate under permits from {NAME PERMITTING AGENCY(IES)}, and {NAME OF PROVIDER} has indicated that providing the needed borrow materials for the project will not exceed the overall availability capacity of the quarries.

SCHEDULE, COST ESTIMATES, AND BENEFIT-COST ANALYSIS

STEP 5: Eligibility

STEP 5A: Work/construction schedule (schedule must be for 3 years or less)

Description: Include a detailed project schedule for all phases of the project (demolition, vegetation clearing, construction) with start and end dates for each phase. Also include milestones and critical path activities. Consider delays due to tasks dependent on any required permits/consultations from any agency(ies).

Potential Sources: This information will be obtained internally from the project engineer or planner.

Example: Based on the attached schedule, Phase I {INCLUDE SPECIFIC PROJECT ACTIVITY} will commence in November 2015 and end in April 2016. Phase II includes {IDENTIFY PROJECT ACTIVITY} and will immediately follow Phase I provided we obtain the following permits {LIST PERMITS OR OTHER CONCERNS}.

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EHP Review Components *(continued)*

ADDITIONAL INFORMATION

STEP 6A: Pre-Award

- STEP 6A: Enclose copies of any previous coordination, correspondence, or consultation with federal, state, and local resource agencies (e.g., USFWS, SHPO, U.S. Army Corps of Engineers)**

Description: Provide copies of any correspondence with any regulatory agency or Tribe that has occurred for the proposed elevation project.

Potential Sources: This information will be obtained internally or from any agency/organization that may be partnering for the elevation project.

Example: We consulted with the {INSERT AGENCY}, and based on its feedback, evaluated other options to avoid direct fill and permanent loss of the wetlands in the project area. {INSERT AGENCY} was also contacted regarding impacts on {AREA OF CONCERN}. Communication and responses from these agencies are included as {INSERT ATTACHMENTS}.

- STEP 6B: Describe or provide any public outreach that has occurred (e.g., public notices issued, published newspaper notices, public meetings held, public comments solicited)**

Description: The description of public outreach related to the elevation project should include methods of outreach that has occurred, list of agency(ies) or organization(s) that performed the outreach, when the outreach occurred, and any public comments solicited. Any known potential for public controversy about the project should be provided.

Potential Sources: The public affairs office or public information office of your agency or of any partnering agencies/organizations.

Example: Public outreach was conducted on {INSERT DATE} to provide the information on {PROVIDE INFORMATION THAT WAS PROVIDED TO THE PUBLIC (e.g., the need for the project; alleviation of any public concerns related to the project or its impacts; explanation of project and impacts)} from {NAME OF PROJECT} to the public. Public outreach occurred by {INSERT METHOD (e.g., placing a notice in the local paper about the project and its details; announcing and conducting public meetings in the project location; soliciting comments from the public via notice)}. The result of the public outreach resulted in {STATE RESULT (e.g., 4 public meetings being held; 32 comments received; no comments from the public)}. AND/OR {ATTACH DOCUMENT}

- STEP 6C: Describe property history (e.g., commercial, residential) and provide details and/or copies of documents of any studies, investigation, or enforcement actions related to the property**

Description: Include a detailed description of the property history and past land uses (e.g., name of tenants/subtenants, period of tenancy of each). Also, provide report copies or summary information about any environmental studies, investigations, surveys, etc. about the property and, if applicable, person(s) responsible for any environmental surveys, investigations, or reports. Attach documentation of interviews conducted, copies of historical documentation regarding the site, photographs, diagrams or sketches

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that indicate the location of present, past, or future hazardous materials use or storage at the site. Include a summary of the report(s)/investigation(s), issues raised, reason(s) for the report/investigation, date of report/investigation, and conclusion of the report/investigation.

Potential Sources: Obtain the information from a local enforcement agency, real estate company, local health, hazardous materials agency, or planning department/agency. This information can be combined with direct visual observations and local histories to evaluate the potential presence of hazardous materials. Additional, interview local people that are familiar with the history of the property (e.g., local government personnel, project site neighbors) may provide any insight that might not otherwise be available.

Example: As a part of previous activities at the property, a Phase I Environmental Site Assessment had been prepared for the project site in {YEAR} by {COMPANY NAME}. {PROVIDE SUMMARY OF REPORT}. The report and {OTHER RELATED DOCUMENTS} are included in this packet. Communication and responses from other agencies/individuals are included as {INSERT ATTACHMENTS}.

