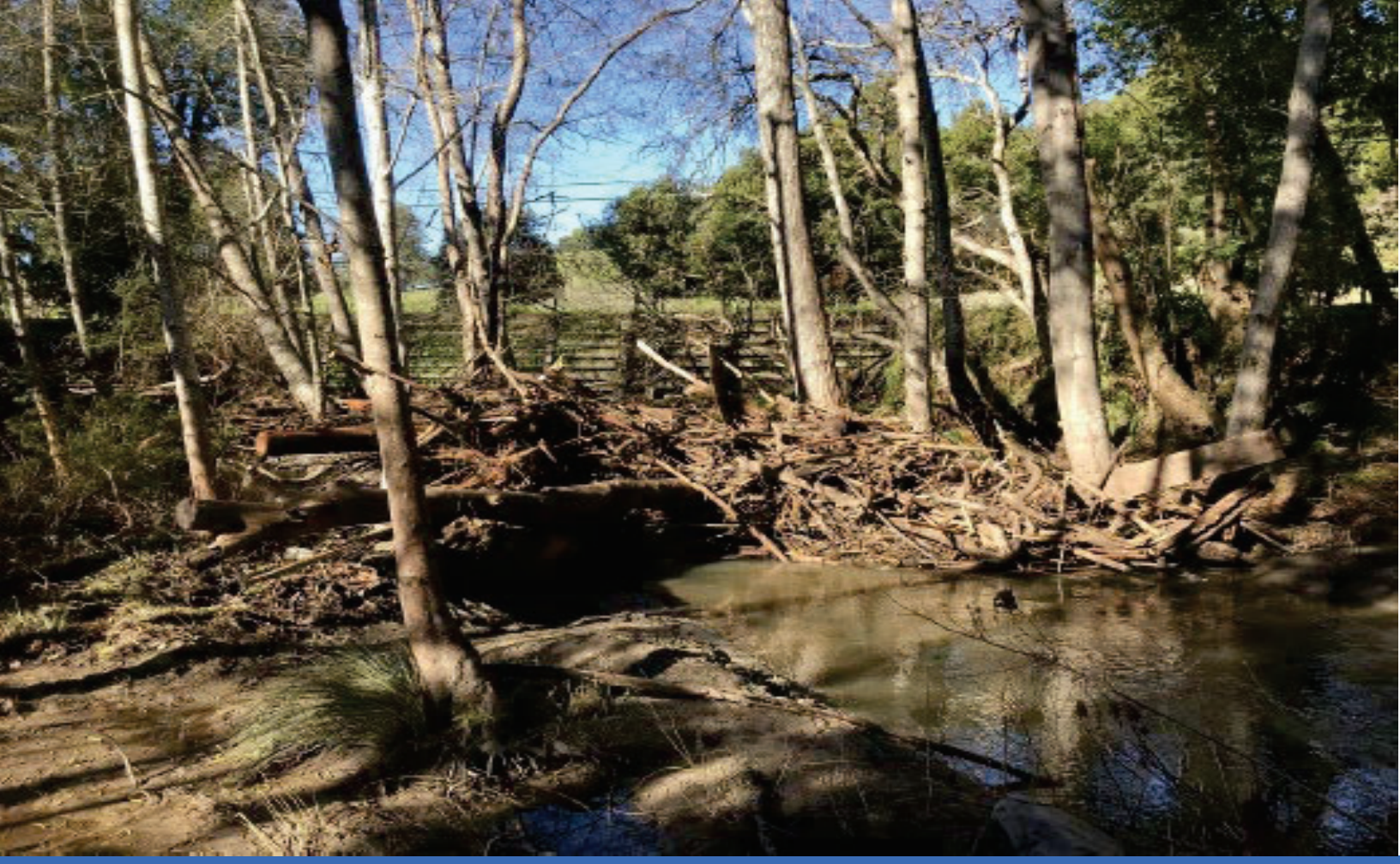


Environmental and Historic-Preservation Emergency Regulatory and Permitting Guidance

Governor's Office of Emergency Services

February 2023 v1.4

Cal OES
GOVERNOR'S OFFICE
OF EMERGENCY SERVICES

Contents

Purpose

This document is a guide on the different regulators/entities to contact, and/or receive a permit from during an emergency project. This is not a complete list, be sure to keep contact with any other agency that might have jurisdiction, depending on the situation.

The term waterway describes any solid material, including but not limited to vegetative debris and debris that could release oil, hazardous substances, pollutants, or contaminants, or threaten critical infrastructure that enters a waterway following an acute incident and poses a threat to the natural or man-made environment. This may include shoreline and wetland debris and debris in coastal, tidal, and inland waterways.

Types of Debris

The types and quantity of waterway debris generated after a disaster is highly dependent on land use and existing infrastructure. Debris may include:

- Chemical contaminated
- Construction and demolition
- Electronic waste (e-waste)
- Household hazardous waste/material
- Soil, mud, and sand
- Vegetative debris
- Vehicles and vessels
- White goods (household appliances)

Resources:

Here is a questionnaire that can help walk through compliance contacts and information for your project: Environmental and Historic Preservation Tracking. (https://tinyurl.com/CalOESEHP)

For help finding which regulator jurisdiction you are in, click here. (https://arcg.is/un0Si0)

CA Coastal Commission

Jurisdiction: Coastal Management Zone (one thousand yards inland from the coast)

Activity/Trigger: Construction work within the Coastal Management Zone (e.g., Placement of segregated fill on a beach). If immediate action is necessary under Public Resources Code Section 3061 within three days (72 hours) of the disaster or discovery of the danger, whichever occurs first, for authorization to conduct emergency action, then send the required information within seven days of taking emergency action.

Contact: Cassidy.Teufel@coastal.ca.gov

Link to the permit: CA Coastal Commission Application for Emergency Permit.

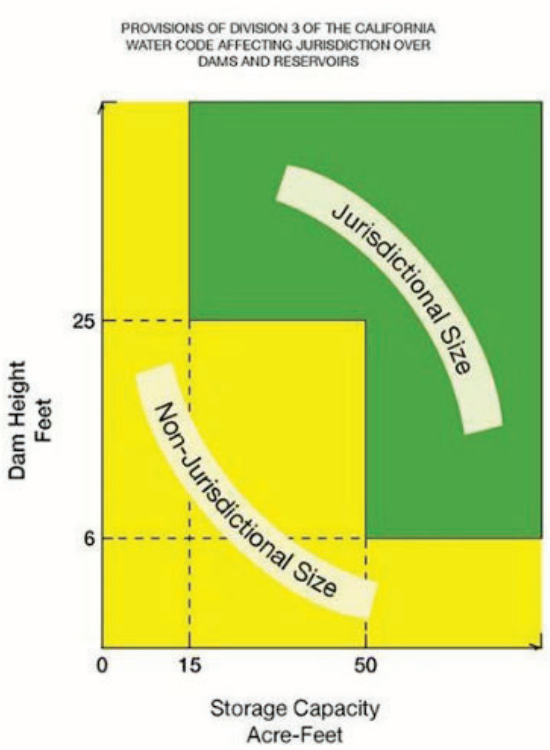
Division of Safety of Dams (DSOD)

Jurisdiction: Work within jurisdictional dams

Activity/Trigger: Immediate work to repair, or prevent compromising a dam

Link: Division of Safety of Dams (ca.gov)

Contact DSOD: (916) 565-7868



Central Valley Flood Protection Board

Jurisdiction: The applicant must seek approval from the Central Valley Flood Protection Board (Board) for any proposed work within a Board-Adopted Plan of Flood Control:

1. Between or in the vicinity of any Federal Project Levees within a State Plan of Flood Control.
2. or within 100-foot proximity of a non-leveed Regulated Stream listed in California Code of Regulations, Title 23, Waters, Division 1, Article 8, Table 8.1.
3. or within a Designated Floodway that has been adopted by the Board.
4. or within a Sacramento San Joaquin Drainage District (SSJDD) Easement

Links:

1. Permitting – Central Valley Flood Protection Board (ca.gov)
2. Checking this map to see if there is jurisdiction, as written in the earlier link. The CVRPB mapping link can be used to access DWR's best available maps (BAM) tool to illustrate the federal, non-federal levees, rivers/streams, designated floodways and regulated streams, and example of which is attached: DWR Best Available Maps.

US Fish and Wildlife Services

Jurisdiction: Conservation and management of fish, wildlife, plants, and their habitats for the American people.

Activity/Trigger: Activities that may affect wildlife, endangered species, and watercourses which serve as habitat for aquatic and terrestrial species.

USFWS has said that if the applicant must perform emergency work to protect human life and property, supplying notification and documentation prior to the activity.

Contact: Michael Fris, Field Supervisor: (916) 414-6700 can supply guidance and further contacts.

Link to permits (if directed to apply): U.S. Fish & Wildlife Service ePermits (servicenowservices.com).

National Marine Fisheries Service

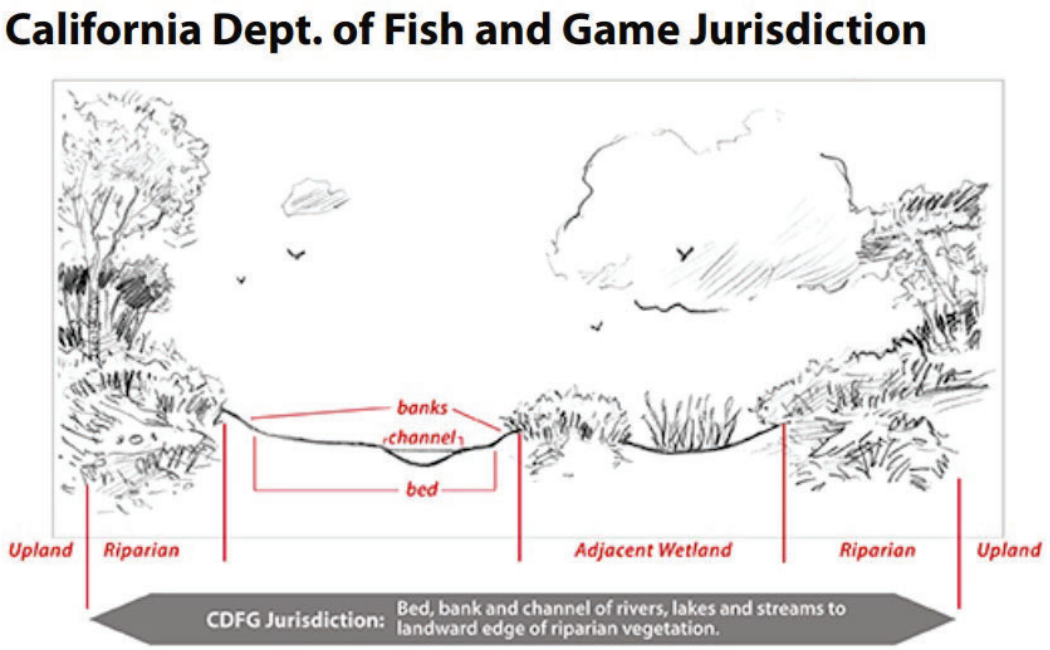
Jurisdiction: responsible for the stewardship of U.S. national marine resources. It conserves and manages fisheries to promote sustainability and prevent lost economic potential associated with overfishing, declining species, and degraded habitats.

Activity/Trigger: Impacts to Federally listed endangered species. The presence of federally protected Migratory Fish Species from a biological survey as part of CEQA and NEPA compliance. If a species may be in the project area, coordinate with USFWS or NMFS as soon as possible to redesign your project to minimize impacts on the species

Contact: Charlotte Ambrose - charlotte.a.ambrose@noaa.gov

CA Department of Fish and Wildlife

Jurisdiction: Jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species in the State of California.



Activity/Trigger: Projects which affect state-protected plant or animal species, and/or lake and streambed alterations, and operations during nesting bird season.

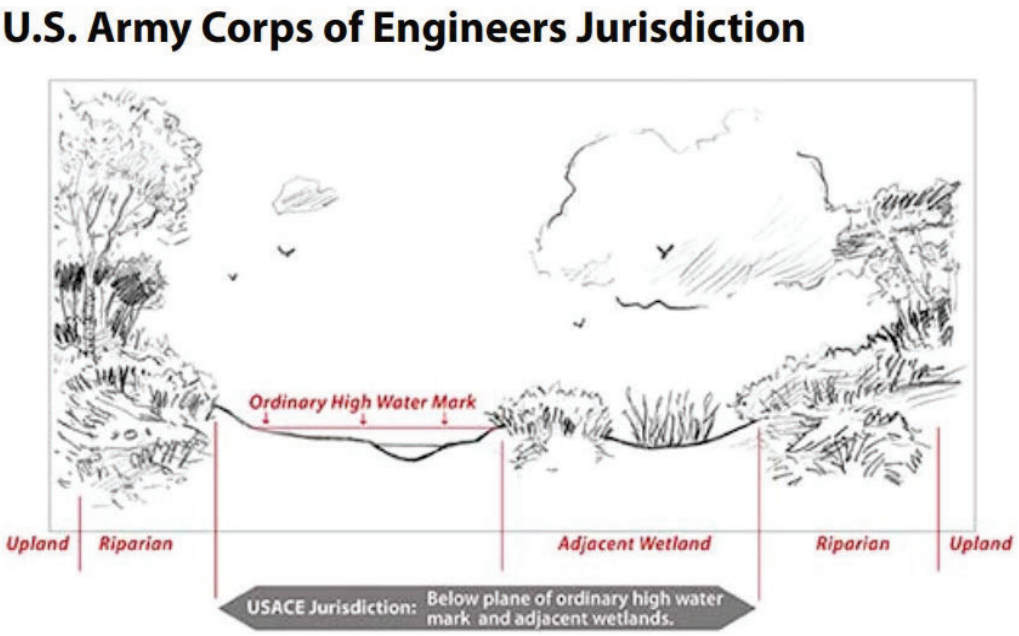
The applicant must request an incidental take permit for work within watercourses and habitats.

