



FEMA

# HMA EHP Resources At-a-Glance Guide

*A Practical Guide to Environmental & Historic  
Preservation Laws, Rules, and Tools*



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This EHP Resources At-A-Glance Guide is a Hazard Mitigation Assistance (HMA) product. This guide was prepared to assist applicants with identification of Environmental Planning and Historic Preservation (EHP) Resources. Additional tools developed by HMA are available online at <http://www.fema.gov/hazard-mitigation-assistance>.

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## INTRODUCTION



As a Federal agency, the U.S. Department of Homeland Security (DHS) Federal Emergency Management Agency (FEMA) is committed to complying with its responsibilities under the National Environmental Policy Act (NEPA) of 1969, the National Historic Preservation Act (NHPA) of 1966, and the Endangered Species Act (ESA) of 1973, in addition to all other applicable Environmental Planning and Historic Preservation (EHP) laws, regulations, and Executive Orders. Careful consideration of compliance matters from the earliest stages of project development and throughout the grant process promotes efficient EHP compliance and results in successful HMA projects.

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## I. HOW TO USE THIS GUIDE

This guide is intended to provide an overview of resources analyzed as part of the DHS/FEMA EHP compliance process. This guide provides an overview of applicable topics that FEMA addresses as part of its EHP review; and it identifies key contacts, websites, and search engines to assist in early identification of potential EHP resources. It is not intended to address the implementation of the compliance process (i.e., the how). Instead, as part of a holistic approach to incorporating EHP considerations into the application development process, this is a guide to use in conjunction with other available tools, including, but not limited to, HMA EHP At-a-Glance.

This reference guide has been prepared to provide users with an easy, “at-a-glance” summary of laws, regulations, and executive orders that are typically encountered in project development, and to identify readily available resource data that provide further information. By identifying available information and documenting it early in the EHP compliance process, subapplicants/applicants enable enhanced project development.

This guide provides links to regulations and guidance to assist grant writers and other local and tribal entities in further understanding environmental resources and identifies potential issues early in the process. This information can be valuable in conducting initial reviews of grant applications and the prioritization and internal decision making process for submittal of grant applicants.

In this guide, resource topics are grouped into three categories: natural resources, cultural resources, and built environment. In each category, the resource is identified, regulatory information is summarized, and contacts are provided. Additionally, a list of available FEMA training seminars and additional information sources is provided.

It should be noted that this guide is intended to focus on Federal laws, regulations, and Executive Orders (EOs) that are generally applicable to FEMA review of a proposed grant 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 project development.

## II. NATURAL RESOURCES

### Air Quality

Natural resources include air quality, biological resources, coastal resources, geology/soils/seismicity, and water resources, as discussed below.

### Air Quality

#### *What is air quality and how is it analyzed?*

Air quality can be characterized as the extent to which air is free from contaminants conventionally taken to be respiratory irritants. Air quality is regulated by the U.S. Environmental Protection Agency (U.S. EPA) under the Clean Air Act (CAA), and can be analyzed based on criteria pollutants, greenhouse gases, and hazardous air pollutants. Information on the CAA can be found at <http://www.epa.gov/air/caa/>.

More information on FEMA compliance with the CAA can be found at <http://www.fema.gov/environmental-planning-and-historic-preservation-program/clean-air-act-cao-1990-amended>.

The CAA, as amended, requires Federal agencies to assess the impact that Federally funded, permitted, or conducted projects will have on air quality, and to take actions to prevent air quality degradation. The CAA sets forth air-quality standards and requirements to control pollutant release. The U.S. EPA established National Ambient Air Quality Standards (NAAQS). The Federal NAAQS include both primary and secondary standards for ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), particulate matter 10 microns in diameter or smaller (PM<sub>10</sub>), and lead. Primary standards were established to protect human health, and secondary standards were designed to protect property and natural ecosystems from the effects of air pollution. The 1990 CAA Amendments established attainment deadlines for all designated areas that were not in attainment with the NAAQS. In addition to the NAAQS described above, a new Federal standard for particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) and a revised O<sub>3</sub> standard were established.

The U.S. EPA has ultimate responsibility for ensuring, pursuant to the CAA, that all areas of the United States meet, or are making progress towards meeting, the NAAQS. U.S. EPA requires that all states submit State Implementation Plans (SIPs) for non attainment areas that describe how the NAAQS will be achieved and maintained. The U.S. EPA has delegated this attainment responsibility to the State; and in some states, this is further delegated to a local level (e.g., local air district). Each air district is responsible for establishing and implementing rules and control measures to achieve air quality attainment in its district boundaries.

#### *What is the attainment status of my project area?*

Attainment status is dependent upon the project location. The links below provide information regarding each of the criteria pollutants, and attainment status for each State. The attainment status in your project area would determine what rules and regulations would be applicable to your project, what criteria pollutants would be of concern, and if air quality modeling may be required.

1. Ozone (O<sub>3</sub>): <http://www.epa.gov/ttn/naaqs/ozone/index.html>
2. Carbon monoxide (CO): <http://www.epa.gov/ttn/naaqs/co/index.html>

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### Air Quality

3. Nitrogen dioxide (NO<sub>2</sub>):  
[http://www.epa.gov/ttn/naaqs/standards/nox/s\\_nox\\_index.html](http://www.epa.gov/ttn/naaqs/standards/nox/s_nox_index.html)
4. Sulfur dioxide (SO<sub>2</sub>):  
[http://www.epa.gov/ttn/naaqs/standards/so2/s\\_so2\\_index.html](http://www.epa.gov/ttn/naaqs/standards/so2/s_so2_index.html)
5. PM<sub>10</sub>: [http://www.epa.gov/ttn/naaqs/pm/pm10\\_index.html](http://www.epa.gov/ttn/naaqs/pm/pm10_index.html)
6. PM<sub>2.5</sub>: [http://www.epa.gov/ttn/naaqs/pm/pm25\\_index.html](http://www.epa.gov/ttn/naaqs/pm/pm25_index.html)
7. Lead: <http://www.epa.gov/ttn/naaqs/pb/index.html>

### ***Will my project require a greenhouse gas assessment?***

A U.S. Supreme Court ruling (Massachusetts vs. EPA) on April 2, 2007, stated that the U.S. EPA was bound by the CAA to regulate greenhouse gases (GHG) as air pollutants. On February 18, 2010, the Council of Environmental Quality (CEQ) released the Draft NEPA Guidance on Consideration of Effects of Climate Change and Greenhouse Gas Emissions. This draft guidance explains how Federal agencies should analyze the environmental effects of GHG emissions and climate change when they describe the environmental effects of a proposed agency action under NEPA. This draft guidance affirms the requirements of the statute and regulations, and their applicability to GHGs and climate change impacts. In the draft guidance, CEQ advises Federal agencies to consider opportunities to reduce GHG emissions caused by proposed Federal actions; and to adapt their actions to minimize climate change impacts throughout the NEPA process, and address these issues in their agency NEPA procedures. The key laws, regulations, standards, and guidelines that apply to GHG emissions are listed below.

1. Massachusetts vs. EPA: <http://www.law.cornell.edu/supct/html/05-1120.ZS.html>
2. Endangerment and Cause of Contributing Findings for Greenhouse Gases under Section 202 of the CAA: <http://www.epa.gov/climatechange/endangerment/>
3. Draft NEPA Guidance on Consideration of Effects of Climate Change and Greenhouse Gas Emissions:  
[http://ceq.hss.doe.gov/nepa/regs/Consideration\\_of\\_Effects\\_of\\_GHG\\_Draft\\_NEPA\\_Guidance\\_FINAL\\_02182010.pdf](http://ceq.hss.doe.gov/nepa/regs/Consideration_of_Effects_of_GHG_Draft_NEPA_Guidance_FINAL_02182010.pdf)





The CEQ advises Federal agencies to consider, in scoping their NEPA analyses, whether analysis of the direct and indirect GHG emissions from their proposed actions may provide meaningful information to decision makers and the public. Specifically, if it is reasonable to expect a proposed action to cause direct emissions of 25,000 metric tons or more of CO<sub>2</sub>-equivalent GHG emissions on an annual basis, the agency should consider this an indicator that a quantitative and qualitative assessment may be meaningful to decision-makers and the public. For long-term actions that have less than 25,000 metric tons of CO<sub>2</sub>-equivalent annual direct emissions, CEQ encourages Federal agencies to consider whether the action's long-term emissions should receive similar analysis. CEQ does not propose this as an indicator of a threshold of significant effects, but rather as an indicator of a minimum level of GHG emissions that may warrant some description in the appropriate NEPA analysis for agency actions involving direct emissions of GHGs.

Local rules and regulations for determining GHG emission impacts vary with each state, and should be identified for each individual project.