STEP 6D: Describe any known archaeological artifacts, cultural resources, or human remains on the property or within a 0.5-mile radius

Description: Provide a list of known archaeological resources and sites with known human remains within 0.5 miles of the project area. This list should include the distance of these sites to the project area. If the elevation project could affect these sites, include planned efforts minimize any effects as well as any coordination with Native American Tribes/individuals, Native Hawaiian organizations, or historic societies regarding these resources. Please include a copy of any archaeological survey done.

Potential Sources: Contact your SHPO/THPO, local planning department, local libraries, historical societies, university and college libraries, and state and local natural history museums for cultural resources surveys/reports within project area. Note that some of these resources are considered sensitive, and information about some archaeological sites is confidential and only available to professionally qualified individuals, or at the discretion of a Tribe.

- The National Register of Historic Places Database, a near-complete list by state and county of properties, is available through the National Park Service's website.
- A list of SHPO websites can be found through the National Park Service's website.

Example: A cultural resources report was prepared for this elevation project and cultural resources were identified within 0.5-mile radius {LIST RESOURCES}. No archaeological resources are known to exist at the project site.

STEP 6E: Is the property located on or adjacent to Native American tribal land, or are there any known Traditional Cultural Properties or other Native American resources (e.g., traditional fishing areas) on or adjacent to the property?

Description: Provide a list of Tribal lands and the appropriate Tribal contacts if the elevation project is located on or adjacent to the Native American Tribal lands. Provide a list of Native American resources on or adjacent to the project area, if they are known to exist, and the appropriate Tribal contacts. Provide as much information as available for these resources and details about any coordination that has occurred with the appropriate Tribes. Provide any project design details that will be incorporated

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and address any potential project-related effects to these resources. Note that some of these areas are considered sensitive, and information about some cultural/archaeological sites is confidential and only available to professionally qualified individuals, or at the discretion of a Tribe.

Potential Sources: Identify whether there are Indian Tribal governments located in the project area or Indian Tribal governments with a demonstrated interest. A complete list of all Federally recognized Indian Tribal governments and their contact information is available on the Tribal Historic Preservation Officers Program website through the National Park Service's website.

- An online directory of Tribal Leaders for all Federally recognized Indian Tribal governments is maintained by the Bureau of Indian Affairs.
- A map of all Indian Reservations in the Continental United States is available on the National Park Service's Native American Graves Protection and Repatriation Act (NAGPRA) website.
- A complete list of all Federally and state recognized Indian Tribal governments are available through the National Conference of State Legislatures website.
- Contact the local SHPO office for a list of Indian Tribal governments in an area. A list of SHPO websites can be found through the National Park Service's website.
- In addition, contact your local THPO, local planning department, local libraries, historical societies, university and college libraries, and state and local natural history museums for more information.

Example: The project area is located near {STATE NAME OF RESERVATION AND TRIBE}. {NAME INDIVIDUAL AND TRIBAL ROLE} was contacted about the elevation project {INSERT ALL COMMUNICATION METHOD} on {INSERT DATE(s)}. {NAME INDIVIDUAL} stated that there may be Tribal resources near project area and that the Tribe would like to be officially contacted by a Federal agency, if one intends to fund or permit the elevation project. No additional information was provided by the Tribal representative.

STEP 6F: Describe any known federally or state listed threatened/endangered species or their critical habitat within the project area

Description: Include a list of all potential federal and state listed species as well as critical habitat found the project area. Describe each species present or believed to be present in the project area throughout the duration of the elevation project (e.g., resident species will remain in the area throughout the projects, migrant species will be present for certain times of the year).

Potential Sources: List of endangered and threatened species are maintained by USFWS and NMFS. Each Service has jurisdiction over different species. In general, USFWS manages land and freshwater species, while NMFS manages marine species.

- For species under the jurisdiction of USFWS, their Endangered Species website provides an overview of endangered and threaten species and provides links to multiple different reporting tool to obtain endangered and threatened species information. The USFWS Environmental Conservation System Online (ECOS) provides species specific information on endangered and threatened species and their critical habitat, including range information. The USFWS Endangered Species Program website links to a map where you can locate and learn more about endangered and threatened species by state. To identify the location of critical habitat, USFWS Critical Habitat Designations (GIS Mapping) website provides critical habitat locations and shape files to assist in mapping critical habitat.

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- For species under the jurisdiction of NMFS, the NMFS Office of Protected Resources manages listed species and critical habitat. This website provides an overview of endangered and threatened species and links to obtain endangered and threatened species information. The NMFS Threatened or Endangered Species website provides information on endangered and threatened species and their critical habitat, including range and location information.
- For species listed at the state level, visit the state department of natural resources or state department of environmental protection or their respective websites to obtain a list of species.