Contact: Jason Faridi – Jason.Faridi@wildlife.ca.gov
Links:

1. EPIMS: Environmental Permit Information Management System (ca.gov)
2. Incidental take permit: CESA Incidental Take Permits.

US Army Corp of Engineers

Jurisdiction: Work below the ordinary high-water mark (Clean Water Act Section 404), or structures within tidally influenced waterways (Rivers and Harbors Act Section 10) (e.g., coast, bay, delta, Sacramento River)



Activity/Trigger: Dredge and fill activities subject to work below the ordinary high water or ordinary high tide mark of a waterway. The US Army Corps may allow for this work to occur through an Emergency, Maintenance, or non-reporting Nationwide Permit. Contact the district engineer for directions.

Types of Permits:

1. Maintenance exemption under Section 404(f) of the Clean Water Act. Permits are not applicable for the emergency reconstruction of recently damaged parts, of currently serviceable structures. Examples include dikes, dams, levees, riprap, causeways, bridge abutments or approaches, and transportation structures. The exemption does not cover any modification that changes the character, scope, or size of the original fill design Emergency reconstruction must occur within a reasonable period after damage occurs to qualify for the exemption. Note this only covers activities under Section 404 of the CWA. Although encouraged, no notification is necessary before going ahead with the work.
2. Emergency Repair and Protection). Most emergency activities in waters of the U.S. not covered by the exemption by the district under a Regional General Permit. The Regional General Permit structures or work in or affecting navigable waters of the United States and the discharge of dredged or fill material in Waters of the United States (WOUS) for necessary repair or protection of existing structures, facilities or fills where an imminent threat to life or property exists due to unforeseen events during an emergency incident. These permits require the applicant inform the district in advance.

    a. Sacramento District- RGP8: http://www.spk.usace.army.mil/Missions/Regulatory/Permitting/Regional-and-Programmatic-General-Permits/
    b. San Francisco District-RGP5: https://www.spn.usace.army.mil/Missions/Regulatory/Permitting/Emergency/
    c. Los Angeles District- RGP63: https://www.spl.usace.army.mil/Portals/17/docs/regulatory/RGP/RGP63_Permit_19Nov2018.

3. Nationwide Permit 3 (Maintenance). For activities not covered under (1) and (2) above, Nationwide Permit 3 (NWP3) authorizes the repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure, or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3 provided the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those

due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement. NWP3 also authorizes the removal of accumulated sediments and debris in the vicinity of existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.) and/or the placement of new or additional riprap to protect the structure. NWP3 requires the applicant notify the Sacramento District in advance when activities involved the removal of accumulated sediments or debris; however, we recommend notification to the district in all situations.

4. Emergency Procedures. In rare circumstances, activities not covered by exemption or authorized under an emergency RGP or NWP3 (or other NWP) through the Corps' Emergency Procedures. Once approved by higher headquarters, emergency procedures allow the Corps district to expeditiously make a permit decision following coordination with state and federal agencies. After the event, the Corps district issues a public notice and completes any necessary consultations. The procedures require the submission of a complete application for a standard permit to the proper District.

Contact: Michael.S.Jewell@usace.army.mil

1. Los Angeles District: (213) 452-3333
2. Sacramento: (916) 557-5100
    a. Redding Office: (530) 233-9534
3. San Francisco: (415) 503-6708

Link to permits (if directed to apply): Obtain a permit application (army.mil).

State and Regional Water Boards State and Regional Water Boards

Jurisdiction: Work below the ordinary high-water mark (Clean Water Act Section 404), or structures within tidally influenced waterways (Rivers and Harbors Act Section 10) (e.g., coast, bay, delta, Sacramento River), or otherwise not under the jurisdiction of the US Army Corps, requiring Waste Discharge Requirements.

Actions/Triggers: Dredge and fill activities subject to work below the ordinary high water or ordinary high tide mark of a waterway.

Link to permit: 401 Water Quality Certification and Wetlands Program | California State Water Resources Control Board

Other permits:

1. Debris Management Sites, or landfills with unsorted waste activities General Waste Discharge Requirements for Disaster-Related Wastes (ca.gov)
2. Construction Stormwater Permit Coverage. Coverage under the State Water Resources Control Board's General Permit for Discharges of Stormwater Construction Stormwater Permit Coverage. The applicant will need coverage under the State Water Resources Control Board's General Permit for Discharges of Stormwater Associated with Construction Activity, Order 2009-0009-DWQ (Construction General Permit, CGP) when a project creates a soil disturbance of one acre or more. Coverage for projects with less than one acre of soil disturbance that are part of a larger plan of development that collectively disturbs one acre or more. Construction activity subject to this permit includes clearing, grading, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of a facility.
    a. CGP Compliance. Compliance with the CGP requires electronic submittal of permit registration documents including a Stormwater Pollution Prevention Plan (SWPPP) prepared by a Qualified SWPPP Developer (QSD) and implemented by a Qualified SWPPP Practitioner (QSP). The CGP requires implementation, monitoring, and maintenance of adequate sediment and erosion control Best Management Practices (BMPs), and certain monitoring and reporting activities. Many California Professional Engineers have a self-certification that qualifies them as a QSD/QSP. In addition, the California Stormwater Quality Association (CASQA) has a lookup tool to find licensed QSD/QSPs. More information is available online **here.** More information on US EPA standards here: National Management Measures to Control Nonpoint Source Pollution from Urban Areas, November 2005, EPA-841-B-05-004 and here: Urban Runoff: National Management Measures | US EPA
    b. A notice of intent must be filed in the Stormwater Multiple Application and Report Tracking System (SMARTS).
3. Industrial Stormwater Permit Coverage. The applicant will need coverage under the State Water Resources Control Board's General Permit for Stormwater Discharges Associated with Industrial Activities,

Order 2014-0057-DWQ (Industrial General Permit, IGP) when a project includes certain industrial activities. In the case of post-fire debris removal and hazard tree removal, these include scrap and waste materials storage, sorting, and handling of soil, concrete, metals, vehicles, wood, and vegetation; log storage and handling associated with chipping, grinding, or sawmilling; and maintenance of vehicles and equipment. The applicant should discuss determination of IGP applicability with a Regional Water Board representative (found below).

a. IGP Compliance. Compliance with the IGP requires electronic submittal of permit registration documents including a Stormwater Pollution Prevention Plan (SWPPP), implementation, monitoring, and maintenance of adequate Best Management Practices (BMPs), and certain monitoring and reporting activities. The applicant must hire a Qualified Industrial Stormwater Practitioner (QISP) to design and implement the SWPPP, perform facility evaluations, prepare response plans, and produce reports. Many California Professional Engineers have a self-certification that qualifies them as a QISP. In addition, the California Stormwater Quality Association (CASQA) has a lookup tool to find licensed QISPs. More information is available online **here**.
b. A notice of intent must be filed in the Stormwater Multiple Application and Report Tracking System (SMARTS).

State Historic Preservation Officer and Tribal Considerations
Jurisdiction: Work around cultural resources and likely tribal resources
Activity/Trigger: Ground disturbing activities, and demolition, rehabilitation of historic buildings.
Links:

1. Department of Parks and Recreation: State Historic Preservation Officer (SHPO) (ca.gov)
2. Tribes: California Native American Heritage Commission

CA Air Resources Control Boards/Air Quality Management District
Jurisdiction: Regional air districts

Activity/Trigger: Work involving equipment and work around asbestos
Links:

1. Contact Us | California Air Resources Board
2. National Emission Standards for Hazardous Air Pollutants Compliance Monitoring | US EPA.

Department of Toxic Substances Control
Jurisdiction: Hazardous waste handling
Activity/Trigger: Transport and handling of hazardous wastes
Contact: Brian Abeel - Brian.Abeel@dtsc.ca.gov

CalRecycle
Jurisdiction: Resource Conservation and Recovery Act
Activity/Trigger: Transport and handling of classified wastes
Links: Disaster Recovery - CalRecycle Home Page.

CalFire
Jurisdiction: Timber Harvest Activities in the Timber Management Zone
Activity/Trigger: Timber harvest activities
Links:

1. Utility ROW Exemption – Work along a public right of way
2. Emergency Notice - for work in the Watercourse and Lake Protection Zone, or near cultural, or tribal resources.

Additional permitting guidance:

1. CalOES Environmental-Historic Preservation
2. California Severe Winter Storms, Flooding, Landslides, and Mudslides DR-4683-CA (FEMA)
3. This document is specific to Ventura County, however, there is guidance for state and federal triggers about any location.

Guidance for Support Facilities Associated with Debris Removal Operations

- □ Produce a site-specific plan to the Environmental Lead, which includes:
    a. Address/Location
    b. Aerial map showing the active use boundaries, and uses
    c. A description of the site
    d. A description of all uses and impacts, including if heavy equipment storage, utility tie-ins, etc.
- □ Coverage under the proper National Pollutant Discharge Elimination System Permit - Industrial General Permit, or Construction General Permit (as appropriate) from the Regional Water Board, and develop a Storm Water Pollution Prevention Plan (SWPPP)
- □ CalTrans Encroachment Permit Secured, and confirmed with CalTrans (if applicable)
- □ County permits secured (Zoning, Conditional Use, Administrative Use, etc.), and confirmed with County
- □ Site assessment by a qualified biologist for Endangered Species Act and California Endangered Species Act
    a. Provide CNDDB and ECOS Critical Habitat review
    b. Provide documentation of a field visit with photographs and notes
    c. Proof of any consultation with CA Department of Fish and Wildlife
    d. Proof of any applicable permits (Lake and Streambed Alteration Agreements)
- □ Documentation of an archaeological site assessment, by a Qualified Secretary of Interior Archaeologist
- □ If applicable, any Section 404 of the Clean Water Act permit, as well as provide evidence of compliance with Executive Order 11990 Protection of Wetlands, and Executive Order 11988 - Floodplain Management requires Federal activities to avoid impacts to floodplains
- □ Documentation that the site is not on the Hazardous Waste and Substances sites from Department of Toxic Substances Control (DTSC) "Cortese list."

Attachment A - California Department of Fish and Wildlife Best Management Practice Guidance (for use when issuing a Fish and Game Code 1610 Emergency Notice)

2023 CalOES CDFW Flood Debris Cleanup and Management Best Management Practices

California Department of Fish and Wildlife

Sections 1.0 and 2.0 of this document contain the statewide Best Management Practices (BMPs) developed by the California Department of Fish and Wildlife (CDFW) for use and incorporation for the flood debris removal and management activities associated with the 2023 Atmospheric River Storm Events. These BMPs are provided to assist lead agencies and contractors conducting emergency cleanup activities while minimizing the environmental impacts of those activities. **These BMPs do not overlap with or include federal regulations or requirements**. As such, lead agencies and contractors are responsible for meeting federal permitting needs and ensuring compliance with federal environmental regulations prior to initiating project activities.

These BMPs are intended to assist with expeditious cleanup and recovery of debris resulting from the 2023 Atmospheric River storm events. **These BMPs are not intended to replace the notification and permitting requirements for permanent replacement of structures and infrastructure lost to rainstorms or flooding unless otherwise noted**. Construction of permanent structures must be carried out according to existing state and local regulations. In the case of structures crossing watercourses, temporary crossings are allowed under these BMPs for the purpose of access to areas where cleanup efforts will be conducted and are finite in duration. Construction and replacement of permanent structures crossing watercourses are considered activities not covered by these BMPs and must be compliant with applicable planning, CEQA, and permitting requirements.

CDFW anticipates the Governor's Office of Emergency Services (Cal OES) may retain consulting services to assist in the development of supplemental BMPs to address circumstances not expressly covered by these BMPs. BMPs recommended by Cal OES and any consultant it retains must be approved by CDFW before implementation. Any omission in these BMPs or failure to account for a particular set of circumstances should not be construed as a determination by CDFW that no BMPs are warranted.

Potential impacts from Disaster Debris Removal (DDR) activities include:

- Deposit of hazardous or non-hazardous waste into watercourses and terrestrial habitat, including, but not limited to, green waste (e.g., branches, stumps, trees), treated wood (e.g., utility poles, fencing, decks), roadway materials (e.g., asphalt, concrete, sediments), vehicles, vessels, and other mixed commercial and residential waste.

- Alteration of the bed, bank, or channel of any river, stream or lake resulting in a substantial impact to in-stream or riparian habitats.
- Removal of habitat and habitat elements, including historical nest and roosting trees, active nests/roosts/dens, foraging habitat, and riparian habitat.
- Take of species listed under the California Endangered Species Act or Fully Protected Species under Fish and Game Code.
- Degradation of habitat or harm to special status species listed under the Native Plant Protection Act and other provisions of the California Fish and Game Code.
- Introduction of non-native invasive species into vulnerable habitats.

1.0 Statewide CDFW BMPs

1.1 Project Planning

1.1.1 CDFW Consultation. It is imperative to consult with CDFW early in the project planning phase to ensure planned activities will be in compliance with these BMPs. CDFW should be consulted **only** by the Project Manager , or designee, to ensure work, including in-water work, such as, temporary crossing sites, staging areas, and access routes, do not impact sensitive habitat or species. If project activities will occur near or in sensitive habitat (habitat upon which sensitive species depend), or wildlife have been identified on site and cannot leave of their own volition, the Operations Chief, Debris Group Supervisor, or designee should reference Section 1.6 on how to proceed. To identify the appropriate CDFW Cal OES contact for consultation during project planning, please refer to Exhibit 1.0.