#### ***Who do I contact for more information?***

FEMA suggests that you contact your State and local air quality jurisdiction or planning department to obtain additional information about the applicable air quality requirements of your project. You may find your local air quality agency through the National Association of Clean Air Agencies at <http://www.4cleanair.org/>.

Indian Tribal governments have express authority under the CAA to manage air quality on their reservations. The Tribal Authority Rule identifies those provisions of the CAA that are applicable to Indian Tribal governments in the same manner as states. The U.S. EPA's direct implementation role under the CAA calls for administering CAA-mandated programs in tribal areas where a tribe is not administering provisions of these programs. More information on tribal responsibilities and authority can be found at the U.S. EPA Tribal Compliance Assistance Center at <http://www.epa.gov/tribalcompliance/airresources/arairdrill.html>.

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### Biological Resources

Biological resources include animals and plants that may be protected or otherwise addressed under a variety of local, State, and Federal laws. FEMA evaluates each grant application for compliance with the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Fish and Wildlife Coordination Act, the Migratory Bird Treaty Act, and the Marine Mammal Protection Act.

#### *What is the Endangered Species Act?*

The Endangered Species Act of 1973 (ESA) (16 United States Code [U.S.C.] Sections 1531 to 1543) and subsequent amendments provide guidance for the conservation of Federally listed species, and the ecosystems (critical habitat) on which they depend. Section 4 of the Federal ESA provides a framework in which species of fish, wildlife, or plants may be determined to be (listed as) endangered or threatened. Section 9 of the Federal ESA prohibits the take of any fish or wildlife species listed as threatened, endangered, or proposed for listing, unless otherwise authorized or exempted by Federal regulations. The term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Section 9 of the Federal ESA also prohibits the unlawful removal, damage, or destruction of any endangered plant on Federal lands; or, when on non-Federal areas, in knowing violation of any State law. The unauthorized take of Federally listed species is illegal and can result in fines or criminal penalties. There are two processes whereby take is authorized when it is incidental to an otherwise legal activity; these are described in Section 7 and Section 10 of the ESA, as described below.



Section 7 of the ESA provides a framework for authorizing the take of threatened or endangered species by Federal agencies or their designees, and applies to actions that are conducted, permitted, or funded by a Federal agency. Under Section 7, Federal agencies must consult with the U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS) when any action the agency carries out, funds, or authorizes (such as through a permit) may affect a listed endangered or threatened species. This process usually begins as informal consultation. A Federal agency, in the early stages of project planning, may approach the USFWS/NMFS and requests informal consultation. Discussions between the agencies may include what types of listed species may occur in the proposed action area, and what effect the proposed action may have on those species. If a proposed

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project is likely to adversely affect a listed species or adversely affect designated critical habitat, the lead agency (such as FEMA) is required to prepare a Biological Assessment evaluating the nature and severity of the potential effect. If the USFWS or NMFS agrees with the finding of the Biological Assessment, a Biological Opinion is issued that authorizes take as described in the document. During the consultation process, conservation measures that prevent or reduce take may be developed or required by the involved agencies. The consultation process required to obtain a Biological Opinion generally takes 6 months or longer. In some instances, the need for a Biological Opinion can be avoided by slight modifications to the project design or methodology used in construction. If the need for formal consultation can be avoided, the time required for project permitting may be greatly reduced. In the case of FEMA projects, prior to submitting the grant application, the subgrantee or subapplicant may request technical assistance from the USFWS or NMFS. The Section 7 consultation handbook provides more details on this process: [http://www.fws.gov/endangered/esa-library/pdf/esa\\_section7\\_handbook.pdf](http://www.fws.gov/endangered/esa-library/pdf/esa_section7_handbook.pdf).

Section 10 of the Federal ESA requires the acquisition of an incidental take permit from the USFWS by non-Federal parties for certain activities that might incidentally harm (or take) endangered or threatened wildlife. In cases where the activities of the non-Federal party involve permitting from another Federal agency, such as the U.S. Army Corps of Engineers (USACE), consultation generally proceeds under Section 7 of the ESA. To obtain an incidental take permit, a non-Federal applicant must develop a Habitat Conservation Plan (HCP) that describes the anticipated effects of the activity, how impacts will be minimized or mitigated, and how the HCP is to be funded. If a project is included in an existing HCP and is consistent with an already established incidental take permit, FEMA's process for ESA compliance (under Section 7) can be streamlined.

Information on the ESA can be found at <http://www.fws.gov/endangered/esa-library/pdf/ESAall.pdf>; more information on FEMA's compliance with the act can be found at <http://www.fema.gov/environmental-planning-and-historic-preservation-program/endangered-species-act-1973>.

### ***Are there endangered species or critical habitat in my project area?***

An endangered species is a species in danger of extinction throughout all or a significant portion of its range. A threatened species is one that is likely to become endangered in the foreseeable future without further protection. Other ESA designations include proposed and candidate species. Proposed species are those that have been officially proposed (in the Federal Register) for listing as threatened or endangered. Candidate species are those for which there is enough information to warrant proposing them for listing, but the service is currently precluded from doing so by higher-listed priorities. There are approximately 600 animal species and 800 plant species that are listed as threatened or endangered in the United States. Most endangered species are found only in specific geographic localities.

In general, the NMFS is responsible for protection of Federally listed marine species and migratory fishes, such as salmon, while all other species are under USFWS jurisdiction. To determine if a project occurs in an area that may support special status species, contact the appropriate regional USFWS, and State resource agency for information. Regional USFWS offices can provide information about the potential for species to occur in a specific locality; USFWS regional offices can be identified at <http://www.fws.gov/endangered/regions/index.html>. Some USFWS regional offices provide online tools that generate

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species lists for a specific geographic location; these can be found at <http://www.fws.gov/angered/>.

Critical habitat has been designated by the USFWS and NMFS for many threatened and endangered species, and delineates specific areas that include physical or biological features essential to the conservation of the species, and which may require special management considerations or protection. Critical habitat can include specific areas outside the geographic area occupied by the species at the time it is listed, but have been determined by the resource agencies to be essential for the conservation of a species. More information about critical habitat can be found at <http://www.fws.gov/angered/what-we-do/critical-habitats-faq.html>.

In consultations for species with critical habitat, Federal agencies must ensure that activities do not destroy or adversely modify critical habitat to the point that it will no longer aid in the species' recovery. To determine if a proposed project occurs in critical habitat, consult the USFWS critical habitat portal at <http://criticalhabitat.fws.gov/crithab/>, and/or contact your appropriate regional USFWS office and State resources agency (e.g., Department of Fish and Game) for more information.

### ***What is the Magnuson-Stevens Fishery Conservation and Management Act?***

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) is the primary law governing marine fisheries management in United States Federal waters. The MSA created eight regional fishery management councils to manage fisheries and promote conservation. The MSA focuses on rebuilding overfished fisheries and protecting essential fish habitat (EFH). More information on the MSA can be found at <http://www.habitat.noaa.gov/aboutus/statutoryauthorities.html>.

The MSA requires all Federal agencies to consult with NMFS on proposed projects authorized, funded, or undertaken by that agency that may adversely affect EFH. Guidelines under Section 305(b) of the MSA direct the NMFS to use a coordinated process to evaluate projects that may affect EFH, in conjunction with the required Section 7 consultation process under the ESA (discussed above).

EFH has currently been described for approximately 1,000 species of fish and shellfish, and additional information on EFH can be found at <http://www.habitat.noaa.gov/pdf/efhregulatoryguidelines.pdf>. Managed species vary regionally and are specified in Fisheries Management Plans (FMP) prepared by regional Fisheries Management Councils. A list of Regional Fisheries Management Council contacts is available at: [http://www.nmfs.noaa.gov/sfa/reg\\_svcs/councils.htm](http://www.nmfs.noaa.gov/sfa/reg_svcs/councils.htm). Similarly, a list of Fisheries Management Plans, by region, is available at [http://www.nmfs.noaa.gov/sfa/domes\\_fish/FMPS.htm](http://www.nmfs.noaa.gov/sfa/domes_fish/FMPS.htm).

### ***Are there essential fish habitats in my project area?***

EFH is designated in individual FMPs to manage habitats that are important to maintain particular fish stocks. EFH includes waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity; however, it is not limited to marine or estuarine waters, and can include rivers and creeks that support migratory fish of commercial value. Often, EFH designated under separate FMPs overlap geographically. Guidance on consultation relative to EFH has been provided by the NMFS, and can be found at [http://www.habitat.noaa.gov/pdf/efhconsultationguidancev1\\_1.pdf](http://www.habitat.noaa.gov/pdf/efhconsultationguidancev1_1.pdf).