Example: A review of the USFWS, the NMFS, and state wildlife agencies' lists of endangered or threatened species identified {INSERT NUMBER OF SPECIES OR STATE NO SPECIES} endangered or threatened species located in the project area. Based on the review of the USFWS and the NMFS resources, critical habitat for {INSERT NUMBER} species was found to be located in the project area. {LIST THE ENDANGERED/THREATENED SPECIES BY NAME AND IDENTIFY IF THEY ARE FEDERAL OR STATE LISTED} and {LIST THE CRITICAL HABITAT} may be found in the project area and potentially may be impacted by the proposed project. {IF FEDERALLY LISTED SPECIES AND/OR CRITICAL HABITAT IS PRESENT INCLUDE THE FOLLOWING SENTENCE}. Since Federal listed {STATE SPECIES/CRITICAL HABITAT} may be present in the project area and potentially affected by the elevation project, consultation with {USFWS AND/OR NMFS} will occur.

STEP 6G: Is the project within 200 feet of a body of water (e.g., river, stream, wetland, pond)?

Description: Describe whether any part of the elevation project is within 200 feet of a body of water (e.g., river, stream, wetland, pond), and provide details about the proximity of the project property to the waterbody(ies) and the type of waterbody(ies).

Potential Sources: Review topographic maps, available satellite images such as those available from Google Earth maps, EPA's NEPAassist, GIS data sources for the jurisdiction/agency, or available field surveys. Then, review the local jurisdiction's/lead agency's ordinances and codes to determine any special requirements regarding setbacks/restrictions to development and/or permits.

Example: Based on the review of {IDENTIFY DATA SOURCE} the proposed elevation project will be within {DISTANCE} of the {WATERBODY}.

STEP 6H: Is the project in a designated Coastal Zone or Coastal Barrier Resource System under the state's coastal management program?

Description: If the elevation project will occur in the coastal zone, the description should include the name of the agency with regulatory authority of the specific area of the coastal zone (sometimes it is delegated to a local agency), any design elements that have been or will be incorporated into the elevation project design because of the project's location within the coastal zone, and any communication that has occurred with the agency that regulates the affected coastal zone.

Potential Sources: Coastal zone management is administered at the state level. Coastal jurisdiction extent, requirements, and coastal zone management plans vary from state to state. Review this information from the National Oceanic and Atmospheric Administration (NOAA) to ascertain whether their project is in a coastal zone, and determine the permitting requirements imposed by the state and any applicable coastal zone management plans in their state. To determine if your state and/or project lies within coastal zone boundaries visit the NOAA Office for Coastal Management website. In addition:

- NOAA Office for Coastal Management's, "State Coastal Zone Boundaries," a downloadable PDF, describes each state's coastal zone boundary - <https://coast.noaa.gov/czm/media/StateCZBoundaries.pdf>

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- The CZMA requires the review of the state coastal zone management plan and for the Federal action proponent or Federal funding candidate to determine that their actions are consistent with the state's enforceable policies in their coastal zone management plan. If the Federal action proponent or Federal funding candidate deems their action is consistent with the state's policies or will have no effect on the state's coastal resources, they send a letter to the state stating their determination. The state then has a certain amount of time to issue a consistency determination/certification, negative determination/certification, or object to the rationale provided.
- Information about the applicable coastal zone management plans and regulatory agency should be obtained through the state regulatory agency of the coastal zone, either by phone or through the state agency's website. Review of the applicable coastal zone management plan or direct communication with the agency regulating the coastal zone will need to occur to determine any project-specific restrictions related to the project's occurrence within the coastal zone.

Example: The {INSERT STATE} coastal zone generally extends {INSERT DISTANCE} inland from the mean high tide line. The proposed elevation project lies within the designated coastal zone and will require review of the {NAME OF THE STATE COASTAL MANAGEMENT PLAN OR PROGRAM}. The following activities {IDENTIFY ACTIVITIES} are enforceable under this plan/program. The project activities are addressed in the {NAME OF THE STATE COASTAL MANAGEMENT PLAN OR PROGRAM} and may have reasonably foreseeable effects on coastal uses or resources. A complete application for determination of consistency including all required documentation should be submitted to {STATE REGULATORY AGENCY OF THE COASTAL ZONE} for consistency determination/certification.

STEP 6I: Describe if elevation activities will involve the use of hazardous or toxic materials

Description: Provide a list of all hazardous and toxic chemicals that could be used to implement the elevation project including items such as gasoline and herbicides. Include a description of the intended use of these chemicals.

Potential Sources: Obtain the information from the project engineer/planner.