1.1.2 Qualified Biologist. Each project should have a qualified biologist assess the project impacts to fish and wildlife. The qualified biologist should hold a wildlife biology, botany, ecology, forestry, or other relevant degree from an accredited university and: 1) be knowledgeable in relevant species life histories and ecology, 2) be able to correctly identify relevant species and habitats, 3) have experience conducting field surveys of relevant species or resources, 4) be knowledgeable about survey protocols, 5) be knowledgeable about state and federal laws regarding the protection of special-status species, and 6) have experience with CDFW's California Natural Diversity Database (CNDDB) and Biogeographic Information and Observation System (BIOS). The project proponent will review the resume and ensure the above qualifications of the biologist are met prior to beginning work. If species-specific protocol surveys are performed, surveys

will be conducted by the qualified biologist with the minimum qualifications required by the appropriate protocols, including having CDFW or USFWS approval to conduct such surveys if required by certain protocols. If the size of the project warrants more than one qualified biologist, one of the qualified biologists should be designated the lead qualified biologist and be the primary point of contact for the biological elements of the project.

1.1.3 Spill Response Plan. A spill response plan should be prepared, prior to the start of project activities if feasible, that identifies how hazardous materials will be stored and removed from the site, and the actions to be taken in the event of a spill of concrete, petroleum products, sediment, or other hazardous material. The plan should:

- Reference the California State Oil Spill Contingency Plan,
- Identify the steps to be followed in the event of a spill,
- Have clear instructions on immediate reporting, and
- Identify the emergency response materials which will be kept at the project site to allow the rapid containment and clean-up of any spilled material.

If a spill occurs, notifications should be made according to the California State Oil Spill Contingency Plan, to the Regional Water Board (via the State Warning Center), and CDFW contacts (Exhibit 1.0), in addition to the following contacts:

- California State Warning Center - (800) 852-7550 or (916) 845-8911
- Federal – National Response Center - (800) 424-8802 or (202) 267-2675
- Local Government - 911 or other designated local number

1.1.4 On-Site Education Training. If feasible, the qualified biologist should conduct a pre-project training program for all employees, contractors, or personnel working within the project site prior to performing any work. The program should consist of a presentation from the qualified biologist that includes a discussion of the biology of the habitats and special-status species identified during project scoping. The qualified biologist should also include as part of the education program information about the distribution and habitat needs of any special-status species that may be present and project-specific protective measures included in these BMPs. Interpretation should be provided for non-English speaking employees, contractors, or personnel prior to their performing any work at the project site. A handout that summarizes the education program including images

of special-status species should also be distributed to all personnel working on the project.

1.1.5 In-Water Work. When project activities will require working within watercourses, installing temporary access through watercourses, and/or removal or placement of materials within the bed, bank, or channel of watercourses, work must be performed in compliance with federal notification and permitting requirements.

1.1.6 Permanent Replacement of Watercourse Crossings. These BMPs are intended to assist with the timely removal, storage, transportation, and disposal of hazardous and non-hazardous solid waste and debris resulting from the 2023 Atmospheric River storm events. These BMPs are not intended to be utilized for permanent replacement of watercourse crossings and other in-water infrastructure, such as culverts, that have been destroyed. In the event permanent replacement of a watercourse crossing and/or other in-water infrastructure is needed for access to a primary dwelling or for emergency services, CDFW should be consulted early in the planning phase to discuss permitting requirements for these activities to minimize impacts to the watercourse.

1.2 Pollution Prevention and Equipment Storage

1.2.1 Hazardous Materials. Debris, soil, silt, bark, slash, sawdust, mulch, rubbish, creosote-treated wood, raw cement/concrete, or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances resulting from project related activities which could be hazardous should be prevented from contaminating the soil and/or entering any watercourse bed, bank, or channel or lake margin by either being removed daily or stored in watertight containers onsite until removed.

1.2.2 Equipment Maintenance and Fueling. No equipment maintenance, fueling, or storage should occur within or next to a watercourse bed, bank, or channel or lake margin where petroleum products or other pollutants from the equipment may enter these areas.

1.2.3 Equipment and Vehicle Leaks. Any equipment or vehicles driven and/or operated within or next to a watercourse bed, bank, or channel or lake margin should be checked and maintained daily to prevent leaks of materials that could be harmful to aquatic and terrestrial life or riparian habitat.

1.2.4 Stationary Equipment Leaks. Stationary equipment such as motors, pumps, generators, and welders, located within or next to a watercourse bed, bank, or channel or lake margin should be positioned over drip pans.

1.2.5 Removal of Trash and Debris. All raw construction materials and waste from the project site following the completion of work should be removed. No litter or construction debris should be deposited within or next to a watercourse bed, bank, or channel or lake margin, or where it may pass into a watercourse bed, bank, or channel or lake margin.

1.3 Sediment and Erosion Control

1.3.1 Sediment and Erosion Control Measures. Prior to any ground disturbing work, sediment and erosion control measure materials should be stockpiled on site. Sediment and erosion control measures should be used during all phases of operation where soil, trenching spoils and casting, and sediment and/or debris runoff threatens to enter a watercourse bed, bank, or channel or lake margin. Examples of sediment and erosion control measures include bioengineering, silt fencing, compost socks, coir logs, coir rolls, straw waddles, straw bale dikes, planting, mulching, seeding and high-tack hydroseeding with native species or a noxious weed-free seed mix recommended for the county in which the project takes place. Sediment and erosion control measures should be installed in a manner that prevents erosion of the site and prevents sediment and debris from entering a watercourse.

Where vegetation cannot reasonably be expected to become established and erosion control measures are intended for more than one season, the materials used should consist of non-synthetic, biodegradable materials. For example, tacked-down jute erosion control blankets, coconut fiber matting, jute netting, and other soil stabilization methods or similar should be used. Broadcast straw or other mulch is acceptable on soil with little to no slope and in areas that are not exposed to wind. ***Materials (e.g., monofilament netting) used in the sediment barriers should not pose an entanglement risk to fish or wildlife***.

1.3.2 Sediment Traps for Runoff from Steep Areas. Preparations should be made so that runoff from steep, erodible surfaces will be diverted into stable areas with little erosion potential or contained behind erosion control structures or sediment traps. Erosion control measures such as straw bales, waddles, coir socks and/or siltation control fencing/silt barriers should be placed and maintained until the threat of erosion ceases. Frequent water-

bars or other appropriate features should be installed on dirt roads, equipment tracks, or other work trails to control erosion.

1.3.3 Maintenance of Sediment and Erosion Control Measures. Sediment and erosion control measures should be maintained in good operating condition until final sign off of the property by the Incident Management Team (IMT). Maintenance includes, but is not limited to, checking sediment and erosion control measures for trapped or entangled fish and wildlife, removing accumulated sediment, repair and or and replacement of damaged sediment and erosion control measures. Modifications, repairs, and improvements should be made to the sediment and erosion control measures whenever needed to maintain them in good operating condition. If a sediment barrier fails to retain sediment, corrective measures should be employed, and a biological monitor should be notified, immediately.

1.4 Watercourse Crossings and In-Water Activities

1.4.1 Equipment Limitation Zone. A minimum 25-foot buffer for side slope steepness of less than 30% and a minimum 50-foot buffer for side slope steepness of greater than 30% on either side of watercourses should be implemented when possible as an Equipment Limitation Zone (ELZ). The intent of the ELZ is to reduce or eliminate the likelihood of ground disturbance from heavy equipment that may result in ruts, erosion, and direct sediment delivery to the watercourse. Heavy equipment and vehicles will limit operations within the ELZ unless removal of structures or debris are necessary.

1.4.2 If temporary watercourse crossings will occur, locations within the ELZ will be clearly indicated with signage or flagging, and sediment and erosion control methods will be used to minimize impacts within the ELZ. When operations at that location end, these erosion control methods should be removed, and the location should be returned to baseline.

1.4.3 Temporary Watercourse Crossings. If an existing or new temporary watercourse crossing must be used, the crossing site should be inspected by the qualified biologist for fish, wildlife, and special-status plant species prior to entering the watercourse. When fish or wildlife have been identified on site either prior to or during project activities and cannot leave of their own volition, the Operations Chief, Debris Group Supervisor, or designee should reference Section 1.6 on how to proceed.

1.4.4 Culvert Removal and Replacement. When debris removal activities require removal of a damaged culvert, and the culvert site is within a wetted portion of the watercourse, sediment and erosion control measures should be deployed up and downstream of the removal site to contain sediment-laden water to the immediate area of the culvert removal. If culvert replacement is needed to re-establish or maintain access to a primary dwelling or for emergency services, CDFW should be consulted early in the planning phase to discuss permitting requirements for activities not covered by these BMPs to minimize impacts to the watercourse.

1.4.5 Do Not Impair Water Flow. The installation of temporary watercourse crossings should be installed such that water flow is not impaired and fish passage is not obstructed. If temporary watercourse crossings are to be used during high seasonal flows, such crossings should accommodate those flows or should be removed before such flows occur.

1.4.6 Temporary Crossing Materials. Materials and methods used for temporary watercourse crossings should cause minimal turbidity or siltation. Aggregate gravel between 2-6-inches (as appropriately sized), screened river gravels, clean washed 2-inch or more rock or gravel, and/or logs in fill materials should be included. Temporary watercourse crossing abutments below the high-water mark should be rock or logs.

1.4.7 Stabilize Crossing Sites. All bare soil exposed in conjunction with temporary watercourse crossing construction, deconstruction, maintenance, or repair, should be treated with sediment and erosion control measures, as referenced in Section 1.3.1, immediately upon completion of work on the crossing, and prior to the onset of precipitation capable of generating runoff.

1.4.8 In-Water Silt Barriers. If work or temporary watercourse crossings must occur within a wetted watercourse or lake margin, precautions to minimize turbidity and siltation should be used and may require the placement of silt fencing, coir logs, coir rolls, straw bale dikes, or other siltation barriers so that silt and/or other deleterious materials are not allowed to pass to downstream reaches. ***Materials used in the silt barrier should not pose an entanglement risk to fish or wildlife***.

1.4.9 Maintenance of Silt Barriers. Silt collected around the silt barriers should be removed on an as-needed basis to prevent silty/turbid water from flowing around the silt barriers during storm events and to allow the silt barriers to

function properly. Silt barriers that trap sediment should be removed when temporary crossings have been taken out and after all flowing water is cleared of turbidity in a manner that will not introduce silt to the stream. The stream should then be remediated to baseline condition.

1.4.10 Bank Stabilization. When needed, temporary bank stabilization should be installed with suitable non-erodible materials that will withstand wash out. The bank stabilization material should extend above the ordinary high-water mark. Only clean material such as rock riprap that is free of trash, debris and harmful material should be used as bank stabilization materials. Asphalt and concrete should not be considered an acceptable material. At no time should bank stabilization methods incorporate grouting.

1.4.11 Removal of Watercourse Crossings. All materials used in constructing temporary watercourse crossings should be removed once the project is complete. During temporary watercourse crossing removal, all fill material should be excavated in a manner that recreates the natural channel grade and orientation, with a channel bed that is as wide as or slightly wider than the original watercourse.

1.5 Vegetation and Tree Clearing

1.5.1 Pre-project Site Survey. Before the start of project activities, the qualified biologist with the designated construction monitor (e.g., Task Force Lead (TFL)) should survey the project area to ensure no CESA-listed or special-status fish, wildlife, plant species are present, and no active nests, nest cavities, roosts, roost trees, dens, egg masses, or redds are present. When project activities are proposed within the wetted portion of a watercourse or lake margin, the qualified biologist with the designated construction monitor should survey the area prior to the start of project activities. When habitat elements with active nests, nest cavities, roosts, roost trees, dens, egg masses, or redds are detected, the qualified biologist with the designated construction monitor should refer to Section 1.6 on how to proceed.

1.5.2 Vegetation Removal. Disturbance or removal of vegetation should be kept to the minimum necessary to complete project related activities.

1.5.3 Remove Cleared Material from Watercourses. All trimmed or cleared material and/or vegetation should be removed from the area and deposited where it cannot re-enter the watercourse or lake margin.

1.5.4 Non-Commercial Tree Removal. Trees being removed should be evaluated by a certified arborist, if feasible. The evaluation should determine the viability of trees marked for removal before tree removal activities begin. If possible, retain large snags, trees with basal hollows or cavities, trees with limbs greater than 6-inches in diameter, old-growth trees, stand-alone granary trees, or other trees with features providing valuable habitat where no immediate risk to infrastructure exists or future flooding of improved property. If avoidable, no trees should be felled in a manner in which they might fall into a watercourse. When a tree with an active bat roost is selected for removal, refer to Measure 1.6.4 on how to proceed.

1.6 Wildlife Protection

1.6.1 Construction Monitoring. Project activities should be monitored daily by a construction monitor (Designated Construction Monitor). The qualified biologist assigned to the project should act as the Designated Construction Monitor when on-site. The qualified biologist should either be on-site or be available to arrive on site within two hours during all project activities. Should a project site have CESA-listed species that may be impacted during operations and the qualified biologist cannot be present on-site, either the Project Manager, or their designee with training in application of BMPs may act as Designated Construction Monitor and oversee project activities temporarily until the qualified biologist is available. At a minimum, the designated construction monitor should have attended the on-site education training and daily clearance survey, if provided.

1.6.2 Daily Clearance Survey. Before the start of daily project activities, the qualified biologist or designated construction monitor should survey the project area to ensure no new active nests, nest cavities, roosts, dens, egg masses, or redds have become established, including surveying any excavated areas within the project area to ensure trapped fish or wildlife are allowed an opportunity to escape. This includes inspecting around and inside any open-ended pipes or infrastructure elements stored on the project site that will be moved or utilized during project activities.

1.6.3 Detection of Wildlife. When wildlife is encountered during project activities, the wildlife should be allowed to leave the project area unharmed. If any CESA-listed or Fully Protected wildlife is encountered, the qualified biologist or designated construction monitor should be notified,

and the detection reported to the CDFW Cal OES contact by the Project Manager , or designee. If the wildlife is discovered to be caught in any pits, ditches, or other types of excavations, the qualified biologist should evaluate if it is unable to escape on its own, and if not, then the qualified biologist should capture and release it outside the project area into the most suitable habitat near the project area. Project activities should not be ceased if the observed wildlife is birds flying over or through the project area.