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Habitat Areas of Particular Concern (HAPC) are subsets of EFH that are rare, particularly susceptible to human-induced degradation, of key ecological importance, or located in an environmentally stressed area. HAPCs are not afforded any additional regulatory protection under the MSA; however, Federal actions with potential adverse impacts to HAPC will be more carefully scrutinized during the consultation process, and may be subject to more stringent EFH conservation recommendations. HAPC may be a particular habitat, such as seagrass of the Pacific Coast, or it may be a particular geographic location, such as Georges Bank in the North Atlantic.

The NMFS maintains an on-line mapping tool that can be used to determine if an activity would occur in EFH or an HAPC: <http://www.habitat.noaa.gov/protection/efh/habitatmapper.html>.

### ***What is the Fish and Wildlife Coordination Act?***

The Fish and Wildlife Coordination Act (16 U.S.C. Sections 661 to 667e et seq.) applies to applicable Federal projects where a body of water is impounded, diverted, deepened, or otherwise modified. Project proponents are required to consult with the USFWS and NMFS and the appropriate State wildlife agency. Consultation with the USFWS and NMFS under the Fish and Wildlife Coordination Act typically occurs concurrently with the consultation process under the ESA. The intent of this consultation is to prevent loss or damage to fish and wildlife resources, and ensure that these resources receive equal consideration compared to other project features. Consultation includes notifying the wildlife agencies of the initiation of studies associated with the project, affording them an opportunity to participate in project planning, and providing them with materials necessary to evaluate the environmental impacts of the project (e.g., species lists, biological assessment). More information on the act is available at <http://www.usbr.gov/power/legislation/fwca.pdf>; additional information on FEMA compliance can be found at <http://www.fema.gov/environmental-planning-and-historic-preservation-program/fish-wildlife-coordination-act-1956>.

Projects that include impoundment, diversion, deepening, or modifying a waterbody with a water surface area that is greater than 10 acres are subject to this act. For applicable projects, the wildlife resources protected under the Fish and Wildlife Coordination Act include “birds, fishes, mammals, and all other classes of wild animals and all types of aquatic and land vegetation upon which wildlife is dependent.” More information can be found at <http://www.fema.gov/environmental-planning-and-historic-preservation-program/coastal-zone-management-act-1972>.

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### ***What is the Migratory Bird Treaty Act?***

The Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-712) makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Most native bird species are protected under the MBTA. Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandoning eggs or young) may be considered a take, and is potentially punishable by fines and/or imprisonment. Incidental take permits are not issued for this act. A description of the MBTA can be found at: <http://www.fws.gov/laws/lawsdigest/migtrea.html>.

While MBTA is Federal law, in some states, MBTA is administered by a State agency on behalf of the USFWS. Project proponents must avoid take of migratory birds and must coordinate with USFWS or the applicable State agency if needed. For projects that include the construction or modification of communications towers, a Draft Memorandum of Understanding (MOU) between the USFWS and FEMA describes established procedures for the protection of migratory birds. The Draft MOU can be found at <http://www.regulations.gov> by entering the document ID FEMA-2008-0014-0003. Any proposed project must take measures to avoid the take of any migratory birds, nests, or eggs. Conducting tree or brush removal outside of the bird nesting season is a measure commonly used to comply with the MBTA.

### ***What is the Marine Mammal Protection Act?***

The Marine Mammal Protection Act, adopted in 1972, makes it unlawful to take or import any marine mammals and/or their products. Under Section 101(a)(5)(D) of this act, an incidental harassment authorization (IHA) may be issued for activities other than commercial fishing that may impact small numbers of marine mammals. An IHA covers activities that extend for periods of not more than 1 year, and that will have a negligible effect on the impacted species. Amendments to this act in 1994 statutorily defined two levels of harassment. Level A harassment is defined as any act of pursuit, torment, or annoyance that has the potential to injure a marine mammal in the wild. Level B harassment is defined as harassment having potential to disturb marine mammals by causing disruption of behavioral patterns including but not limited to migration, breathing, nursing, breeding, feeding, or sheltering.

Projects that occur in areas that are frequented by marine mammals may require an IHA, particularly if project activities (such as pile driving) would generate substantial underwater noise. To receive an IHA, FEMA must submit a written request to the NMFS Office of Protected Resources, and the appropriate NMFS Regional Office where the specified activity is planned. The NMFS will then conduct an environmental review and place the IHA application on the Federal Register for public comment. Typically, the process of issuing an IHA takes 3 to 4 months. IHAs are typically valid for 1 year after issuance, so this authorization is generally applied for 4 to 6 months before the activity would begin. An overview of the IHA process can be found at <http://www.nmfs.noaa.gov/pr/permits/incidental.htm#iha>.

## II. NATURAL RESOURCES

### Coastal Resources

### Coastal Resources

#### *What are Coastal Resources?*

Coastal resources are commonly defined as transition areas between land and sea, including large inland lakes. Coastal areas are diverse in function and form, dynamic, and do not lend themselves well to definition by strict spatial boundaries. Unlike watersheds, there are no exact natural boundaries that unambiguously delineate coastal areas. Coastal resources typically include wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs, as well as the fish and wildlife using those habitats.



#### *What is the Coastal Zone Management Act and does it apply to my project?*

In recognition of the increasing pressures of overdevelopment on the nation's coastal resources, Congress enacted the Coastal Zone Management Act in 1972 (CZMA), last amended in 2004; and the Coastal Zone Act Reauthorization Amendments in 1990. These laws encouraged the voluntary participation of states by making Federal funds available to develop a program to help preserve, protect, develop—and where possible—restore or enhance valuable natural coastal resources. To encourage states to participate, the CZMA makes Federal financial assistance available to any coastal State or territory, including those on the Great Lakes, that is willing to develop and implement a comprehensive coastal zone management program.

These acts apply to all actions that are located in a designated coastal zone; they state that any Federal agency whose activities directly affect the coastal zone will, to the maximum extent practicable, be consistent with State management programs. The CZMA can be viewed at [http://coastalmanagement.noaa.gov/czm/czm\\_act.html](http://coastalmanagement.noaa.gov/czm/czm_act.html); FEMA data relative to this act can be found at <http://www.fema.gov/environmental-planning-and-historic-preservation-program/coastal-zone-management-act-1972>.

Coastal zone management is administered at the State level, and coastal jurisdiction extent and permitting requirements vary from state to state. Thirty-four states have approved coastal management programs. The extent of coastal zone jurisdiction for each state, as well as links to permitting requirements for projects in coastal zones, are available online at <http://coastalmanagement.noaa.gov/mystate/welcome.html>. Applicants should review information from the National Oceanic and Atmospheric Administration (NOAA) to ascertain whether their project is in a coastal zone, and if it is, to determine the permitting requirements imposed by their state.

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### Coastal Resources/ Geologic Hazards

#### *What is a coastal barrier resource and does the Coastal Barrier Resources Act apply to my project?*

According to the USFWS, coastal barrier resources are unique landforms that provide protection for diverse aquatic habitats and serve as the mainland's first line of defense against the impacts of severe coastal storms and erosion. Located at the interface of land and sea, the dominant physical factors responsible for shaping coastal landforms are tidal range, wave energy, and sediment supply from rivers and older, pre-existing coastal sand bodies.

The Coastal Barrier Resources Act (CBRA) of 1982 established the John H. Chafee Coastal Barrier Resources System (CBRS), a defined set of coastal barrier units located along the Atlantic, Gulf of Mexico, Great Lakes, Puerto Rico, and U.S. Virgin Island coasts. These areas are delineated on maps that were enacted into law by Congress, and are maintained by the USFWS. Most new Federal expenditures and financial assistance are prohibited within the CBRS. However, if the expenditures and financial assistance are consistent with the CBRS, the USFWS typically poses no objection.

Information on the CBRA is available from the USFWS at <http://www.fws.gov/CBRA/index.html>, and from FEMA at <http://www.fema.gov/national-flood-insurance-program-2/coastal-barrier-resources-system>. Official CBRA maps and statewide locator maps are available online from the USFWS at <http://www.fws.gov/CBRA/Maps/index.html> and at the FEMA Flood Insurance Rate Maps (FIRM) map service center <https://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1>. These maps can be used to identify whether a property or project area is located in a CBRA zone.

CBRS determinations are made by the USFWS. Limitations in FEMA ability to fund projects, and consultation and/or reporting requirements to USFWS, vary by FEMA program and project type. FEMA has developed a project fact sheet for CBRS; it can be found at <http://www.fws.gov/CBRA/FAQs.html>.

## Geologic Hazards

FEMA evaluates the geotechnical conditions of a project area to identify locales susceptible to erosion, landslides, earthquakes, or other geologic events that pose a threat to health and safety when incompatible development is sited in areas of significant hazard.