Example: The elevation project will involve the use of hazardous materials including but not limited to {LIST MATERIALS}. Gasoline products will be used by construction equipment and herbicides will be used for the landscaping and the removal of existing invasive plants from the construction area. These chemicals will be used in compliance with {LIST REGULATIONS} pertaining to the safe handling, storage, and usage of hazardous materials. The following Best Management Practices (BMPs) will be implemented {LIST BMPs}.

IMPLEMENTATION/CLOSEOUT

Project Conditions specified in the Pre-Award Letter and Record of Environmental Considerations will be enforced during project Implementation and Closeout. Project Conditions are identified during EHP review and are not reflected in the Supplement, but should be included in the application, where applicable.

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Resources

Below is a comprehensive list of resources identified throughout this Supplement. Not all of these resources are necessary for every elevation project, but are provided to ease in identification of source material.

PROGRAM GUIDANCE

- HMA Guidance
- HMA Environmental and Historical Preservation Resources At-A-Glance Guide
- Addendum to the HMA Unified Guidance, Part B

SUPPORTING JOB AIDS

- Elevation Job Aid No. 1.3

ADDITIONAL TOOLS AND RESOURCES

- Bureau of Indian Affairs' Directory of Tribal Leaders
- EPA's NEPAAssist Tool
- EPA's Enviromapper
- EPA's Superfund Cleanup Sites
- EPA's SWPPP website
- FEMA's How to Find Your FIRM and Make a FIRMette
- FEMA's FIRM Tutorial
- FEMA's Map Service Center
- Local Community Planning Office
- National Conference of State Legislatures list of recognized Indian Tribal governments
- National Park Service National Graves Protection and Repatriation Act website
- National Park Service's Tribal Preservation Program website
- National Register of Historic Places
- National Wetlands Inventory
- NMFS Threatened or Endangered Species website
- NMFS Office of Protected Resources
- NOAA's Office for Coastal Management
- State's Coastal Zone Boundary

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Resources *(continued)*

ADDITIONAL TOOLS AND RESOURCES, continued

- State Historic Preservation Office
- State NFIP Coordinator
- Topographic maps from USGS or Department of Agriculture
- Tribal Historic Preservation Office
- U.S. Army Corps of Engineers Floodplain assistance
- USFWS Critical Habitat Designations website
- USFWS Endangered Species website
- USFWS Endangered Species Program website
- USFWS Environmental Conservation System Online

LAWS, REGULATORY GUIDANCES, AND EOS

- 40 CFR - Protection of Environment
- 44 CFR - Emergency Management and Assistance
- 50 CFR - Wildlife and Fisheries
- Antiquities Act of 1906, As Amended, 54 U.S.C. §320301-320303
- Archaeological and Historic Preservation Act of 1974, As Amended, 54 U.S.C. §3125 et seq.
- Archaeological Resources Protection Act of 1979, As Amended, 16 U.S.C. §470aa-470mm et seq.
- Bald and Golden Eagle Protection Act of 1940, As Amended, 16 U.S.C. §668 et seq.
- Clean Air Act of 1970, As Amended, 42 U.S.C. §7401 et seq.
- Clean Water Act of 1972, 33 U.S.C. §1251 et seq.
- Coastal Barriers Resources Act of 1982, 16 U.S.C. §3501 et seq.
- Coastal Zone Management Act of 1972, 16 U.S.C. §1451 et seq.
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §9601 et seq.
- Endangered Species Act of 1973, As Amended, 16 U.S.C. §1531et seq.
- EO 11988 Floodplain Management (1977)
- EO 11990 Protection of Wetlands (1977)
- EO 12898 Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (1994)
- EO 13007 Indian Sacred Properties (1996)
- Fish and Wildlife Conservation Act of 1980, 16 U.S.C. §2901 et seq.
- Magnuson-Stevens Fishery Conservation and Management Act of 1976, As Amended and Its Reauthorization, 16 U.S.C. §1801 et seq.

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- Migratory Bird Treaty Act of 1918, As Amended, 16 U.S.C. §703 et seq.
- National Environmental Policy Act of 1969, As Amended, 42 U.S.C. §4321 et seq.
- National Flood Insurance Act of 1968, As Amended, 42 U.S.C. §4001 et seq.
- National Historic Preservation Act of 1966, As Amended, 54 U.S.C. §300101 et seq.
- Native American Graves Protection and Repatriation Act of 1990, 25 U.S.C. §3001 et seq.
- Resource Conservation and Recovery Act of 1976, As Amended, 42 U.S.C. §6901 et seq.
- Robert T. Stafford Disaster Relief and Emergency Assistance Act, As Amended, 42 U.S.C. §5121 et seq.