1.6.3.1 When detected wildlife occurs in active nests, dens, roosts, roost trees, egg masses, redds, and/or nest cavities a buffer should be established between ongoing project activities and the detection site so the wildlife are not disturbed, and it can be identified to species. The buffer should be delineated by temporary fencing or markers and remain in effect throughout project activities or until active nests, dens, roosts, roost trees, location of egg masses, redds, and/or nest cavities is/are no longer active, as determined by the qualified biologist. The buffer(s) should be determined by the qualified biologist and based on the life history of the species detected, including their sensitivity to noise, vibration, ambient levels of human activity and general disturbance, the current site conditions (screening vegetation, terrain, etc.), and the various project-related activities necessary to implement the project. If feasible, consider leaving some larger diameter snags and/or downed logs nearby that may provide food source and shelter for wildlife.

1.6.3.2 When detected wildlife is determined to not be a CESA-listed or Fully Protected Species and a buffer is not feasible while allowing work to continue, and the species is not protected by federal regulations, the qualified biologist may attempt to safely capture and relocate the wildlife to outside the project area if capture is feasible and will not endanger the wildlife.

1.6.3.3 When detected wildlife is determined to be a CESA-listed or Fully Protected species or evidence of their active presence is identified, the detection site should be buffered and all project activities at and immediately adjacent to the detection site should cease until consultation between the Operations Chief, Debris Group Supervisor, or designee and the CDFW Cal OES contact occurs.

1.6.4 Tree Removal with Active Bat Roost. When a tree with an active bat roost is selected for removal, the tree should be removed using a two-step

removal process. The limbs of the tree should be removed and left on the ground while the trunk is left in place during the first day, and during the following day the trunk should be removed. This process will allow the bats the opportunity to vacate the roost during the night prior to the trunk removal.

1.6.5 Rock Outcrops and Downed Logs. When rock outcroppings and downed logs that may provide shelter for wildlife are present within the project area, a buffer should be installed to exclude the feature from the area where active work is being performed. If downed logs and/or boulders must be removed, the qualified biologist with a designated construction monitor should survey the area prior to start of removal activities. Wildlife discovered should be allowed to move out of the area by their own volition, if they do not, then the qualified biologist should capture and release the wildlife outside the project area into the most suitable habitat near the project area.

1.6.6 Escape Ramp in Trench. At the end of each workday, an escape ramp should be placed at each end of any open excavation to allow wildlife that may become trapped to climb out overnight. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle no greater than 30 degrees and has enough traction to allow wildlife to escape.

1.6.7 Injured Wildlife. If any injured wildlife is found within the project site, the qualified biologist should arrange with a CDFW-qualified wildlife rescue and rehabilitation facility to temporarily hold and care for the wildlife.

1.7 Plant and Habitat Protection

1.7.1 Sensitive Habitats and Land Types. During initial project planning, sensitive habitats and land types should be identified during project scoping and by referencing the most current version of *CDFW 2023 Statewide Flood Impacted Habitat and Special Status Species Protective Measures*. Before the start of project deployment, the project site should be visually inspected for wet meadows, vernal pools, areas with biological crusts, pebble plains, quartz deposits (in arid habitats), desert pavement, etc. These areas are extremely sensitive to any disturbance including foot traffic and should be marked with exclusion fencing or similar methods and avoided.

If project logistics necessitate entry into these habitat types, consultation between the CDFW Cal OES contact and the Operations Chief, Debris Group Supervisor, or designee for additional site-specific measures should occur prior to any entry into those habitats. Additional measures could include, but are not limited to, full avoidance, seasonal avoidance, transplanting, and reseeding.

1.7.2 Special-Status Botanical Species. Avoid impacts to rare plant species by identifying areas with rare plants during the appropriate blooming season and establishing work season buffers. If rare, threatened, or endangered plant species are found during operations a 10-foot Equipment Limitation Zone (ELZ) should be placed around the population. If trees are to be harvested within the ELZ, trees should be felled away from the core plant populations, if feasible. If avoidance is not possible, the Operations Chief, Debris Group Supervisor, or designee should consult with the CDFW Cal OES contacts listed in Exhibit 1.0for additional site-specific measures.

1.7.3 Invasive Species Prevention. All contractors should follow guidelines in the California Invasive Plant Council's *Preventing the Spread of Invasive Plants: Best Management Practices for Land Managers (Cal-IPC 2012)* to prevent the spread of invasive plant species. Equipment should be cleaned of material that may harbor invasive plant seeds or invasive pests before starting a new project in a different watershed. This material includes dirt or plant seeds on construction equipment, tools, boots, and clothing.

1.7.4 Disinfect Equipment Prior to Entry into Watercourses. To prevent the spread of invasive aquatics and diseases (e.g., Zebra and Quagga Mussels), equipment to be used in water should be decontaminated to according to CDFW Aquatic Invasive Species Decontamination Protocols 2022.

2.0 Species-Specific BMPs based on CDFW Region

2.1 CDFW Regions (https://wildlife.ca.gov/Regions):

- Northern Region: Del Norte, Humboldt, Lassen, Mendocino, Modoc, Shasta, Siskiyou, Tehama, and Trinity counties.
- North Central Region: Alpine, Amador, Butte, Calaveras, Colusa, El Dorado, Glenn, Lake, Nevada, Placer, Plumas, Sacramento*, San Joaquin*, Sierra, Sutter, Yolo*, and Yuba counties. *Note: These counties are split between regions. See detailed map in Exhibit 1.1.

- Bay Delta Region: Alameda, Contra Costa, Marin, Napa, Sacramento*, San Mateo, Santa Clara, Santa Cruz, San Francisco, San Joaquin*, Solano, Sonoma, and Yolo* counties. *Note: These counties are split between regions. See detailed map in Exhibit 1.1.
- Central Region: Fresno, Kern, Kings, Madera, Mariposa, Merced, Monterey, San Benito, San Luis Obispo, Stanislaus, Tulare, and Tuolumne counties.
- South Coast Region: Los Angeles, Orange, San Diego, Santa Barbara, and Ventura counties.
- Inland Deserts Region: Imperial, Inyo, Mono, Riverside and San Bernardino counties.

2.2 CDFW Contacts

CDFW Contacts are contained in Exhibit 1.0.

2.3 Species-Specific Measures

In addition to the measures presented in the EPP, during project scoping the Operations Chief, Debris Group Supervisor, or their designee should reference the most current version of *2023 CDFW Statewide Flood Impacted Habitat and Special Status Species Protective Measures* (exhibit 1.0). This document contains specific habitat and impact information, as well as additional species-specific BMPs for use during project activities. Contact the appropriate CDFW Cal OES contact or Jason Faridi at Jason.Faridi@wildlife.ca.gov for the most current version.

Flood Impacted Habitat and Species Statewide Points of Contact (POC)
California Department of Fish and Wildlife Regional Boundaries, 2023

Northern Region

Siskiyou, Modoc, Trinity, Shasta, Lassen, Tehema
Curt Babcock (LSA & CESA POC),
Curt.Babcock@wildlife.ca.gov

Humboldt, Del Norte, Mendocino
Michael Van Hattem LSA & CESA POC),
michael.vanhattem@wildlife.ca.gov

North Central Region

Lake, Glenn, Butte, Plumas, Colusa, Sutter, Yuba, Sierra, Nevada, Yolo, Placer, Sacramento, El Dorado, Amador, Alpine, San Joaquin, Calaveras
Sarah Lose (LSA &CESA POC)
Sarah.Lose@wildlife.ca.gov

Bay Delta Region

Sonoma, Marin, Napa, Solano, Alameda, Santa Clara, Santa Cruz, San Mateo, San Francisco
Craig Weightman (LSA & CESA POC),
Craig.Weightman@wildlife.ca.gov

San Joaquin, Sacramento (legal Delta), Yolo (legal Delta), Solano (legal Delta), Contra Costa
Melissa Farinha (LSA & CESA POC)
Melissa.Farinha@wildlife.ca.gov

Central Region

Stanislaus, Tuolumne, Merced, Mariposa, Monterey, San Benito, Fresno, Kings, Tulare, San Luis Obispo, Kern
Linda Connolly (LSA POC)
Linda.Connolly@wildlife.ca.gov

Craig Bailey (CESA POC)
Craig.Bailey@wildlife.ca.gov

South Coast

Santa Barbara, Ventura, Los Angeles
Erinn Wilson-Olgin (LSA & CESA POC),
Erinn.Wilson-Olgin@wildlife.ca.gov

Orange, San Diego
David Mayer (LSA & CESA POC)
David.Mayer@wildlife.ca.gov

Inland Deserts

Mono, Inyo, San Bernardino (desert portions), San Bernardino (mountain portions), Riverside, Imperial
Brandy Wood (LSA & CESA POC)
Brandy.Wood@wildlife.ca.gov

Headquarters

★ Jason Faridi (LSA POC)
Jason.Faridi@wildlife.ca.gov

Margaret Mantor (CESA POC)
Margaret.Mantori@wildlife.ca.gov

Marine

Serving the California coastline
Becky Ota
Becky.Ota@wildlife.ca.gov

February 03, 2023

Attachment B – Regional Water Quality Control Boards Contact Map

Regional Water Quality Control Boards

NORTH COAST REGION (1)
Del Norte, Glenn, Humboldt, Lake, Marin, Mendocino, Modoc, Siskiyou, Sonoma, and Trinity
www.waterboards.ca.gov/northcoast
5550 Skylane Blvd., Suite A
Santa Rosa, CA 95403
E-mail: NorthCoast@waterboards.ca.gov
Tel: (707)576-2220
Fax: (707)523-0135

CENTRAL VALLEY REGION (5)
www.waterboards.ca.gov/centralvalley
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670
E-mail: info5@waterboards.ca.gov
Tel: (916)464-3291
Fax: (916)464-4645

Fresno Branch
Fresno, Kern, Kings, Madera, Mariposa, Merced, and Tulare
1685 E Street
Fresno, CA 93706
Tel: (559)445-5116
Fax: (559)445-5910

Redding Branch
Butte, Glenn, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Tehama
364 Knollcrest Drive, Suite 205
Redding, CA 96002
Tel: (530)224-4845
Fax: (530)224-4857

SAN FRANCISCO BAY REGION (2)
Alameda, Contra Costa, San Francisco, Santa Clara (north of Morgan Hill), San Mateo, Marin, Sonoma, Napa, Solano
www.waterboards.ca.gov/sanfranciscobay
1515 Clay Street, Suite 1400
Oakland, CA 94612
E-mail: info2@waterboards.ca.gov
Tel: (510)622-2300
Fax: (510)622-2460

CENTRAL COAST REGION (3)
Santa Clara (south of Morgan Hill), San Mateo (southern portion), Santa Cruz, San Benito, Monterey, Kern (small portions), San Luis Obispo, Santa Barbara, Ventura (northern portion)
www.waterboards.ca.gov/centralcoast
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401
E-mail: info3@waterboards.ca.gov
Tel: (805)549-3147
Fax: (805)543-0397

LOS ANGELES REGION (4)
Los Angeles, Ventura counties, (small portions of Kern and Santa Barbara counties)
www.waterboards.ca.gov/losangeles
320 W. 4th Street, Suite 200
Los Angeles, CA 90013
E-mail: info4@waterboards.ca.gov
Tel: (213)576-6600
Fax: (213)576-6640

LAHONTAN REGION (6)
Modoc (East), Lassen (East side and Eagle Lake), Sierra, Nevada, Placer, El Dorado, Alpine, Mono, Inyo, Kern (East), San Bernardino, Los Angeles (N/E corner)
www.waterboards.ca.gov/lahontan
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150
E-mail: info6@waterboards.ca.gov
Tel: (530)542-5400
Fax: (530)544-2271

Victorville Branch
15095 Amargosa Road - Bldg 2, Ste 210
Victorville Ca 92394
Tel: (760)241-6583
Fax: (760)241-7308

COLORADO RIVER BASIN REGION (7)
Imperial, San Bernardino, Riverside, San Diego
www.waterboards.ca.gov/coloradoriver
73-720 Fred Waring Dr., Suite 100
Palm Desert, CA 92260
E-mail: info7@waterboards.ca.gov
Tel: (760)346-7491
Fax: (760)341-6820

SANTA ANA REGION (8)
Orange, Riverside, San Bernardino
www.waterboards.a.gov/santaana
3737 Main Street, Suite 500
Riverside, CA 92501-3348
E-mail: info8@waterboards.ca.gov
Tel: (951)782-4130
Fax: (951)781-6288

SAN DIEGO REGION (9)
San Diego, Imperial, Riverside
www.waterboards.ca.gov/sandiego
2375 Northside Drive, Suite 100
San Diego, CA 92108
E-mail: info9@waterboards.ca.gov
Tel: (619)516-1990
Fax: (619)516-1994

Attachment C – Federal Emergency Management Agency (FEMA)Region9 Work in or Near Water Quick Guide

Federal Emergency Management Agency (FEMA) Region 9
Work In or Near Water Quick Guide

PURPOSE:

The National Environmental Protection Act (NEPA) establishes environmental policy for the United States. The Act requires that federal agencies consider the effects of their proposed actions and alternatives on the human environment before deciding to fund and implement an action. The information below is a quick review of laws and Executive Orders that FEMA must consider for work in or near water. Non-compliance with these requirements may jeopardize receipt of federal funding.

LAW REQUIREMENTS FOR WORK IN OR NEAR WATER:

FEMA is required to take into account environmental considerations when authorizing or approving actions that could significantly affect the environment in the United States. Work in or near water has an elevated potential to affect the environment; there are several federal and state laws that pertain to work in water (not limited to the following):

- **Clean Water Act (CWA):** This Act is the primary federal law governing water pollution. Its establishes the basic structure for regulating discharges of pollutants into the Waters of the United States (WOTUS) and regulating quality standards for surface waters, including wetlands.

    - Under Section 404 of the CWA, the United States Army Corps of Engineers (USACE) is responsible for issuing permits for the discharge of dredged or fill material into waters of the U.S (WOTUS).