***What geologic/soil/seismicity regulations does FEMA consider during EHP review?***

The Earthquake Hazards Reduction Act of 1977, or what is also called the National Earthquake Hazards Reduction Program Reauthorization Act of 2011 (<http://www.nehrp.gov/about/PL108-360.htm>), established an earthquake reduction program. The program objectives include the education of the public and development of technologically and economically feasible design and construction methods to create ways to increase the use of existing scientific and engineering knowledge to mitigate earthquake hazards. The National Earthquake Hazards Reduction Program—Design and Construction Site provides guides and tools for earthquake-resistant design and construction; it can be found at <http://www.nehrp.gov/library/guidance.htm>.

EO 12699, Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction, requires newly constructed buildings to meet standards for seismic safety set by the National Earthquake Hazards Reduction Program. EO 12699 applies to construction of new buildings that are to be used or are intended for sheltering persons or property; more information on this EO can be found at <http://www.wbdg.org/ccb/FED/FMEO/eo12699.pdf>. Additionally, FEMA has extensive information on seismic matters. Its index of earthquake publications is at <http://www.fema.gov/plan/prevent/earthquake/pubindex.shtm>.

Other information is available from the United States Department of Agriculture Natural Resource Conservation Service (NCRS) which has extensive data on soils that would also provide geologic information for project areas.

Impacts to geology/soils/seismicity vary by location and the existing condition at project sites. In addition to the links provided above, State, Tribal, county, or city jurisdictions should be consulted.

**Water Resources**

Water resources include the waters of the oceans, rivers, and lakes; groundwater and deep subsurface waters; and glaciers and permanent snowfields; they can include areas that currently show no surface indications of water.

***What is Executive Order 11988 (Floodplain Management)?***

EO 11988, Floodplain Management, requires Federal agencies to take action to minimize occupancy and modification of the floodplain. Specifically, EO 11988 requires federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative (<http://water.epa.gov/lawsregs/guidance/wetlands/eo11988.cfm>). FEMA regulations implementing EO 11988 are codified at 44 CFR Part 9; more information on FEMA's compliance with this order can be found at <http://www.fema.gov/plan/ehp/ehplaws/eo11988.shtm>.

***Is my project in the floodplain?***

For purposes of the EO 11988 compliance, the term "floodplain" generally refers to the 100-year floodplain. This floodplain is the area subject to inundation from a flood having

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a 1 percent chance of occurring in a given year. This flood is also referred to as the “base flood”, and may occur more or less often than once every 100 years. In circumstances known as “critical actions”—activities for which even a slight chance of flooding is too great a risk—the regulated flood-prone area is defined by the 500-year floodplain, which designates the area subject to inundation from a flood having a 0.2 percent chance of occurring in a given year. For example, construction of a hospital is considered to be a critical action even a low risk of flooding is too great for activities such as serving patients with limited mobility, housing critical records, and storing potentially hazardous medical materials. Therefore, FEMA must consider the 500-year Floodplain when evaluating an action that involves a hospital.

FEMA produces floodplain maps, referred to as Flood Insurance Rate Maps (FIRMs), that can be used to determine if an action is in the floodplain. The FIRM show the 1 percent annual chronic floodplains as Special Flood Hazard Areas (SFHAs). The FIRM may also show the 0.2 annual chronic floodplain.

Whenever a proposed project is located in or may affect a floodplain, FEMA follows its Eight-Step Process to evaluate, avoid, or minimize adverse impacts to floodplain function and value to comply with EO 11988 (<http://www.fema.gov/environmental-planning-and-historic-preservation-program/executive-order-11988-floodplain-management>). The key to the process is the analysis of alternatives to locating a project in the floodplain. To determine if a project is located in a floodplain, consult the local floodplain manager or the applicable FIRM at <https://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1&userType=G>.

#### ***What are the Clean Water Act and the River and Harbors Act?***

The Clean Water Act (CWA) (<http://www.epa.gov/lawsregs/laws/cwa.html>) is a 1977 amendment to the Federal Water Pollution Control Act of 1972 (USC, Title 33), which established the basic structure for regulating pollutant discharges to navigable waters of the United States. The CWA sets forth procedures for effluent limitations, water quality standards and implementation plans, national performance standards, and point source (e.g., municipal wastewater discharges) and nonpoint source (e.g., stormwater) programs. The primary principle of the CWA is that any pollutant discharge into the Nation’s waters is prohibited unless specifically authorized by a permit; permit review is the primary regulatory tool of the CWA, as discussed further below. More information about the CWA can be found at <http://www.fema.gov/environmental-planning-and-historic-preservation-program/clean-water-act-1948-amended-1966-1972>.

Section 303 of the CWA requires states to adopt water quality standards for all surface and ground waters of the United States ([http://www.epa.gov/owow/tmdl/results/pdf/aug\\_7\\_introduction\\_to\\_clean.pdf](http://www.epa.gov/owow/tmdl/results/pdf/aug_7_introduction_to_clean.pdf)). When multiple uses exist (e.g., agricultural supply, municipal supply, recreation, and preservation of rare and endangered species), water quality standards must protect the most sensitive use. Section 303(d) of the CWA requires states to identify water bodies that are not attaining water quality standards, and to establish total maximum daily loads for pollutants causing the impairment (nonattainment of water quality standards) of listed water bodies.

The CWA also establishes the National Pollutant Discharge Elimination System (NPDES) under Sections 401 and 402, and permits for dredged or fill material under Section 404.

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### Water Resources



Dredging means excavation in wetlands or other surface waters, or excavation in uplands that creates wetlands or other surface waters. Filling means deposition of any material (such as sand, dock pilings, or seawalls) in wetlands or other surface waters. The USACE is charged with enforcing the provisions of Section 404 by reviewing general and individual permit applications. As a part of the Section 404 permitting process in some states, a permit applicant must seek water quality certification from the State, Tribe, or the U.S. EPA, in accordance with Section 401 of the CWA (<http://water.epa.gov/lawsregs/guidance/wetlands/sec401.cfm>). The permitting process is discussed below.

Section 10 of the Rivers and Harbors Act of 1899 (33 USC 401 et seq.) requires authorization from the USACE for the construction of any structure in, over, or under any navigable water of the United States, the excavation/dredging or deposition of material in these waters, or any obstruction or alteration in navigable water (<http://www.fws.gov/laws/lawsdigest/RIV1899.html>). Structures or work outside the limits defined for navigable waters of the United States require a Section 10 permit if the structure or work affects the course, location, condition, or capacity of the water body. Section 10 and CWA Section 404 overlap in some activities involving wetlands. Permits for activities regulated under both are processed simultaneously by the USACE.

#### ***Is there a wetland in my project area?***

As defined by the U.S. EPA for the public, wetlands are areas where the frequent and prolonged presence of water at or near the soil surface drives the natural system—meaning the kind of soils that form, the plants that grow, and the fish and/or wildlife communities that use the habitat. Swamps, marshes, and bogs are well-recognized types of wetlands. However, many important specific wetland types have drier or more variable water systems, such as vernal pools (pools that form in the spring rains but are dry at other times of the year), playas (areas at the bottom of undrained desert basins that are sometimes covered with water), and prairie potholes. The USFWS maintains a searchable national wetland inventory at <http://www.fws.gov/wetlands/Data/Mapper.html>, which contains information on wetlands. The USACE has more information at <http://www.epa.gov/owow/wetlands/facts/fact11.html>.

#### ***Does my project require a Clean Water Act or Rivers and Harbors Act permit?***

Section 402 of the CWA requires all municipal, industrial, and commercial facilities that discharge wastewater or stormwater directly from a point source (a discrete conveyance such as a pipe, ditch, or channel) into a waterway of the United States (such as a lake,

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river, or ocean) to obtain an NPDES permit (<http://cfpub.epa.gov/npdes/>). All permits are written to ensure the receiving waters will achieve applicable water quality standards.

A Section 404 permit from the USACE must be obtained for most dredge or fill activities in jurisdictional waters of the United States. During the permit review process, the USACE determines the type of permit (general or individual) appropriate for the proposed project. If a project requires an individual permit, the USACE requires documentation and determination of the Least Environmentally Damaging Practicable Alternative (LEDPA); FEMA encourages consultation with the USACE on the specifics of the project to ensure that the application represents the LEDPA.

Section 401 of the CWA specifies that states must certify that any activity subject to a permit issued by a Federal agency, such as a CWA Section 404 permit, meets all State water quality standards. A project proponent must obtain water quality certification (also known as Section 401 certification) as part of a Section 404 permit.

Certain waters of the United States are considered special aquatic sites under the CWA, because they are generally recognized as having particular ecological value. Such sites include sanctuaries and refuges, mudflats, wetlands, vegetated shallows, eelgrass beds, coral reefs, and riffle and pool complexes. Special aquatic sites are defined in the CWA and may be afforded additional consideration in the USACE permit process for a project.

To determine if a project requires a permit under the CWA or Rivers and Harbors Act, contact the local applicable USACE office (<http://www.mvm.usace.army.mil/USACEDistrictsList.asp>). Other environmental compliance requirements may apply to the permit processes; obtaining an individual CWA permit may be a lengthy process.

#### ***What is Executive Order 11990 (Wetlands)?***

EO 11990 requires Federal agencies to follow avoidance, mitigation, and preservation procedures with public input before proposing new construction in wetlands. As with EO 11988, FEMA regulations implementing this EO are codified in 44 CFR Part 9, and the Eight-Step Process is also used to evaluate the potential effects of an action on wetlands. As discussed in the CWA subsection above, formal legal protection of jurisdictional wetlands is promulgated through Section 404 of the CWA. A permit from the USACE may be required if an action has the potential to affect wetlands. More information on EO 11990 is available at <http://www.archives.gov/federal-register/codification/executive-order/11990.html>, and on the FEMA site at <http://www.fema.gov/national-flood-insurance-program-2/executive-order-11990-protection-wetlands-1977>.



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#### *What is the Safe Drinking Water Act?*

The Safe Drinking Water Act (SDWA) was originally passed in 1974 to protect public health by regulating the public drinking water supply (<http://www.epa.gov/oecaagct/ldwa.html>). The law was amended in 1986 and 1996, and requires action to protect drinking water and its sources—rivers, lakes, reservoirs, springs, and groundwater wells. Under the SDWA, the U.S. EPA sets health-based standards for drinking water to protect people from naturally occurring and man-made contaminants that may be found in drinking water.

U.S. EPA defines a sole- or principal-source aquifer as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. These areas may have no alternative drinking water source that could physically, legally, and economically supply all those who depend on the aquifer for drinking water.

#### *Is my project in a sole-source aquifer?*

There are 77 designated sole-source aquifers in the United States. The U.S. EPA maintains a mapping tool to assist in determining if a project is within the boundaries of such an aquifer (<http://water.epa.gov/infrastructure/drinkingwater/sourcewater/protection/solesourceaquifer.cfm>). FEMA recommends that the appropriate U.S. EPA regional contact be informed if there is a possibility that a project is located in an aquifer.

#### *What is the Wild and Scenic Rivers Act?*

The Wild and Scenic Rivers Act of 1968 preserves selected rivers in a free-flowing condition and protects their local environments (<http://uscode.house.gov/download/pls/16C28.txt>). These rivers possess outstanding scenic, recreational, geologic, fish and wildlife, historic, or cultural values. Three types of Wild and Scenic designations exist, depending on a river's characteristics:

1. Wild: undeveloped, generally inaccessible except by trail, with essentially primitive watersheds or shorelines and unpolluted waters;
2. Scenic: undeveloped, occasionally accessible by road, with shorelines or watersheds largely undeveloped; and
3. Recreational: some development, readily accessible by road or railroad, with some impoundment or diversion in the past.

Rivers and streams that are in the National Rivers Inventory or are proposed for inclusion must be identified during project planning. Information on the National Wild and Scenic Rivers Program is at <http://www.rivers.gov/rivers/>; and FEMA, Region III, also provides information at <http://www.fema.gov/region-iii-environmental-information/special-concerns-rivers>.

#### *Is there a Wild and Scenic River in my project area?*

Selected rivers and streams have been placed into the National Rivers Inventory by acts of Congress. As of 2009, the National System protects more than 12,000 miles of 252 rivers in 39 states and in the Commonwealth of Puerto Rico. On March 30, 2009, the Omnibus Public Land Management Act was signed into law; it designated 86 new Wild and Scenic Rivers, totaling over 1,100 miles in Oregon, Idaho, Arizona, Wyoming, Utah, California, and Massachusetts. A list of the designated Wild and Scenic rivers by state is at <http://www.rivers.gov/rivers/index.php>.

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A cultural resource may be defined very broadly as “buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance.” Examples are social institutions, historic places, artifacts, and documents, or, more specifically:

- Properties that are listed in or eligible for listing in the National Register of Historic Places (NRHP)
- Older properties that may have cultural value but may or may not be eligible for listing in the NRHP
- Historic properties that have cultural value beyond their historicity
- Native American/Tribal graves and cultural items
- Shipwrecks
- Museum collections
- Historical documents
- Religious sites
- Sites supporting religious practices
- Sites supporting cultural use of natural resources
- Sites supporting folklife, tradition, and other social institutions
- Sites supporting theater groups, orchestras, and other community cultural amenities

The National Historic Preservation Act (NHPA) of 1966, (Public Law [PL]. 89-665; 16 USC 470 et seq.) as amended, outlines Federal policy to protect historic properties and promote historic preservation in cooperation with States, Tribal governments, local governments, and other consulting parties. The NHPA established the NRHP, and designated the State Historic Preservation Office (SHPO) as the entity responsible for administering State-level programs. The NHPA also created the Advisory Council on Historic Preservation (ACHP), and the Federal agency responsible for providing guidance on Federal activities, programs, and policies that affect historic properties.

Section 101 (d) of the NHPA granted Federally recognized Indian Tribal governments the ability to assume any or all functions of a SHPO with respect to Tribal lands through the designation of the Tribal Historic Preservation Office (THPO). THPOs have all of the roles and responsibilities of SHPOs, including the ability to make determinations of eligibility, and nominating properties for listing in the NRHP and as National Historic Landmarks. The THPO performs the same regulatory role as the SHPO for the purposes of Section 106 compliance on Tribal lands.

Section 106 of the NHPA outlines the procedures for Federal agencies to follow to take into account the effect of their actions on historic properties, and applies to any Federal undertaking (including awarding grant monies) that has the potential to affect historic properties. “Historic properties” are defined in the NHPA as those properties that are “listed in or eligible for listing in the National Register.” Although buildings and archaeological

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sites are most readily recognizable as historic properties, a diverse range of resources is listed in the NRHP, including roads, landscapes, and vehicles. Under Section 106, Federal agencies are responsible for considering ways to avoid, minimize, and mitigate any adverse effects to historic properties. The Section 106 process is the primary way that FEMA evaluates impacts on cultural resources. It is important to note that FEMA also must consider the impacts of its actions on the broader range of cultural resources (listed above).

Because FEMA grant programs use Federal dollars to fund selected mitigation projects, FEMA must comply with Section 106 of the NHPA and other applicable cultural resources laws. It is the responsibility of the applicant (grantee) and/or subapplicant (subgrantee) to assist FEMA with compliance. Please refer to the HMA EHP At-a-Glance Guide, which allows identification of some of the cultural resources issues that may pertain to a particular project type. Additionally, FEMA recommends that a subapplicant contact the SHPO, or the local government representative responsible for managing historic properties, early in the development of a project scope of work to identify known or suspected historic properties, and determine if the proposed work has the potential to adversely affect them (see additional guidance, below). Some SHPOs may prefer to coordinate directly with FEMA; in such cases, contact your local FEMA program specialist. The subapplicant should consider ways to avoid or minimize adverse effects to historic properties, and should include in its subapplication information about alternatives considered.

Before the project is funded, FEMA must consult with the SHPO and other historic preservation stakeholders, including Indian Tribal governments, if applicable, to identify historic properties and determine how a proposed project will affect them. If there are adverse effects, FEMA may work with the subapplicant to avoid these adverse effects through simple project modifications or specifications. If this cannot be done, FEMA consults with historic preservation stakeholders on ways to avoid, minimize, or mitigate (treat) adverse effects to historic properties. This may result in a Memorandum of Agreement with the SHPO that outlines the agreed-upon treatment measures. This process can take time, which should be considered in developing the project scope of work.

For more information on the FEMA Historic Preservation Program, see the FEMA Historic Preservation website at <http://www.fema.gov/environmental-historic-preservation>. For more specific information on hazard mitigation and historic properties, see Integrating Historic Property and Cultural Resource Considerations into Hazard Mitigation Planning, State and Local Mitigation Planning How-to Guide, FEMA 386-6 (FEMA, May 2005), available online at <http://www.fema.gov/library/viewRecord.do?id=1892>.

## Historic Properties: Above-Ground (Historic Structures)

### *What are Above-Ground Historic Properties?*

Historic properties are buildings, structures, objects, sites, and districts that are listed in or eligible for listing in the NRHP. Above-ground resources are those that are mostly located above-ground and do not require excavation to identify. Examples include residential, commercial, industrial, and institutional buildings such as houses, garages, barns, stores, factories, schools, and churches. Above-ground resources also include structures such as bridges, roads, canals, dams, property walls, and signage. In some cases, landscape elements such as ornamental plantings, terracing, and ponds may also be above-ground

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historic properties. Historic properties are generally over 50 years in age; however, properties less than 50 years of age may be historic if they are exceptionally important. The age of specific properties in a particular project area is generally available through applicable assessor's offices and, in some cases, may be available online.

The key laws, regulations, EOs, standards, and guidelines that apply to FEMA (and grantee/subgrantee) responsibilities with respect to above-ground historic properties are listed below.