    - Under Section 401 of the CWA, the State is delegated authority by the Environmental Protection Agency (EPA) to issue permits for nonpoint source pollution sources.

  Subgrantees must coordinate with USACE and the State for actions listed under Section 404 and 401 of the CWA, respectively, for permitting **PRIOR to the initiation of any action** (including the use of Nationwide Permits). Contact information for USACE offices can be located at the following weblink: http://www.usace.army.mil/Locations.aspx.

- **Endangered Species Act (ESA):** This Act is the federal law that is designed to protect critically imperiled species from extinction as a consequence of economic growth and development. There are numerous species that exist in or near water.

    - FEMA is required, under section 7(a)(2) of the ESA, to consult with the U.S. Fish and Wildlife Service (USFWS) and/or National Marine Fisheries Service (NMFS) **PRIOR to the initiation of any action** to determine if the action may effect Threatened and Endangered Species and their critical habitat. Timelines for the completion of consultation depend explicitly on the complexities of the action. Refer to USACE Biological Opinions or the FEMA Biological Opinions with the Fish and Wildlife Service and National Marine Fisheries to ensure no impacts to species while performing in water work.
    - NMFS species list here https://www.fisheries.noaa.gov/species-directory/threatened-endangered
    - FWS species list here https://ecos.fws.gov/ecp/report/species-listings-by-state?stateAbbrev=CA&stateName=California&statusCategory=Listed
    - FEMA FWS/NMFS Biological Opinion https://www.fema.gov/disaster/4683/news-media#block-views-block-media-library-public-block-1

      Conservation and Avoidance and Minimization Measures listed

Federal Emergency Management Agency (FEMA) Region 9
Work In or Near Water Quick Guide

- **Coastal Zone Management Act (CZMA):** This Act is the federal law that encourages coastal states to develop and implement coastal zone management plans. Under the direction of the CZMA policies, the State has been authorized for the supervision of significant land and water activities that could significantly affect the coastal zones.

    - Coordination with the state administering agency, the California Coastal Commission, should be made **PRIOR to the initiation of any action**. Information regarding the California Coastal Commission for the CA can be found at the following weblink: Coastal Zone Boundary (ca.gov).

- **Magnuson-Stevens Fishery Conservation and Management Act (MSA):** This Act is the primary law governing marine fisheries management in U.S. federal waters. First passed in 1976, the Magnuson-Stevens Act fosters long-term biological and economic sustainability of our nation's marine fisheries out to 200 nautical miles from shore.

    - FEMA is required to consult with the National Marine Fisheries Service (NMFS) and the National Oceanic and Atmospheric Administration (NOAA) for work in water out to 200 nautical miles from shore **PRIOR to initiation of actions** in these areas. Timelines for the completion of consultation depend explicitly on the complexities of the action.

- **FEDERAL EXECUTIVE ORDERS (E.O.) FOR WORK IN OR NEAR WATER:** Federal regulations sets forth the policy and procedure and responsibilities to implement and enforce Executive Order (E.O.) 11998, Floodplain Management, and E.O. 11990, Protection of Wetlands.

    - Based on these Executive Orders, FEMA is required to integrate the goals of the Orders to the greatest possible degree into its procedures for implementing the National Environmental Policy Act (NEPA).

Attachment D - California Governor's Office of Emergency Services Storm Debris Removal Quick Guide

California Governor's Office of Emergency Services
Storm Debris Removal Quick Guide
Public Assistance Projects

California Governor's Office of Emergency Services (CalOES) and the Public Assistance (PA) Program is providing this information to **avoid jeopardizing applicants' eligibility for reimbursement** from the Federal Emergency Management Agency (FEMA) for debris removal and disposal.

Debris can include downed trees, silt, sand, building components, wreckage, and personal property. Debris must be separated for proper handling, transport and disposal of hazardous materials and toxic waste including asbestos containing materials, lead-based paints, and household chemicals.

FEMA may reimburse reasonable costs associated with debris removal, such as labor, disposal fees, monitoring costs, equipment costs, material costs, or contract costs. Contracts must comply with federal regulations (2 CFR 200.320) as well as State and local procurement standards.

FEMA ELIGIBILITY REQUIREMENTS

1. You must be an **Eligible Applicant** as defined in the Public Assistance Program and Policy Guide (PAPPG), page 42, and have the legal responsibility, page 52, to be reimbursed for debris removal. https://www.fema.gov/sites/default/files/documents/fema_pappg-v4-updated-links_policy_6-1-2020.pdf
2. Debris was generated by the disaster event and is located on improved property or rights-of-way of an eligible Public Assistance applicant.
3. When there is a serious threat to lives, public health and safety, it eliminates the immediate threat of damage to improved property, or it assists the economic recovery of the community-at-large.

PERMITTING AND DOCUMENTATION REQUIREMENTS

1. **Source documentation** including timesheets, work logs, equipment use logs, receipts, load tickets, monitoring logs, contracts, mutual aid agreements;
2. **Document** including volume or weight and pickup location(s)
3. **Document** debris management site(s), transfer stations, and final disposal location(s) including permit documentation
4. **TDSR/Debris Management Site Approval:** For information regarding a new TDSR, final disposal location, permits, and emergency waivers, contact your regional California Environmental Protection Agency (CalEPA)/ Regional Water Quality Control Board (RWQCB) and Department of Resources Recycling and Recovery (CalRecycle). Permit information for hazardous waste management may be found at the Department of Toxic Substances Control, here: https://dtsc.ca.gov/permits/
5. **Debris burning (vegetative debris only):**
   Obtain a burn permit from CAL FIRE here: https://burnpermit.fire.ca.gov/. There may be other local ordinances that apply in your area; be sure to check with your local fire department or county fire marshal prior to burning.
   a. Grinding, chipping, recycling, or disposal should be at permitted landfills are preferred methods of disposal over burning

HANDLING DEBRIS

1. Separate waste types such as vegetative, C&D, white goods, household hazardous waste, electronic waste, animal carcasses, sand and mud, etc.
2. For guidance regarding **animal mortality waste disposal**, visit: https://calepa.ca.gov/disaster/animals/
3. Guidance on **household hazardous waste** can be found here: https://dtsc.ca.gov/disaster-related-hazardous-waste-removal/
4. For guidance on **asbestos removal,** additional information is available here: https://dtsc.ca.gov/managing-asbestos-hazardous-waste/
5. For information on abandoned or derelict waterborne vessels in public waters of the state, visit the California States Lands Commission (SLC) page here: https://www.slc.ca.gov/abandoned-vessels-program/

TEMPORARY DEBRIS STAGING AND REDUCTION SITES (TDSRs)

1. Local enforcement agencies (LEA) are designated by the governing body of a county or city and have the primary responsibility for ensuring the correct operation and closure of solid waste facilities in the state. They also have responsibilities for guaranteeing the proper storage and transportation of solid wastes. Find your LEA here: https://www2.calrecycle.ca.gov/SolidWaste/LEA/Directory/
2. Emergency waivers from the Local Enforcement Agency and CalRecycle may be required to allow landfills to accept debris. Information is here: https://calrecycle.ca.gov/swfacilities/permitting/guidance/stdswaiver/

CA STATE POINT OF CONTACT

To coordinate your debris removal operations or for more information please contact **Cole Glenwright**, at (916) 425-0302 or cole.glenwright@caloes.ca.gov.

OTHER FEDERAL AGENCIES

Debris Removal from Watersheds:
USDA Natural Resources Conservation Service may make available the Emergency Watershed Program (EWP) to assist state agencies, county governments, towns and other subdivisions of state government to relieve storm caused impairments and imminent threats to watershed function. EWP may support removal of storm debris that poses a threat to health, life, or property. Not all storm debris in water is eligible for EWP. For more information, visit https://www.nrcs.usda.gov/programs-initiatives/ewp-emergency-watershed-protection or contact Greg Norris, State Conservation Engineer, at 530-792-5609 (greg.norris@usda.gov).

Debris Removal from Farms and Ranches
USDA Farm Service Agency may provide assistance with debris removal from farming or ranching operations through the Emergency Conservation Program, animal mortality through the Livestock Indemnity Program, and assistance to eligible non-industrial private forest owners thru the Emergency Forest Restoration Program. For more information contact your county FSA office or visit: https://www.fsa.usda.gov/state-offices/California/index

Debris Removal from Federal Waterways
U.S. Army Corps of Engineers is responsible for removing debris from federally designated navigable channels and turning basins. They also provide direct assistance through FEMA Mission Assignment. Additional information is found here: https://www.usace.army.mil/Missions/Emergency-Operations/National-Response-Framework/Debris-Management/

Attachment E - Debris Management Guidance

Debris Management Guidance

2023 Statewide Winter Storms (FEMA-3591-EM-4683-DR-CA) – Version 1

ABOUT: Disaster debris management is a key recovery responsibility of local government. This guidance document is intended to assist local governments conduct debris management operations in a manner that maximizes potential reimbursement, aligns with operational best practices, and complies with applicable laws and regulations.

ELIGIBLITY: Depending on what assistance is approved for your county, debris management operations may be eligible for reimbursement from FEMA or Cal OES. Generally, only the removal of disaster-generated debris from public rights of way and public property is eligible for reimbursement. Disaster-generated debris includes downed trees and branches, sediment, mud, and rocks resulting from debris flows, household hazardous waste, and construction and demolition debris from public buildings or from private residential structures if placed on public property. Debris removal directly from private property is generally ineligible unless necessary to protect public health and safety. For more information on eligibility, refer to FEMA's Public Assistance Program and Policy Guide (Version 4) and FEMA's Procurement Disaster Assistance Team Field Manual.

OPERATIONS: Debris management operations after a major storm or flood generally align with one of two approaches:

1. **Curbside Collection:** Collection of debris placed on the curb of the public right of way for collection, offsite processing (if necessary) and reuse/disposal. May include debris resulting from emergency road clearance operations and debris placed on the right of way by residents (including vegetative debris and construction and demolition debris). This operation generally involves grapple trucks or light equipment passing through affected areas to collect debris, processing/reduction at a temporary debris management site, and disposal at recyclers or landfills.

Curbside debris collection after the 2019 Russian River Flooding (Sonoma)

2. **Collection Centers:** Collection at a central point on public property where residents drop off debris for processing and reuse/disposal. This operation generally involves placement of roll off bins on public property, monitoring of debris dropped off by residents, transport of bins to a debris management site for processing/reduction (if necessary), and reuse/disposal at recyclers or landfills

Strong public information is key to either approach. For more information on operations, refer to FEMA's Public Assistance Debris Management Guide.

FOR DEBRIS MANAGEMENT QUESTIONS: DebrisTaskForce@CalOES.ca.gov

Your Cal OES Regional ESC can also assist you in coordinating with Cal OES Debris Operations.

MONITORING: Consistent monitoring of contracted debris management operations is required to ensure only eligible debris is managed and costs are properly documented. Debris monitoring involves government or third party contractor staff observing all debris collection (including of bins or collection centers), processing, and disposal. Monitors document types, quantities, and locations of debris, and ensuring debris contractors only collect eligible debris. For more information on debris monitoring, refer to FEMA's Public Assistance Debris Monitoring Guide (March 2021).

Master Service Agreement for Debris Assessment and Monitoring

The State of California has an active master service agreement for debris assessment and monitoring which is available to any local government.

Master Agreement User Instructions

Complete Master Agreement

ENVIRONMENTAL COMPLIANCE: Several Federal and State environmental laws apply to debris management operations and consultation with regulatory agencies prior to and during debris management operations is critical. Cal OES has a fulltime disaster recovery environmental team that can assist local governments coordinate with regulators. Key environmental compliance issues include:

1. **Stormwater and Water Quality:** Regional Water Quality Control Board permits are often required for temporary debris management sites and other facilities. Please refer to the State Water Board's General Waste Discharge Requirements for Disaster Related Wastes.
2. **Household Hazardous Waste:** Household hazardous waste (HHW) must be segregated, specially handled, and disposed of at permitted facilities. Additional information is available from the Department of Toxic Substances Control (DTSC). When mission tasked by Cal OES, DTSC can also deploy crews for HHW removal.
3. **Landfills:** Emergency Waivers from the Local Enforcement Agency and CalRecycle may be required to allow landfills to accept debris. Additional information is available from CalRecycle.

In certain circumstances, permits or consultation may be needed for sensitive biological, archaeological, or historic sites.

FEDERAL AND STATE ASSISTANCE: Potential financial assistance is provided through the Public Assistance Program; it is important that local governments work closely with State and Federal Public Assistance staff when planning and implementing debris management operations. Additionally, technical assistance is available from Cal OES, CalRecycle, and other State and Federal agencies to local governments who require additional subject matter expertise in planning and implementing debris management operations. In circumstances where debris management needs exceed local capacity, direct State or Federal assistance including from DTSC and CalRecycle may be available pursuant to the Standardized Emergency Management System.

Attachment F – California Incident DR4683 FEMA Environmental Considerations Greensheet

CALIFORNIA INCIDENT DR-4683
FEDERAL EMERGENCY MANAGEMENT AGENCY
ENVIRONMENTAL CONSIDERATIONS GREENSHEET

Environmental and Historic Preservation and Disaster Recovery

As with all federal funding, certain environmental and historic preservation requirements must be fulfilled as you repair and rebuild your communities. This brochure is provided to help you better understand environmental factors that you must consider as you apply for FEMA funding.

The information and assistance described here will help avoid any environmental roadblocks or time delays.

The most important message is that we are available to help you with all environmental requirements. Contained here are facts, procedures, and contacts to help you through the process.

Please identify any potential environmental concerns or problems and discuss these with our environmental and historic preservation staff as soon as possible. This will help us address issues and expedite funding.

Our work is under the direction of FEMA Federal Coordinating Officer Andrew Grant. We also coordinate closely with the California Governor's office of Emergency Services (CalOES).

As the acting Region IX Regional Environmental Officer, I pledge to assist you in understanding and complying with all environmental requirements.

Please contact myself, the EHP Advisor, CalOES, or FEMA Public Assistance for any environmental or historic assistance.