1. National Historic Preservation Act (NHPA): <http://www.achp.gov/nhpa.html>
2. Section 106 of the NHPA Implementing Regulations (Section 106): <http://www.achp.gov/regs-rev04.pdf>
3. Secretary of the Interior's Standards for the Treatment of Historic Properties (SOI Standards): <http://www.nps.gov/hps/tps/standguide/>

### *Are there Above-Ground Historic Properties in my project area?*

Ultimately, FEMA, in consultation with the SHPO/THPO and historic preservation stakeholders, will determine whether a resource is historic. However, there are some initial steps that can be taken to determine if a property may be historic as the project scope of work is developed.

- A property may be listed in the NRHP individually or as a contributing resource in a larger historic district. A near-complete list of properties included in the NRHP by State and County is at <http://nrhp.focus.nps.gov/natreghome.do?searchtype=natreghome>.
- In addition to the NRHP, many SHPOs maintain a list of properties that have been designated as historically significant at the State level. In some cases, these lists can be searched online. An example is the Virginia SHPO list of historically significant properties (Virginia Landmarks Register), searchable by county at [http://www.dhr.virginia.gov/register/register\\_counties\\_cities.htm](http://www.dhr.virginia.gov/register/register_counties_cities.htm). If not available online, consider contacting the SHPO; a list of SHPO websites can be found at <http://www.nps.gov/nr/shpolist.htm>.
- SHPOs also maintain inventories of properties that have been surveyed throughout the State. If your property is included in the State inventory, it is possible that it may be a historic property. An example is the Maryland SHPO Maryland Inventory of Historic Properties, searchable by keyword and county at <http://www.mdihp.net/>.
- Historically significant properties may also be identified locally, at the county or city level. Lists of individual properties and districts (i.e., a collection of historic properties such as a residential neighborhood or commercial strip) that have been designated as historically significant at the local level may be available online through the county or city department of planning, or through local historic societies.

If a property is not on one of the above-referenced lists, it may still be historic. FEMA suggests that subapplicants contact the local department of planning at the outset of project development to discuss the project and whether there are known or suspected historic properties in the project area. Early coordination with these offices will help to ensure the grant process proceeds smoothly, and helps FEMA to complete their Historic Preservation review in a timely manner.

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## Historic Properties: Archaeology

### *What are Archaeological Historic Properties?*

An archaeological historic property is an archaeological site that is listed in or eligible for listing in the NRHP. An archaeological site is a location that contains the physical evidence of past human behavior. Archaeological sites typically contain artifacts and features. Artifacts commonly found at sites include ceramics, glass, metal tools/objects, animal remains, stone tools, and prehistoric pottery. Features are typically non-portable objects, installations, or landscape features such as building foundations, cellars, postmolds, trash pits/trash dumps, fire pits/hearths, shell middens, burials, and earthen mounds. Archaeological sites can be prehistoric, historic, or contain both components. Prehistoric archaeological sites contain evidence of indigenous American societies before sustained contact with European colonists, and historic archaeological sites are those Native American and European sites that post-date sustained European contact.

In addition to the NHPA, there is a series of Federal laws, regulations, EOs, standards, and guidelines that apply to FEMA (and grantee/subgrantee) responsibilities with respect to archaeological properties (listed below). The American Antiquities Act of 1906 was the first United States law providing for the protection of archaeological resources. The Archaeological Resources Protection Act (ARPA) of 1979, as amended, deals with the permits required to excavate or remove any archaeological resource from Federal or Tribal lands. The Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), which applies to Federal agencies and museums receiving Federal funding, is of particular importance when dealing with potential Native American human remains or artifacts recovered from burial contexts. The key laws, regulations, and guidelines that apply to archaeological properties are listed below.

1. National Historic Preservation Act (NHPA): <http://www.achp.gov/docs/nhpa%202008-final.pdf>
2. Section 106 of the NHPA Implementing Regulations (Section 106): <http://www.achp.gov/regs-rev04.pdf>
3. Limitations on the Delegation of Authority by Federal Agencies to Initiate Tribal Consultation under Section 106 of the NHPA: [http://www.achp.gov/delegationmemo-final\\_7-1-11.pdf](http://www.achp.gov/delegationmemo-final_7-1-11.pdf)



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4. American Antiquities Act: <http://www.nps.gov/archeology/tools/Laws/antact.htm>
5. Archaeological Resources Protection Act (ARPA): <http://www.nps.gov/archeology/tools/Laws/arpa.htm>
6. Native American Graves Protection and Repatriation Act (NAGPRA): <http://www.nps.gov/nagpra/>
7. Secretary of the Interior's Standards for the Treatment of Historic Properties (SOI Standards): <http://www.nps.gov/hps/tps/standguide>
8. FEMA EHP Program: <http://www.fema.gov/environmental-planning-and-historic-preservation-program>

### *Are there Archaeological Historic Properties in my project area?*

Ultimately, FEMA will determine if a resource is an archaeological historical property, in consultation with the SHPO or THPO and historic preservation stakeholders. However, there are a few ways to determine if a property may contain an archaeological site as the project scope of work is developed. In pursuing this information, it should be noted that the precise location and nature of archaeological sites are not available to the general public so that the sites remain protected from vandalism and looting. Nevertheless, local and SHPO representatives may be able to provide some general information or guidance if you explain your purpose for asking.

1. Your project area may contain an archaeological site listed in the NRHP. A near-complete list by State and county of properties included in the NRHP is at <http://nrhp.focus.nps.gov/natreghome.do?searchtype=natreghome>.
2. In addition to the NRHP, many SHPOs maintain a list of previously identified archaeological sites and archaeological surveys/excavations conducted in the State. A list of SHPO websites can be found at <http://www.nps.gov/nr/shpolist.htm>.
3. In addition to the NRHP, many SHPOs maintain a list of properties that have been designated as historically significant at the State level. In some cases, these lists can be searched online. If a historic building or structure is located in your project area, it is more likely to contain archaeological deposits or features associated with the historic use or occupation of the property.
4. Local libraries, historical societies, university and college libraries, and State and local natural history museums may have information on the history and prehistory of your area. Research data available at these institutions may provide information on the types, setting, and character of previously identified prehistoric and historic archaeological sites. This information can be used to make a preliminary assessment of whether your project area is likely to contain archaeological sites.

FEMA suggests that subapplicants contact the local department of planning and SHPO at the outset of project planning, and before submitting subapplications to discuss the project and whether there are known or suspected archaeological properties in the project area. Early coordination with these offices will help to ensure the grant process proceeds smoothly and helps FEMA to complete their Historic Preservation review in a timely manner.

## Tribal Resources

### *What are Tribal Resources?*

Tribal resources are cultural resources that are, or have been in the past, associated with Native American, Hawaiian, or Alaskan groups (Indian Tribes). In 1992, the NHPA was amended by Congress to give Indian Tribal governments a greater role in the preservation of historic and archaeological properties on Tribal lands (i.e., lands within the boundaries of the continental United States that are reserved and held under the ownership of Federally recognized Indian Tribal governments).

The NHPA also requires Federal agencies to consult with Tribal groups with a designated interest in their actions as consulting parties to the Section 106 process, whether or not the undertakings are to occur on or off Tribal lands. Guidance on Consulting with Native American, Hawaiian, and Alaskan Tribes in the Section 106 review process is provided by the Advisory Council on Historic Preservation at <http://www.achp.gov/regs-tribes.html>. Additionally, FEMA has a designated Tribal Liaison Officer for consultation with Tribal groups.

The key laws, regulations, EOs, standards, and guidelines that apply to Tribal resources are listed below.

- National Historic Preservation Act of 1966, as amended through 1992: <http://www.nps.gov/history/local-law/nhpa1966.htm>
- FEMA EHP Program: <http://www.fema.gov/environmental-planning-and-historic-preservation-program>

### *Are there Tribal Resources in my project area?*

It is important to be aware that consultation with Indian Tribal governments is a process that requires careful consideration and the utmost respect. Federally recognized Indian Tribal governments are independent, sovereign nations; as such, FEMA must consult with these groups directly, on a government-to-government basis. Accordingly, subapplicants are asked not to reach out to Indian Tribal governments directly.

To efficiently complete the Section 106 review process and consult with all required stakeholders, FEMA will need to ascertain whether the project area is located on any Federally or non-Federally recognized Tribal lands (i.e. State recognized tribal lands). FEMA will also need to determine if the project area contains any resources to which any Tribal group assigns religious or cultural significance. The subapplicant may aid in this process by consulting the resource data listed below to identify whether there are either Indian Tribal governments located in the project area, or Indian Tribal governments with a demonstrated interest in the project area.

1. A complete list of all Federally recognized Indian Tribal governments and their contact information is available on the National Park Service's Tribal Preservation Program website at [http://www.nps.gov/tribes/Tribal\\_Historic\\_Preservation\\_Officers\\_Program.htm](http://www.nps.gov/tribes/Tribal_Historic_Preservation_Officers_Program.htm).