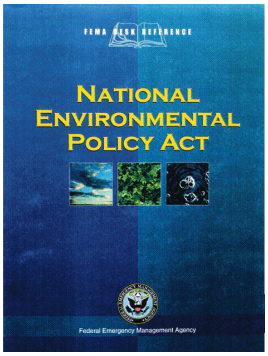
Sincerely,

Kenneth Sessa
Acting Regional Environmental Officer

FEMA, Region IX
U.S. Department of Homeland Security
1111 Broadway, Suite 1200
Oakland, California 94607-4052
Cell: (816) 283-7960

January 2023

Environmental Laws and Project Requirements



In addition to NEPA, listed below are the other primary environmental laws and executive orders that come into play when rebuilding or replacing a "public assistance" facility. Some activities can proceed without environmental or historic review, others require some environmental consideration, and in some of the major projects, consultation with the State, other Federal agencies, and FEMA is necessary before construction begins.

Failure to comply with applicable environmental and historic laws could jeopardize or delay potential funding.

Federal Laws Include

Endangered Species Act

National Historic Preservation Act

Clean Water Act (Section 404)

Resource Conservation and Recovery Act

Executive Order 11988 - Floodplain Management

Executive Order 11990 - Wetlands Protection

Executive Order 12898 - Environmental Justice

Some projects proceed without complex review

Emergency Protective Actions and Debris Removal from Rights-of-Way

Repairs to pre-disaster condition or temporary repairs (unless older than 45 yrs)

Some projects require various levels of review

Debris removal that includes ground disturbing activity

Where the footprint is different than pre-disaster conditions

Involving hazard mitigation

Involving threatened or endangered species, wetlands or floodplains

Some projects require review and consultation

Improved or alternate projects

Other projects where the scope of work has changed

Obtaining permits, prior to construction, is the responsibility of the project applicant.

Waterways, Including Culverts and Bridges

The Clean Water Act and the U.S. Rivers and Harbors Act apply to actions affecting waters of the United States. This includes any part of the surface water tributary system (natural waters including small streams, lakes, and wetlands) as well as isolated man-made waters. The U.S. Army Corps of Engineers (USACE) administers both laws.

For projects involving work proposed or completed in a waterway, and for repairs to previously authorized serviceable structures deviating from their original dimensions in any way (i.e. size, length, depth, profile, type, etc.), a new or modified permit from the USACE may be required.

Examples of actions requiring permits include any temporary or permanent construction, demolition, and any dredging or filling in any part of surface water tributaries or systems, including cutting roads and repair of damaged facilities. Debris removal below the ordinary high watermark may require permitting as well.

Floodplain Map

Floodplains and Wetlands

FEMA reviews all projects that take place in the **floodplain** as required by Executive Order 11988. For major projects, this could require the "8-Step" process, which evaluates practicable alternatives and includes public review.

Some projects are exempt from floodplain review, including debris removal and repairs or replacements when the cost is less than $5,000.

Project approvals and permits are often needed from the USACE.

As with floodplains, per Executive Order 11990, an "8-Step" process" may be required whenever a project has the potential to modify a **wetland**. Project approvals and permits may be required from the USACE, and the California Department of Fish and Wildlife (CDFW).

Debris should never to be stored in a wetland, even on an temporary basis. Debris removal from a wetland should be coordinated with the USACE, the USFWS, and CDFW.

Threatened and Endangered Species

California red-legged frog

Under the Endangered Species Act, any project that may have the potential to affect federally threatened or endangered species must coordinate with the USFWS to develop measures to avoid and/or minimize impacts to such species. ***Endangered species*** are in danger of extinction throughout the area and habitats in which they usually occur. ***Threatened species*** are those that could become endangered in the near future. California has over 300 federally endangered, threatened, proposed or candidate species (listed species).

It is very important to know whether a proposed project might impact one or more listed species or designated critical habitat. Applicants should contact experts at FEMA, the USFWS, and CDFW who can help determine if a listed species or critical habitat may be affected by a proposed project. For information on listed species in the counties included in DR-4683, consult the following:

https://www.fws.gov/species/search

Historic Preservation and Tribal Relations

Any proposed project which may affect historic properties must be reviewed by FEMA and the California State Historic Preservation Officer (SHPO) in accordance with the Programmatic Agreement (Agreement) among FEMA, SHPO, and CalOES (signed October, 2019).

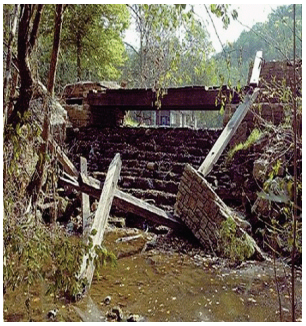
A **historic property** is any prehistoric or historic building, site, district, structure or object significant in American history, architecture, archaeology, engineering and culture.

Any structure (e.g., buildings, walls, bridges, culverts) **45 years old** or older may be eligible for listing on the National Register of Historic Places. Archaeological resources also require special attention. Paramount among these are Tribal resources, of which California has a rich legacy.

Any proposed project that may alter a previously undisturbed ground (e.g., relocating a utility, road realignment, a material borrow area for construction, debris removal or preparation of debris staging, stockpiling or burning sites) must consider potential effects to historic properties and Tribal resources.

Land that has been plowed or used for agriculture is not considered previously disturbed and must be evaluated.

Different measures can be taken if historic and Tribal resources are affected. It is important to involve FEMA and the California SHPO offices to make these determinations, and to decide what measures, if any, are to be taken.



Damaged historic dam

Debris Disposal and Hazardous Materials

For any debris removal projects, applicants must consider hazardous waste and follow the disposal guidance provided by CalOES and FEMA. The guidance, *Disaster Debris Management*, is available at:

https://www.caloes.ca.gov/office-of-the-director/operations/recovery-directorate/recovery-operations/debris-management/ or from the Cal OES Program staff.

No contact, approval or permits are needed to take solid waste debris to a licensed landfill or approved construction and demolition landfill. If sandbags have been used, information on how to properly dispose of them is in the guidance listed above.

Asbestos, if present, must be removed prior to building demolition. Clean up and disposal of hazardous materials requires careful considerations. Guidance for emergency response and disposal of hazardous materials is provided by CalOES in the following website:

https://www.caloes.ca.gov/office-of-the-director/operations/response-operations/fire-rescue/hazardous-materials/

FEMA's Public Assistance Debris Management Guide can be found on the website: http://www.fema.gov/public-assistance-policy-and-guidance

Other Considerations

Hazard mitigation projects reduce the threat of future damage. Retrofitting for wind damage or elevating for flood protection are examples. All hazard mitigation projects will be subject to a thorough review by FEMA as they usually involve ground disturbance or alter a project's footprint.

Projects involving **any ground disturbance** outside previously disturbed footprint, even if within the right-of-way (including facility realignment, borrow areas, utility burial, utility pole replacement, access roads, etc.) may require archaeological review prior to construction.

Environmental Justice Executive Order 12898 strives to minimize negative health or environmental impacts on minority and low-income populations. Projects are examined to avoid these impacts. FEMA will not exclude any persons and populations from participating in benefits because of race, color, or national origin.

The Heritage Emergency National Task Force (HENTF) is a partnership between FEMA and the Smithsonian Institution with members from over 60 federal agencies and national service organizations. After a disaster, HENTF provides technical assistance to Local, County/Parish, State/Territorial, and Tribal governments and to private nonprofit arts, cultural, and history organizations regarding the salvage of records and collections. HENTF's online resources include guidance to help flood survivors salvage photos and other cherished belongings at Save Your Family Treasures.

CONTACTS

This publication presents an overview of the many laws and requirements for environmental clearance of FEMA Public Assistance projects. There are many other details not here that may prove useful for environmental compliance. The FEMA staff in California are available to answer any questions you may have and to direct you to other resources that may be needed to ensure that all environmental considerations are explored for FEMA-funded projects.

Lead Environmental and Historic Preservation Advisor
Chelsea Klein
1111 Broadway, Suite 1200
Oakland, California 94607-4052
(816)872-2014
Chelsea.Klein@fema.dhs.gov

Acting Regional Environmental Officer
Kenneth Sessa
1111 Broadway, Suite 1200
Oakland, CA 94607-4052
(816) 283-7960
kenneth.sessa@fema.dhs.gov

Heritage Emergency National Task Force
Lori Foley, Coordinator
Office of Environmental Planning/Historic Preservation
Federal Insurance and Mitigation Administration, FEMA
lori.foley@fema.dhs.gov
(202) 826-6303
https://culturalrescue.si.edu/hentf

California Governor's Office of Emergency Services
Patricia Nelson, Environmental Officer
10370 Peter A. McCuen Boulevard
Mather, CA 95655
(916) 307-1030
patricia.nelson@caloes.ca.gov

FEMA RIX– Floodplains
1111 Broadway, Suite 1200
Oakland, CA 94607
(510) 627-7184

CA Dept. of Water Resources - NFIP Compliance
Kelly Soule, State of California NFIP Coordinator
3464 El Camino, Ste. 210
Sacramento, CA 95821
Kelly.Soule@water.ca.gov

FEMA- Environmental Justice
Kenneth Sessa
(816) 283-7960
kenneth.sessa@fema.dhs.gov

California Coastal Commission
See website link for coastal development permit applications:
https://www.coastal.ca.gov/cdp/cdp-forms.html

U.S. Army Corps of Engineers Regulatory Program
See website link below for appropriate office contact:
http://www.usace.army.mil/Contact/Office-Locator/

Natural Resources Conservation Service
See website link below for appropriate office contact:
https://offices.sc.egov.usda.gov/locator/app

National Marine Fisheries Service– NOAA
See website link below for appropriate office contact:
http://www.westcoast.fisheries.noaa.gov/

U,S Fish and Wildlife Service - threatened & endangered species
See website link below for appropriate office contact:
https://www.fws.gov/offices/Directory/ListOffices.cfm?statecode=6

EPA Hazardous Debris and Materials
Bill Jones, USF10 I EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105
415-972-3275
Jones.bill@epa.gov

Cal OES Debris Specialist
Cole Glenwright
3650 Schriever Avenue
Mather, CA 95655
(916) 425-0302
cole.glenwright@caloes.ca.gov

California Department of Fish and Wildlife
Habitat Conservation Planning Branch
1416 Ninth Street, 12th Floor
Sacramento, CA 95814
(916) 653-4875

California Office of Historic Preservation
Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100 Sacramento, CA 95816
(916) 445-7000
julianne.polanco@parks.ca.gov

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
(916) 373-3710

California State Water Resource Control Boards
See website link below for appropriate office contact:
https://www.waterboards.ca.gov/waterboards_map.html

CalOES Tribal Advisors
Gabe Kearney
916-926-9542
Gabe.Kearney@CalOES.ca.gov

Alex Shariatmadari
916-754-6942
Alex.Shariatmadari@CalOES.ca.gov

FEMA Tribal Advisors
Pamela Joe
1111 Broadway, Suite 1200
Oakland, CA 94607
202 341-2821
pamela.joe@fema.dhs.gov

Christopher Poehlmann
510-725-7958
Christopher.Poehlmann@FEMA.dhs.gov

Attachment G – Ground Disturbance Root Ball Operation Guidance

Federal Emergency Management Agency Ground Disturbance Operations and Woody Debris Removal including Root Ball Environmental Compliance Guidance

Section 106 of the National Historic Preservation Act (NHPA) is a section of federal law that requires federal agencies, including FEMA, to take into account the effects of their undertakings on historic properties. Section 106 of the NHPA and its implementing regulations, Title 36 of the Code of Federal Regulations Part 800 (36 CFR Part 800), establish a process for federal agencies to consider the effects of their undertakings on historic properties through a process that requires consultation with interested parties; NHPA does not mandate a specific outcome nor does it require preservation of historic properties. Section 106 also encourages, but does not require, federal agencies to avoid and minimize the potential for adverse effects of their actions on historic properties. FEMA is required to consult under Section 106 with State Historic Preservation Officers (SHPO), Tribal Historic Preservation Officers (THPO), and Native American Tribes.

In-kind repairs generally do not require consultation even with minor upgrades as long as the work is within the **boundary of the previously disturbed soils** – think in terms of the length, width, and depth dimensions of the total disturbance. For example, if the work includes excavation for a water line within the boundaries of a **right-of-way (ROW)** with previous soil disturbance, what is the length, width, and depth of the previous disturbance? Will the new water line excavation exceed the boundaries of this previous disturbance?

Heavy machinery should not be operated in areas of concern including archaeologically or historically sensitive areas. Heavy machinery should transit to the work site on maintained (paved or dirt) roadways or access routes within previously disturbed soils. Likewise, all access and staging of any equipment should occur within the existing hard surfaced public rights-of-way. Construction of new access or roadways that includes new soil disturbance would require review and may require consultation with the SHPO or THPO as well as a pedestrian survey for cultural resources to stay within compliance. Removal of fire or flood-damaged or destroyed standing trees within a public ROW is generally allowed without consultation with the SHPO/ THPO if these trees are flush cut or stumps are ground to grade level with no removal of the root balls.

Debris: Woody debris removal and root ball removal from historic sites such as cemeteries, battlegrounds, parks, and archaeologically sensitive landscapes may have the potential to adversely affect historic resources. Care should be taken during debris removal operations located particularly in:

Root balls: FEMA Environmental Planning and Historic Preservation (EHP) requests for applicants to provide a list of GPS coordinates (latitude and longitude in decimal degrees) of all root balls removed during the course of debris removal operations. This information is requested in order to review the location of the removed root balls against the locations of known archaeological resources.FEMA recommends the following best practices are implemented to the extent practicable when completing root ball removal:

- Utilize methods to avoid or minimize soil disturbance around the stump;
- Void spaces must be backfilled with any original loose soil from the root ball or clean fill from an approved source;
- When using heavy equipment, work from hard, firm and dry surfaces to the fullest extent possible, to avoid sinking into soft soils.