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2. A directory of Tribal Leaders for all Federally recognized Indian Tribal governments is maintained by the Bureau of Indian Affairs and is available at <http://www.bia.gov/cs/groups/xois/documents/text/idc002652.pdf>.
3. A map of all Indian Reservations in the Continental United States is available on the National Park Service NAGPRA website at <http://www.nps.gov/nagpra/DOCUMENTS/ResMap.htm>.
4. A complete list of THPOs and their contact information is available through the National Association of Tribal Historic Preservation Officers website at [http://www.nathpo.org/THPO/state\\_list.htm](http://www.nathpo.org/THPO/state_list.htm).
5. A complete list of all Federally and State recognized Indian Tribal governments are available through the National Conference of State Legislatures at <http://www.ncsl.org/issues-research/tribal/list-of-federal-and-state-recognized-tribes.aspx>.
6. Contact the local SHPO office for a list of Indian Tribal governments in an area. A list of SHPO websites can be found at <http://www.nps.gov/nr/shpolist.htm>.



The built environment includes environmental justice communities, prime and unique farmland, hazardous materials, and hazardous wastes, as discussed below.

## Executive Order 12898 (Environmental Justice)

### *What is Environmental Justice?*

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

EO 12898, Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations, requires Federal agencies to consider environmental justice issues in their policies, activities, and procedures (<http://www.epa.gov/fedreg/eo/eo12898.htm>). A Presidential Memorandum directed to the heads of all departments and agencies accompanied EO 12898. The memorandum states “each Federal agency shall analyze the environmental effects, including human health, economic, and social effects, of Federal actions, including effects on minority communities and low-income communities, when such analysis is required” by NEPA. The memorandum particularly emphasizes the importance of the NEPA public participation process, directing that “each Federal agency shall provide opportunities for community input in the NEPA process.” Agencies are further directed to “identify potential effects and mitigation measures in consultation with affected communities, and improve the accessibility of meetings, crucial documents, and notices.” Potential environmental justice areas are identified in the project alternatives screening process to ensure that these communities have access to concise and clear information sufficient to effectively participate in the public involvement process. This helps to ensure that these communities are not disproportionately adversely affected by a project. Information on this topic is available at U.S. EPA (<http://www.epa.gov/compliance/environmentaljustice/>) and FEMA (<http://www.fema.gov/environmental-planning-and-historic-preservation-program/executive-order-12898-environmental-justice>) websites.

The U.S. EPA has begun the process of a Tribal and Indigenous Peoples Environmental Justice (TIPEJ) Work Group developing a set of guiding principles and policy. The TIPEJ website is at <http://www.epa.gov/compliance/environmentaljustice/indigenous/index.html>.

### *Are there low income or minority populations in my project area?*

Demographic information specific to different geographies can often be obtained through local and State planning and commerce departments. In addition, the U.S. Census Bureau offers easy-to-use demographic information that can be queried on a variety of scales, from small block groups to larger census tracts, and even larger census-designated places. Information about a project area is available through U.S. Census Data access tools at <http://www.census.gov/main/www/access.html>. If a proposed project is planned in an area of concentrated low-income or minority populations, additional public outreach may be needed to provide an opportunity for these population groups to have input into the planning and decision-making process.

# HMA EHP Resources At-a-Glance Guide

## IV. BUILT ENVIRONMENT

### Farmland Protection Policy Act

#### Farmland Protection Policy Act

##### *What is the Farmland Protection Policy Act?*

Farmland protected under this act includes prime and unique farmland or farmland of statewide and local importance. The Farmland Protection Policy Act (7 U.S.C. 4201 et seq.) ([http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb1042432.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1042432.pdf)) and the U.S. Department of Agriculture's implementing procedures require Federal agencies to evaluate the effects of their activities before taking any action that could result in converting designated prime or unique farmland for nonagricultural purposes. If an action would adversely affect farmland preservation, alternative actions that could avoid or lessen adverse effects must be considered by the lead Federal agency. Federal agencies also must ensure that their programs, to the extent practicable, are compatible with State, local, and private programs to protect farmlands. Determination of the level of impact to prime and unique farmland or farmland of statewide and local importance is done by the lead Federal agency, which inventories farmlands affected by the proposed action and scores part of an AD-1006 Form, Farmland Conversion Impact Rating, for each alternative. Through consultation with the Natural Resources Conservation Service (NRCS) staff in the particular county of the proposed action, NRCS completes the AD-1006 Form ([www.rurdev.usda.gov/SupportDocuments/AD1006.pdf](http://www.rurdev.usda.gov/SupportDocuments/AD1006.pdf)), and determines the level of consideration for protection of farmlands that needs to occur under the Farmland Protection Policy Act.

##### *Is there protected farmland in my project area?*

Prime or unique farmland can be identified using the online Web Soil Survey administered by NRCS, at <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>. The Web Soil Survey provides an online Geographic Information System (GIS) interface where a user can define an area of interest and view data on farmland classification. After an area of interest is defined using the online mapping tool, prime and unique farmland data can be viewed by selecting the Soil Data Explorer tab at the top of the GIS interface, selecting the Land Classifications tab at the left of the GIS interface, selecting the Farmland Classification tab at the left of the GIS interface, and then clicking on View Rating. Farmland of local importance can be defined at a State or local level; contact your State or local departments of agriculture, conservation, or planning.

To complete the AD-1006 Farmland Conversion Impact Rating form, the subgrantee should coordinate with the NRCS Service Center in the county where the project is proposed. An interactive map that allows users to locate the appropriate service center is at <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/contact>.



## Hazardous Materials and Hazardous Wastes

### *What are hazardous materials and wastes?*

Actions involving hazardous materials or generating hazardous wastes must comply with applicable regulations. The terms hazardous material and hazardous waste are defined by both Federal and State regulations, and often can encompass different materials depending on which regulation is being referred to and in which State the site is located. Generally, hazardous material is defined as any solid, liquid, or gas that—when improperly handled or released—will have acute or chronic effects on human health or the environment. Hazardous waste is defined as any solid, liquid, or gas that is a hazardous material and is discarded, or is intended to be discarded. FEMA provides information pertinent to hazardous materials at <http://www.fema.gov/environmental-planning-and-historic-preservation-program/resource-conservation-recovery-act-1976>.

There are several key laws, regulations, standards, and guidelines that apply to hazardous materials, including:

1. Resource Conservation and Recovery Act: <http://www.epa.gov/lawsregs/laws/rcra.html>
2. Hazardous and Solid Waste Amendments of 1984: [http://www.epa.gov/r5water/uic/land\\_ban\\_files/index.htm](http://www.epa.gov/r5water/uic/land_ban_files/index.htm)
3. Toxic Substances Control Act: <http://www.epa.gov/lawsregs/laws/tsca.html>
4. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): <http://www.epa.gov/lawsregs/laws/cercla.html>
5. Clean Air Act Section 112 (see 1.A.3.i.a. above): <http://www.epa.gov/ttn/atw/112g/112gpg.html>

U.S. EPA recognizes the autonomy of Indian Tribal governments in the administration of environmental programs on Tribal land, including the management of hazardous waste. U.S. EPA follows principles outlined in EPA Policy for the Administration of Environmental Programs on Indian Reservations (<http://www.epa.gov/tp/pdf/indian-policy-84.pdf>)

### *Are there hazardous materials in my project area?*

The U.S. EPA administers the EnviroMapper for EnviroFacts web page, which shows potential hazardous materials sites, at: <http://www.epa.gov/emefdata/em4ef.home>. Users are able to enter information, such as a city or an address, and view details on sites that are potential hazardous materials concerns on a map. Additionally, the U.S. EPA provides online data that can be searched by State and county that provides the location and details related to superfund cleanup sites at <http://cumulis.epa.gov/supercpad/cursites/srchsites.cfm>.

In general, actions that are foreseen to involve hazardous materials or wastes include:

- Demolition or modification of building or structural components coated with lead-based paint;
- Demolition or modification of building or structural components that contain asbestos;

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## IV. BUILT ENVIRONMENT

### Haz Mat & Haz Wastes

- Demolition, acquisition, or modification of structures containing fluorescent or high-intensity discharge lighting (polychlorinated biphenyls and mercury);
- Acquisition of or construction on sites containing hazardous materials or wastes; and storage tanks.

If construction activities are determined to potentially disturb hazardous materials present at the site of an action, a site assessment based on the context of the activity (such as a Phase I Environmental Site Assessment, or asbestos and lead-based paint testing) should be conducted to determine if such materials are present.

Site assessments, hazardous materials testing, and compliance requirements are typically the responsibility of the applicant. Depending on the context of the infrastructure that is part of the project (e.g., aged buildings), FEMA recommends coordinating with local or State health or planning departments to determine if the project has the potential to create a hazardous materials concern.