Applicants can coordinate with the State Historic Preservation Office (SHPO); however, SHPO concurrence does not automatically satisfy the requirement for FEMA projects to comply with Section 106 of NHPA. For work involving new ground disturbance, regardless of SHPO coordination, there may be tribes with interest that need to be consulted with which may only occur by FEMA directly. Therefore, any new ground disturbance is recommended to be postponed until FEMA EHP is able to determine if a consultation is necessary.

In the event cultural resources may be impacted by debris removal operations (including root ball removal), contact your California Governor's Office of Emergency Services lead to discuss the scope of work and potential FEMA environmental compliance requirements. **Should there be unexpected discoveries, work should halt immediately and all reasonable measures taken to avoid or minimize harm to until FEMA has completed consultation with the SHPO, Tribe(s), and any other consulting parties.**

Last Update: February 17, 2023

Attachment H – Cemetery Resources

CHICORA FOUNDATION INC.

CEMETERY PUBLICATIONS

Cemetery Publications | Historic Cemeteries | Grave Preservation | Chicora Foundation

Cemetery Disaster Planning. 28 pp. This booklet provides immediate advice on why and how to prepare a disaster plan for your cemetery, reviewing some of the more common cemetery problems, including hurricanes, tornadoes, flooding, and vandalism. It provides comprehensive and up-to-date information on recovery techniques, including FEMA funding. The booklet can be downloaded here.

Recording Historic Cemeteries: A Guide for Historical Societies and Genealogists. 12 pp. wire stitched. This booklet focuses on why and how to record historic cemeteries and graveyards. It provides essential advice for those beginning cemetery preservation projects. ISBN 1-58317-045-6 Click here to view.

Grave Matters: The Preservation of African-American Cemeteries. 16 pages wire stitched. Explores the unique and exciting history of African-American cemeteries and how they can be easily damaged or destroyed by development or a lack of understanding. Suggests ways that this heritage can be preserved for future generations. ISBN 1-58317-008-1 Click here to view.

Iconography of Death: Common Symbolism of Late Eighteenth through Early 20th Century Tombstones in the Southeastern United States. 60 pages perfect bound. This easy-to-use guide helps you recognize and interpret the most used symbols found in cemeteries throughout the Southeast, giving researchers a better understanding of hidden meanings. It also offers a better appreciation of the varied and important aspects of the lives of people who have gone before us. ISBN 0-5831702. $15.00. See Ordering Chicora Publications for details.

Cadaver Dogs in Cemeteries. 2 pages. Provides a quick overview of using cadaver dogs to find historic graves. Bottom line, there is no peer reviewed evidence supporting this technique and besides, there are much better and more reliable approaches. Click here to view.

Association of Gravestone Studies (AGS) Conservation Talk Column

Chicora's Director, Dr. Michael Trinkley, hosted a column in the Association of Gravestone Studies Newsletter called *Conservation Talk*. These columns are

available below as pdf files. All articles are copyrighted by the Association of Gravestone Studies (AGS) and are provided here through their kind permission.

Lichen & Cleaning Stones -- what are lichen, how do they damage stones, and what should we do about them?

Use of Ordinary Portland Cement -- is there really any appropriate use for Portland cement in modern cemetery repairs?

Abrasives and Pressure Washers -- is powerful always better and what kind of damage are we doing with modern equipment?

"Simple" Epoxy Repairs -- what are these "simple" repairs, are they really simple, and should they even be used in cemeteries?

Cemetery Maintenance is More Than Mowing the Grass -- what are the top 10 maintenance problems and why mowing the grass is only the first step in cemetery maintenance?

Safety -- is repairing that stone worth your life . . . or the life of a volunteer?

Vandalism -- every cemetery faces it, but this column provides some tips for dealing with the problem effectively.

Pins and Epoxy -- what pins work best and why? And how they interact with different epoxies. Why blind pinning isn't cookbook -- and requires a professional conservator.

Trees and Stones -- what to do when trees and stones come into conflict? How do we prevent ever getting into conflict in the first place?

Fences -- what are the top 5 fence problems and how do you go about solving them in your cemetery?

Rigging Safety -- What are required to rig cemetery stones and what should you consider in the process? Part 1 of 2

D/2 is Alive and Well -- contrary to rumors, D/2 is still available and this article addresses this particular cleaning product.

Sandstone Problems -- sandstone monuments may be beautiful, but they pose a lot of preservation challenges. This article talks about these concerns and how they can be treated.

Marble Problems - marble, too, faces a variety of long-term preservation issues. This article talks about problems such as sugaring, the formation of gypsum crust, and warping.

Slate Problems - while found in a variety of colonial cemeteries, there is far less published research on slate conservation than there is for other stones. This article summaries what is known about slate deterioration and repair.

Attachment I – FEMA Archaeological Resources Fact Sheet

U.S. Department of Homeland Security
Washington, DC 20472

FEMA

Working with Archaeological Sites - FEMA Factsheet

The term ***archaeological site*** is a general reference term for archaeological properties and resources which may or may not be eligible for inclusion in the National Register of Historic Places (NRHP). NRHP archaeological sites are *historic properties* where the subsurface remnants of a past culture survive in a physical context that allows for the interpretation of these remains. FEMA Historic Preservation (HP) Specialists are advised to use National Register Bulletin No. 36, "Guidelines for Evaluating and Registering Archaeological Properties" to evaluate archaeological sites (http://www.nps.gov/history/nr/publications/bulletins/arch/).

Archaeological Significance and Value

The majority of archaeological sites determined eligible for inclusion in the NRHP fall under Criterion D if they possess *significance* because of their potential to yield information "important in prehistory or history." This important information lies in a site's artifacts and features, associations, and contexts. Accordingly, any action that would alter a site's context could have an effect on its ability to yield information and could potentially diminish its ability to convey integrity through feeling or association.

Archaeological sites may also be included in the NRHP under Criteria other than Criterion D, especially if they are of traditional religious and cultural significance to Indian tribes or Native Hawaiian Organizations (NHOs). Such properties can be affected by direct physical impacts, visual intrusions, and atmospheric elements which may alter setting and feeling. By consulting with Indian tribes, NHOs, and others, FEMA has the opportunity to consider a variety of factors that contribute to an archaeological site's NRHP *significance*.

Human remains, associated funerary objects, and archaeological sites may possess *value* beyond their importance as sources of information about the past. The presence of burials, which are widely recognized in law and practice as having special qualities, means that a location may also possess *value* to living groups that extends beyond the interests of archaeological research. Burial sites may also be considered properties of traditional religious and cultural *significance*. For further details see:

- National Register Bulletin No. 38, Guidelines for Evaluating and Documenting Traditional Cultural Properties" (http://www.nps.gov/history/nr/publications/bulletins/nrb38/)
- National Register Bulletin No. 41, "Guidelines for Evaluating and Registering Cemeteries and Burial Places" (www.cr.nps.gov/nr/publications/bulletins/nrb41/)
- ACHP's "Policy Statement Regarding the treatment of Burial Sites, Human Remains, and Funerary Objects" (http://www.achp.gov/news022307hr.html)

The "Reasonable and Good Faith Effort" Standard

One of the core requirements of Section 106 regulations of the National Historic Preservation Act ("Protection of Historic Properties," 36 CFR Part 800) is that federal agencies make a "reasonable and good faith effort" to identify historic properties subject to effect by their undertakings. The Advisory Council on Historic Preservation (ACHP) recently issued guidelines on meeting this standard in a documented entitled "*Meeting The "Reasonable And Good Faith" Identification Standard In Section 106 Review*" (November 2011).

1. Per 36 CFR § 800.4(b)(1), FEMA makes a "reasonable and good faith effort" to identify historic properties by designing and implementing identification and evaluation plans that addresses the five following factors: *past planning, research and studies*
    - Past studies and identification efforts are essential in determining the scopes of current identification efforts, the types of eligible archaeological sites that might be present and their possible location.
2. *magnitude and nature of the undertaking*
    - Undertakings with the potential for extensive ground disturbance generally will require a more involved effort to identify archaeological sites than those with less ground disturbance.
3. *degree of federal involvement*
    - FEMA is a grant assistance agency with a lesser degree of influence, control, and involvement in undertakings that it funds.
4. *nature and extent of potential effects on historic properties*
    - FEMA's identification effort should be shaped by the knowledge of where effects are likely to occur and the likely impact of these effects on listed or eligible archaeological sites.
5. *likely nature and location of historic properties within the area of potential effects (APE)*
    - The scope of the identification effort should reflect what might be found and where it is likely to be located.

The term "reasonable" may be viewed within the context of intensity and scale and the term "good faith" relates to the development and execution of an identification effort.

When determining the appropriate level of archaeological fieldwork, FEMA HP Specialists may find it necessary to complete additional consultation with SHPOs, Tribal Historic Preservation Officers (THPOs), Indian tribes and/or NHOs to assist in the identification of archaeological sites and properties of traditional religious and cultural significance. Indian tribes and NHOs determine what properties are of traditional religious and cultural significance to them, therefore it is important to reach out to them to determine their level of interest in particular undertakings before initiating invasive archaeological field work. Failure to do so could result in FEMA funding inappropriate actions, such as the removal of materials from or insensitive treatment of historic properties, or result in the need to prepare supplementary identification studies later in Section 106 review.

While FEMA is not required to secure the "approval" of SHPOs/THPOs or other stakeholders on what constitutes a "reasonable and good faith effort", FEMA will seek the advice, guidance, and assistance of the ACHP if there is a dispute of interpretation [36 CFR § 800.2(b)(2)]. Since the

ACHP established this standard, its views on what constitutes an appropriate level of effort to identify eligible archaeological sites deserve careful consideration in the Section 106 process. In the end, however, the ACHP's views are advisory and FEMA makes the final decision about how much identification and evaluation work is enough.

Area of Potential Effects (APE) Considerations

In order to take effects into account, FEMA must first "take the steps necessary to identify historic properties in the area of potential effects" [36 CFR § 800.4(b)]. The area of potential effects (APE) defines the geographic limits of responsibility for purposes of Section 106 review. The defined boundaries of an APE should be influenced by the scale/magnitude and nature of the undertaking and may be different for different kinds of effects [36 CFR § 800.16(d)]. In general, the APE is the area within which an undertaking may directly or indirectly change the character or use of historic properties, if any such properties exist. APEs may need to be adjusted periodically during project formulation and may include more than one location.

APEs should be considered to be three dimensional since undertakings may impact historic properties on surfaces, above surfaces, and below surfaces. For example, in setting the APE's lower vertical limit, scientific and engineering analyses should be used to define a depth beyond which alteration to any eligible or listed archaeological site, if present, is not reasonably expected to occur. This analysis should demonstrate that any such site, if present, would not be affected by the undertaking through changes in such characteristics as soil compaction and soil chemistry.

Some archaeological sites may extend far beyond an established APE, but that does not mean that FEMA is required to conduct detailed studies to characterize such properties. Archaeological survey and testing work (ground verification) does not need to cover the entire APE and archaeological sensitivity models may assist FEMA in targeting identification efforts. Archaeological testing should occur within the APE wherever destructive impacts can be reasonably expected to occur later in time, be farther removed in distance or be cumulative. Identification efforts should be more intensive if there is heightened potential for APEs to contain archaeological sites of national level of significance or which could be of value to living communities.

Identification efforts should be logically designed to identify eligible properties that may be affected without being excessive or inadequate. FEMA should seek to collect enough of the right kind of information in order to make reasonable judgments about project effects. FEMA is not required to conduct and document comprehensive archaeological investigations of APEs; instead identification efforts should focus on where project related effects are likely to occur. One of the reasons the ACHP's regulation contains a post-review discovery provision [36 CFR § 800.13] is that the level of effort should be reasonable and in good faith, not 100 percent or exhaustive.

Good faith collaboration includes timely coordination with critical stakeholders, use of qualified individuals who meet the Secretary of the Interior's professional qualification standards (per Section 112 of NHPA), field/laboratory/analysis work that meets the scientific rigor of applicable standards and guidelines cited in state, tribal, and local laws, sufficient disclosure of analysis results, and adequate time for analysis, reporting, and report review by critical stakeholders.

The level of archaeological investigation within APEs may vary considerably depending on such factors as anticipated effects and prior ground disturbance. When defining scopes for archaeological investigations within defined areas of potential effects, is it important for FEMA HP Specialists to consider all of the five factors outlined in 36 CFR § 800.4(b)(1) in order to achieve the "reasonable and good faith" regulatory standard for the identification of historic properties.

Determination of Effects

In order to assess project effects on archaeological sites, FEMA HP Specialists must be able to identify and quantify the essential physical qualities of a site that are vital and whose presence is required for the site to convey significance within a framework of recognized relevant historical contexts and research themes. During this step of the review process apply the concepts of magnitude, severity, range, duration, frequency, variety and accumulation to make a determination of effect.

FEMA HP Specialists may elect to assume an archaeological site's NRHP eligibility in the absence of data gathered through potentially costly and destructive archaeological fieldwork. Making effects assessment using this approach is not without some risk, however the majority of FEMA projects involve in-kind repairs and it is impractical to conduct fieldwork at every project location. It is important to remember that it is always possible for unanticipated circumstances to result in injury to archaeological deposits if sufficient mechanisms to address inadvertent discoveries are not built into project scopes of work and implemented by FEMA applicants.

Avoidance, Minimization, and Mitigation of Adverse Effects

According to 36 CFR § 800.1, federal agencies should seek ways to avoid, minimize or mitigate any adverse effects on historic properties through consideration of alternatives. Avoidance is the preferred method and it often means bypassing impacts altogether through project redesign or relocation. Examples include changing routes of ingress and egress to a location and moving a project footprint to a portion of a property without intact archaeological resources.