## V. ADDITIONAL INFORMATION

### Additional Information Sources

Additional information not listed in the discussion above is available through the sources listed below, which include websites for guidance, FEMA mitigation programs and contacts, and training seminars.

### FEMA EHP Websites

1. FEMA Environmental Planning and Historic Preservation (EHP) Program:  
<http://www.fema.gov/environmental-historic-preservation-documents>
2. FEMA Environmental Documents and Public Notices:  
<http://www.fema.gov/environmental-historic-preservation-documents>
3. FEMA EHP Disaster Specific Guidance (Greenbooks):  
<http://www.fema.gov/environmental-planning-and-historic-preservation-program/environmental-historic-preservation>
4. eLearning Tool for FEMA Grant Applicants:  
<http://www.fema.gov/environmental-planning-and-historic-preservation-program/elearning-tool-fema-grant-applicants-45>
5. FEMA Regional EHP Sites:  
Region I <http://www.fema.gov/region-i>  
Region III <http://www.fema.gov/region-iii-dc-de-md-pa-va-wv>  
Region VIII <http://www.fema.gov/region-viii-co-mt-nd-sd-ut-wy>  
Region IX <http://www.fema.gov/region-ix>

### General FEMA Mitigation Websites

1. FEMA Mitigation: <http://www.fema.gov/government/mitigation.shtm>
2. FEMA Hazard Mitigation Assistance Programs:  
<http://www.fema.gov/government/grant/hma/index.shtm>
3. FY2011 Hazard Mitigation Assistance (HMA) Unified Guidance:  
<http://www.fema.gov/library/viewRecord.do?id=4225>
4. Pre-Disaster Mitigation (PDM) Grant Program:  
<http://www.fema.gov/government/grant/pdm/index.shtm>
5. Hazard Mitigation Grant Program (HMGP):  
<http://www.fema.gov/government/grant/hmgp/index.shtm>
6. Flood Mitigation Assistance (FMA) Program:  
<http://www.fema.gov/government/grant/fma/index.shtm>
7. Mitigation Best Practices Portfolio:  
<http://www.fema.gov/plan/prevent/bestpractices/index.shtm>

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## V. ADDITIONAL INFORMATION

### Telephone Contacts

- Region I (617) 956-7506
- Region II (212) 680-3600
- Region III (215) 931-5500
- Region IV (770) 220-5200
- Region V (312) 408-5500
- Region VI (940) 898-5399
- Region VII (816) 283-7061
- Region VIII (303) 235-4909
- Region IX (510) 627-7100
- Region X (425) 487-4600

### Training Websites

1. FEMA Training Website: <http://training.fema.gov/>
2. IS-212 Introduction to Unified Hazard Mitigation Assistance: <http://training.fema.gov/EMIWeb/IS/is212.asp>
3. IS-253 Coordinating Environmental and Historic Preservation Compliance: <http://training.fema.gov/EMIWEB/IS/IS253lst.asp>
4. CEQ NEPA Training Compendium: [http://ceq.hss.doe.gov/nepa\\_information/training\\_compendium.html](http://ceq.hss.doe.gov/nepa_information/training_compendium.html)
5. National Trust for Historic Preservation, Conferences & Training: <http://www.preservationnation.org/resources/training/>

## **VI. DOCUMENTATION**

Applicants should document the results of their initial EHP review. This includes records of meetings, site visits, permits, and any contact with resource agencies, as well as copies of permits and website searches. For example, documentation for wetlands analysis may include the following:

- Record of Site Visit Review – maps and photos indicating no wetlands are present.
- A USACE letter indicating concurrence with your findings, and that no Clean Water Act Permits are required.

This documentation should be submitted with the grant application, and be provided upon request from FEMA.

# HMA EHP Resources At-a-Glance Guide

## VII. GLOSSARY

**Air Quality** – Air quality can be characterized as the extent to which air is free from contaminants conventionally taken to be respiratory irritants.

**Categorical Exclusion (CATEX)** – Categories of actions that do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect. FEMA's list of categorical exclusions have been codified at 44 CFR 10.8(d)(2).

**Critical Habitat** – Designated areas by the USFWS and NMFS for many threatened and endangered species, and delineates specific areas that include physical or biological features essential to the conservation of the species, and which may require special management considerations or protection. Critical habitat can include specific areas outside the geographic area occupied by the species at the time it is listed, but have been determined by the resource agencies to be essential for the conservation of a species.

**Coastal Barrier Resource** – Unique landforms that provide protection for diverse aquatic habitats and serve as the mainland's first line of defense against the impacts of severe coastal storms and erosion. Located at the interface of land and sea, the dominant physical factors responsible for shaping coastal landforms are tidal range, wave energy, and sediment supply from rivers and older, pre-existing coastal sand bodies.

**Cultural Resource** – A cultural resource may be defined very broadly as “buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance.”

**Endangered Species** – A species in danger of extinction throughout all or a significant portion of its range.

**Environmental Assessment (EA)** – A public document that a Federal agency prepares under NEPA (see below for a definition of NEPA) to provide sufficient evidence and analysis to determine whether a proposed agency action would require preparation of an environmental impact statement or result in a finding of no significant impact.

**Environmental Impact Statement (EIS)** – A detailed written statement that is required by Section 102(2)(C) of NEPA for a proposed major Federal action significantly affecting the quality of the human environment.

**Environmental Justice (EJ)** – The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

**Floodplain** – For the purposes of EO 11988 compliance, floodplain refers to the 100-year floodplain, which designates the area subject to inundation from a flood having a 1 percent chance of occurring in a given year. This flood is also referred to as the “base flood”, and may occur more or less often than once every 100 years. In circumstances known as “critical actions”—activities for which even a slight chance of flooding is too great a risk—the regulated flood-prone area is defined by the 500-year floodplain, which designates the area subject to inundation from a flood having a 0.2 percent chance of occurring in a given year.

**Hazardous Materials/Hazardous Wastes** – Generally, hazardous material is defined as any solid, liquid, or gas that—when improperly handled or released—will have acute or

## VII. GLOSSARY

chronic effects on human health or the environment. Hazardous waste is defined as any solid, liquid, or gas that is a hazardous material and is discarded, or is intended to be discarded.

**National Environmental Policy Act (NEPA)** – The National Environmental Policy Act of 1969, established a broad national framework to assure that all branches of government give proper consideration to the environment prior to undertaking any major federal action that could significantly affect the environment.

**National Historic Preservation Act (NHPA)** – The National Historic Preservation Act (NHPA) of 1966, as amended, outlines Federal policy to protect historic properties and promote historic preservation in cooperation with States, Tribal governments, local governments, and other consulting parties.

**Prime and Unique Farmland** – Prime farmlands are designations assigned by the U.S. Department of Agriculture. Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. The land is also used as cropland, pastureland, rangeland, forest land, or other land, but cannot be used as urban built-up land or water. Unique farmland is land other than prime farmland that is used for the production of specific high value food and fiber crops. Such land has a special combination of soil quality, location, growing season, and moisture supply that is required to economically produce sustained high quality of a specific crop when treated and managed according to acceptable farming methods.

**Sole-Source (or Principal-Source) Aquifer** – An aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. These areas may have no alternative drinking water source that could physically, legally, and economically supply all those who depend on the aquifer for drinking water.

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

**Special Flood Hazard Area (SFHA)** – FEMA identifies flood hazard areas throughout the U. S. and its territories by producing Flood Insurance Rate Maps (FIRMs). One of these areas is the Special Flood Hazard Area (SFHA), a high-risk area defined as any land that would be inundated by a flood having a 1-percent chance of occurring in any given year (also referred to as the 100-year flood or base flood).

**Tribal Historic Preservation Officer (THPO)** – Administer the national historic preservation program at the tribal level, review National Register of Historic Places nominations, maintain data on historic properties that have been identified but not yet nominated, and consult with Federal agencies during Section 106 review. THPOs are designated by the governor of their territory.

**Tribal Resource** – Cultural resources that are, or have been in the past, associated with Native American, Hawaiian, or Alaskan groups (Indian Tribes).

**Water Resources** – Water resources include the waters of the oceans, rivers, and lakes; groundwater and deep subsurface waters; and glaciers and permanent snowfields; they

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can include areas that currently show no surface indications of water.

**Wetland** – Wetlands are areas where the frequent and prolonged presence of water at or near the soil surface drives the natural system—meaning the kind of soils that form, the plants that grow, and the fish and/or wildlife communities that use the habitat. Swamps, marshes, and bogs are well-recognized types of wetlands. Many important specific wetland types have drier or more variable water systems, such as vernal pools (pools that form in the spring rains but are dry at other times of the year), playas (areas at the bottom of undrained desert basins that are sometimes covered with water), and prairie potholes.



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