Minimization measures may include use of specialized construction techniques to limit impacts to archaeological resources. One example is the Archaearium at Historic Jamestowne, the new structure was built using a system of special load bearing pilings and cantilevers to hover over a 17th century archaeological site. Another method to minimize adverse effects is burial-in-place. Burial-in-place techniques involve the design and installation of ground surface protection structures, usually earthen, to bury or cap all or portions of a site. An evaluation of such techniques can be found at http://azstateparks.com/shpo/downloads/SHPO_4_Burial.pdf. More common minimization measures comprise the inclusion of operation restrictions as project conditions. Such measures may include limitations on types of heavy equipment and their staging locations, use of protective pads or steel plates, limitations on work in wet soils, and hand removal of items on fragile surfaces.

There are many different types of mitigation measures including public education initiatives, planning surveys, alternate site interpretation/enhancement, and data recovery. FEMA HP

Specialists should remember to coordinate all discussions on mitigation measures with FEMA regional/headquarters staff and Program counterparts.

Curation Issues

Artifacts recovered from private lands during archaeological survey and excavation during the course of Section 106 review are usually the property of the landowner, unless state or local law mandates otherwise. (Human remains are generally covered under specific laws.)

The issue of concern to many archaeologists, SHPOs, Indian tribes, and NHOs is not always that of strict ownership but that of what happens to the artifacts. There may be tax incentives to donate artifacts to qualified institutions. The relevant SHPO should be contacted for up-to-date information on ownership laws and preservation incentives within a particular state. FEMA should reach agreement with the private landowner on the disposition of any artifacts extracted from his/her land prior to commencing work on the land. Additional guidance can be found in FEMA state-specific programmatic agreements.

Confidentiality Concerns

Under the Freedom of Information Act [FOIA, 5 U.S.C. 552], members of the public have a right to access federal agency records, except to the extent that such records (or portions thereof) are protected from public disclosure by exceptions found under the Act. The third such exception under FOIA provides that an agency may withhold records "specifically exempted from disclosure by statute" [5 U.S.C. 552(b)(3)].

One of these statutes that specifically restrict disclosure is Section 304 of NHPA [16 U.S.C. 470w-3]. Section 304 requires federal agencies, or other public officials receiving grant assistance under the NHPA, to "withhold from disclosure to the public, information about the location, character, or ownership of a historic resource…" if the agency and the Secretary of the Interior agree that its release may (1) cause a significant invasion of privacy, (2) risk harm to the historic resource, or (3) impede the use of a traditional religious site by practitioners. Once a determination to withhold from the public has been made, the National Park Service (NPS) functioning on behalf of the Secretary of the Interior, may advise FEMA who may have access to the information for NHPA purposes. If the information was developed as part of a Section 106 undertaking or under Section 110(f) of NHPA, NPS will consult with the Advisory Council on Historic Preservation (ACHP) in making the above determinations regarding withholding and access.

It is important to keep in mind several issues about the authority of Section 304 to restrict information:

- First, not all archaeological records, field notes, or data analyses are subject to withholding under Section 304 of the NHPA—only information about a property's "location, character, or ownership."
- The information excludable under the scope of Section 304 of the NHPA must be about a *historic property*. Information about an archaeological site that is neither listed, nor eligible for listing, on the NRHP, would fall outside the protective scope of Section 304.

- Finally, a determination has to be made that release of such information may cause a "significant" invasion of privacy, may risk harm to the historic resource, or may impede use of a traditional religious site by practitioners. Archaeological information (including as noted above records, notes, or analyses, or parts thereof) that does not meet these standards regarding historic property status, type of information, and risk of invasion, harm or impediment of use, is not protected under Section 304.

This could have implications, for example, for an Indian tribe or Native Hawaiian organization that shares sensitive written information about an archaeological site with FEMA to ensure that it is considered in Section 106 review. Should FEMA determine that the site is not listed or eligible for the NRHP, the written information collected about this site, including its location and sensitivity, would not be protected under Section 304.

Debris Removal Considerations

Archaeological sites may be affected by FEMA funded debris removal operations. Special consideration should be given to the confirmed and likely presence of archaeological materials at locations of proposed debris removal. Use of Geographic Information Technology (GIS) mapping technology may be beneficial to FEMA HP Specialists reviewing debris removal locations for the presence of suspect and reported archaeological sensitivity. Most states have not undergone systemic archaeological survey efforts, especially on private lands, but available data on archaeological sites should be incorporated into the project review process for both private property debris removal operations and removal of debris from publicly owned facilities.

Removal of large woody debris, including uprooted trees, and other types of materials has the potential to impact sensitive archaeological considerations and should be discussed with FEMA Public Assistance staff. Timing of debris removal operations, methods of removal, and the use of heavy equipment should be factored into the project review process. Some FEMA Regional offices have established protocols and procedures for assessing debris removal projects and FEMA's Federal Preservation Office (FPO) can offer guidance in this matter. FEMA HP Specialists may be asked to develop an appropriate archaeological sensitivity assessment methodology, in proportion to the appropriate level of effort, for debris removal operations in the absence of standardized written protocols and procedures.

Questions regarding this guidance should be directed to FEMA's Federal Preservation Officer.

Additional Resources

- National Park Service (NPS)
  - National Archaeological Database (http://www.cast.uark.edu/other/nps/nadb/nadb.mul.html)
  - Native American Consultation Database (http://home.nps.gov/nacd/)
  - Managing Archaeological Collections (includes 36 CFR Part 79) (http://www.nps.gov/archeology/collections/index.htm)
  - Archeology Laws: A Guide for Professionals (http://www.nps.gov/archeology/tools/laws/index.htm)

- Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (1983) (http://www.nps.gov/history/local-law/arch_stnds_0.htm)
- NPS Archeology Program Technical Briefs 1-23 (1988-2008) (http://www.nps.gov/archeology/pubs/techBr/index.htm)
- Archaeological Site Discovery & Evaluation (2007, NPS) (http://www.nps.gov/archeology/sites/discovery.HTM)
- National Register Bulletin No. 21, "Defining Boundaries for National Register Properties" (http://www.nps.gov/history/nr/publications/bulletins/boundaries/)
- National Register Bulletin No. 24, "Guidelines for Local Surveys: A Basis for Preservation Planning"(http://www.nps.gov/history/nr/publications/bulletins/nrb24/
- National Register Bulletin No. 36, "Guidelines for Evaluating and Registering Archaeological Properties" (www.cr.nps.gov/nr/publications/bulletins/arch/)
- National Register Bulletin No. 38, "Guidelines for Evaluating and Documenting Traditional Cultural Properties" (http://www.nps.gov/history/nr/publications/bulletins/nrb38/)
- National Register Bulletin No. 41, "Guidelines for Evaluating and Registering Cemeteries and Burial Places" (www.cr.nps.gov/nr/publications/bulletins/nrb41/)

- Advisory Council on Historic Preservation (ACHP)
  - Meeting The "Reasonable And Good Faith" Identification Standard In Section 106 Review http://www.achp.gov/docs/reasonable_good_faith_identification.pdf
  - Archaeology Task Force FAQ http://www.achp.gov/atf.html
  - Interactive Archaeology Guidance (under revision) http://www.achp.gov/archguide/
  - Recommended Approaches for Consultation on Recovery of Significant Information from Archeological Sites (1999, ACHP) (www.achp.gov/archguide.html)
  - Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects (2007, ACHP) (www.achp.gov/docs/hrpolicy0207.pdf)

- Other
  - "Assessing Site Significance: A Guide for Archaeologists and Historians", Donald Hardesty and Barbara Little, Alta Mira Press, 2009 (http://www.altamirapress.com/)
  - "The Archaeologist's Field Handbook: North American Edition", Heather Burke, Clair Smith, and Larry Zimmerman, Alta Mira Press, 2009 (http://www.altamirapress.com/)
  - "Mitigation of Construction Impact on Archaeological Remains", M.J. Davis, K.L.A. Gdaniec, M. Brice, and L. White, Museum of London Archaeology Service for English Heritage, 2004

Attachment J – Final Rule: Revised Definition of "Waters of the United States" Fact Sheet

Final Rule:
Revised Definition of "Waters of the United States"
Fact Sheet
December 2022

Overview

On Dec. 30, 2022, the U.S. Environmental Protection Agency (EPA) and Department of the Army (the agencies) announced a final rule founded upon the pre-2015 definition of "waters of the United States," updated to reflect consideration of Supreme Court decisions, the science, and the agencies' technical expertise.

The agencies chose the familiar, pre-2015 definition as a foundation because it has supported decades of clean water progress and has been implemented by every administration in the last 45 years. Changing regulatory definitions due to court decisions and final rules issued by the agencies in 2015, 2019, and 2020 have caused uncertainty that harmed communities and our nation's waters. The rule restores fundamental protections so that the nation will be closer to achieving Congress' direction in the Clean Water Act that our waters be fishable and swimmable. It will also ensure that our waters support recreation and wildlife.

This action provides clear rules of the road that will help advance infrastructure projects, economic investments, and agricultural activities—all while protecting water quality. EPA and Army are prioritizing and enhancing practical, on-the-ground implementation by providing tools and resources to support timely and consistent jurisdictional determinations under this definition of "waters of the United States."

Categories of "Waters of the United States" [1]

The agencies' definition of "waters of the United States" provides jurisdiction over waterbodies that Congress intended to protect under the Clean Water Act, including traditional navigable waters (e.g., certain large rivers and lakes), territorial seas, and interstate waters. For upstream waters that may significantly affect the integrity of downstream waters that Congress intended to protect, the rule provides a reasonable approach that recognizes regional and geographic differences. The rule accounts for regional differences in waters because regionally tailored implementation tools as well as local and regional conditions help determine whether waters are covered under this rule.

[1] This table is provided for informational purposes; the rule establishes the requirements defining "waters of the United States."

Types of Waters	Features	Examples of Waters Likely to Be Jurisdictional Under the Final Rule	Regulatory Text Paragraph
Traditional Navigable Waters	Large rivers and lakes that could be used in interstate or foreign commerce, as well as waterbodies affected by tides.	Mississippi River, Erie Canal, Great Lakes	(a)(1)
Territorial Seas	Territorial seas that extend three miles out to sea from the coast.	Atlantic Ocean, Pacific Ocean	(a)(1)
Interstate Waters	Includes waters like streams, lakes, or wetlands that cross or form part of state boundaries.	Lake Tahoe, portions of the Columbia River, portions of Savannah River	(a)(1)
Impoundments	Impounded bodies of water created in or from "waters of the United States," like reservoirs and beaver ponds.	Bear Gulch Reservoir in California	(a)(2)
Tributaries	Branches of creeks, streams, rivers, lakes, ponds, ditches, and impoundments that ultimately flow into traditional navigable waters, the territorial seas, interstate waters, or impoundments of jurisdictional waters. Tributaries are jurisdictional if they meet either the relatively permanent standard or significant nexus standard.	Wolftrap Run in Virginia, Puppy Creek in Arkansas	(a)(3)
Adjacent Wetlands	These wetlands can be next to, abutting, or near other jurisdictional waters or behind certain natural or constructed features. They are most often within a few hundred feet of jurisdictional waters. Adjacent wetlands are jurisdictional if they meet either the relatively permanent standard or the significant nexus standard, or where the wetland is adjacent to a traditional navigable water, the territorial seas, or an interstate water.	Parts of the Florida Everglades, Horicon Marsh in Wisconsin	(a)(4)
Additional Waters	These lakes, ponds, streams, or wetlands do not fit into the above categories. They are jurisdictional if they meet either the relatively permanent standard or the significant nexus standard.	Certain local lakes, streams, wetlands, etc.	(a)(5)

Standards for Determining Jurisdiction

To determine jurisdiction for tributaries, adjacent wetlands, and additional waters, the final rule relies on the longstanding approach of applying two standards. Certain types of waters are jurisdictional under the final rule if they meet either the relatively permanent standard or significant nexus standard.

- **Relatively Permanent is a test that** provides important efficiencies and clarity for regulators and the public by readily identifying a subset of waters that will virtually always significantly affect paragraph (a)(1) waters. To meet the relatively permanent standard, the waterbodies must be relatively permanent, standing, or continuously flowing waters connected to paragraph (a)(1) waters or waters with a continuous surface connection to such relatively permanent waters or to paragraph (a)(1) waters.
- **Significant Nexus is a test that** clarifies if certain waterbodies, such as tributaries and wetlands, are subject to the Clean Water Act based on their connection to and effect on larger downstream waters that Congress fundamentally sought to protect. A significant nexus exists if the waterbody (alone or in combination) significantly affects the chemical, physical, or biological integrity of traditional navigable waters, the territorial seas, or interstate waters.

Exclusions from "Waters of the United States"

The agencies' definition of "waters of the United States" does not affect the longstanding activity-based permitting exemptions provided to the agricultural community by the Clean Water Act. Additionally, the final rule codifies eight exclusions from the definition of "waters of the United States" in the regulatory text to provide clarity, consistency, and certainty to a broad range of stakeholders. **The exclusions are:**

- **Prior converted cropland**, adopting USDA's definition and generally excluding wetlands that were converted to cropland prior to December 23, 1985.
- **Waste treatment systems**, including treatment ponds or lagoons that are designed to meet the requirements of the Clean Water Act.
- **Ditches** (including roadside ditches), excavated wholly in and draining only dry land, and that do not carry a relatively permanent flow of water.
- **Artificially irrigated areas,** that would revert to dry land if the irrigation ceased.
- **Artificial lakes or ponds,** created by excavating or diking dry land that are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
- **Artificial reflecting pools or swimming pools,** and other small ornamental bodies of water created by excavating or diking dry land.
- **Waterfilled depressions,** created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction operation is abandoned and the resulting body of water meets the definition of "waters of the United States."
- **Swales and erosional features** (*e.g.*, gullies, small washes), that are characterized by low volume, infrequent, or short duration flow.

Public Input on this Action

The final rule is based on extensive outreach and engagement that began before the rule was proposed and continued through the public comment period of the proposed rule. The agencies received and considered over 114,000 written public comments in developing the final rule.

For More Information

Additional information, along with the final rule and supporting analyses, are available on EPA's website at https://www.epa.gov/wotus.