

California Environmental Protection Agency (Cal EPA)
State Water Resources and Regional Water Quality Control Boards (Water Board)
and
California Natural Resources Agency (CNRA)
California Department of Fish and Wildlife (CDFW)

2020 Statewide Fires –Environmental Protection Plan

1.0 Introduction

This document comprises the Environmental Protection Plan (EPP) to support Private Property Debris Removal (PPDR) program for the 2020 statewide fires. The EO and related proclamations authorize the suspension of state statutes with “waivers” authorized by the CalEPA and CNRA Secretaries to expedite the recovery of the counties impacted by the fires. This EPP is the basis for each Agency Secretary to approve Environmental Waivers for the performance of the PPDR.

The purpose of the EPP is to document how the PPDR will be managed to comply with applicable environmental laws and regulations by implementation of Post Fire Statewide Best Management Practices (BMPs) developed by each agency. In accordance with the EO and related proclamations, the Water Board and CDFW have prepared separate documents summarizing the BMPs unique to their respective statutory responsibilities which are contained in Attachments 1 and 2.

The implementation of the PPDR will also require the work to be conducted in accordance with the federal environmental laws and regulations for which the Federal Emergency Management Agency (FEMA) is the lead agency. FEMA has conducted federal Endangered Species Act Section 7 Consultation the US Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) for which PPDR Avoidance and Minimization Measures (AMMs) are summarized in Attachment 3 for reference. FEMA is also leading the National Historic Preservation Act (NHPA) Section 106 consultations.

Any State, Federal, or Local Regulatory Authority has the right to inspect the project area (any portion of the burn area under the influence of the EPP), following the rules of a landowner’s Fourth Amendment Rights. Non-compliance with applicable environmental laws and regulations identified herein may result in de-obligation of federal and state Public Assistance Grant funding for those undertaking the PPDR work.

This EPP does not apply to PPDR-related activities for which local agency permits may be required for project support facilities, including, but not limited to contractor basecamps, facility storage facilities and laydown areas, and equipment maintenance yards. The local agencies for each of the counties will administer the California Environmental Quality Act (CEQA) and California Planning and Zoning Laws when reviewing applications for construction or conditional use permits for these. Under CEQA all applicable federal and state environmental laws and regulations are considered and are summarized below:

Federal

- Clean Water Act (CWA), e.g., Section 401, United States Environmental Protection Agency (USEPA)/State Water Resources Control Board (SWRCB)
- water quality certification; Sections 301 and 402, National Pollutant Discharge Elimination System (NPDES)/Storm Water Pollution Prevention Plan (SWPPP); Section 404, fill and wetlands U.S. Army Corps of Engineers (USACE),
- Endangered Species Act (ESA, e.g., Section 7, USFWS, and the NMFS),
- Magnuson-Stevens Act (MSA)
- Migratory Bird Treaty Act (USFWS),
- Bald and Golden Eagle Protection Act (USFWS and CDFW),
- National Historic Preservation Act (e.g., Section 106), FEMA, California State Historic Preservation Officer (SHPO), and federally recognized tribes,
- Resource Conservation and Recovery Act (RCRA, e.g., Subtitle D - Non-Hazardous Waste for Timber and BioMass disposal, USEPA), and
- National Environmental Policy Act (NEPA, FEMA).

State

- Clean Water Act (CWA, i.e., Porter-Cologne Act/ California Water Code § 13260; California Code of Regulations, Title 23, § 3855 et seq., water quality certification from the appropriate regional board or state board, SWRCB) California Endangered Species Act (California Fish and Game Code § 2050-2115.5),
- California Fish and Game Code (CFGC) Section 1600 (e.g., Lake and Streambed Alteration Agreement), CDFW),
- California Migratory Bird Protection Act (CFGC Section 3513, CDFW),
- California Clean Air Act (CCAA)
- California Native American, Historical, Cultural and Sacred Sites Act ('Sacred Sites Act', SHPO, and FEMA/Cal OES tribal Liaison),
- E.O. B 10-11 (California Native Tribal Consultation),
- AB-52, Gatto. Native Americans CEQA Consultation,
- Z'Berg-Nejedly Forest Practice Act (2019 California Forest Practice Rules (FPR), CAL FIRE), and
- Native Plant Protection Act (CFGC Section 1900 et seq.)

Attachment 1

**California Environmental Protection Agency (Cal EPA)
State Water Resources and Regional Water Quality Control Boards (Water Board)**

2020 Statewide Fires –Environmental Protection Plan

1.0 Introduction

This document summarizes statewide Best Management Practices (BMPs) for California Environmental Protection Agency, State Water Resources and Regional Water Quality Control Boards (Water Board). The BMPs are topic-specific codes have been established for each of the BMP subjects for ease of reference in the Private Property Debris Removal Program (PPDR) for each of the four Debris Removal Operation Center (DROC) Branches (i.e., Northern, Inland, Bay and Southern).

AMM Subject	ID	Rule
Regulators	R-1	Any State, Federal, or Local Regulatory Authority has the right to inspect the project area (any portion of the burn area under the influence of the program, following the rules of a landowner's Fourth Amendment Rights. CAL FIRE will notify the California Water Boards for the purposes of on-site consultation prior to project implementation, mid-way through the project, and within 7 days of the anticipated completion of the project and while equipment is still on-site to implement any necessary management measures.
	R-2	The timber harvesting portion of the project will be enrolled under the applicable RWQCB's Timber Harvest Program. As a condition of enrollment, the Timber Programs require reasonable access to the property be provided whenever requested by California Water Boards staff for the purpose of performing inspections and conducting monitoring, including; sample collection, measuring and photographing/taping to determine compliance with permit conditions. Management practices and/or water quality protective measures resulting from such inspections, shall be incorporated in the project. Additionally, it requires that additional mitigation or management measures developed as a result of inspection, during enrollment, that are necessary to achieve water quality protection be incorporated into the project.
	R-3	The pre-processing sites and processing sites portions of the project will be enrolled under California Water Boards permits as appropriate and as indicated in the sections below. As a condition of such permit

coverage, reasonable access to the property must be provided whenever requested by California Water Boards staff for the purpose of performing inspections and conducting monitoring, including; sample collection, measuring and photographing/taping to determine compliance with permit conditions. Any corrective measures directed by the California Water Boards, or required by a permit's provisions, shall be implemented, and incorporated into the project.

- Forest Practice Rules**
- FPR-1 Should new road construction be necessary, the following will apply: A Notice of Emergency Operations (1052.1.b) will be filed with CALFIRE and enrollment under the applicable RWQCB Timber Harvest Program (as applicable to the specific property) will be obtained.
 - FPR-2 Consultation with the California Water Boards and DFW will be sought prior to construction.
 - FPR-3 Location and Classification of All Watercourses. The Registered Professional Forester (RPF), who should be a qualified biologist in identifying waters, or a supervised designee will identify the classification of all water courses, and mark off their watercourse and lake protection zone (WLPZ).
- California Water Boards**
- WB-1 **Water Quality**
 - WB-1a Saturated Soil Conditions. Operations will be limited or halted in saturated conditions. As called by the Operations Chief and RPF.
 - WB-1b Work requiring coverage under a permit issued by the California Water Boards (or other state or local agency) that is not otherwise within the scope of an approved Agency Secretary Environmental Waiver may not begin until such coverage is obtained.
 - WB-1c Tree Felling. No trees will be felled in a manner in which they might fall into a watercourse.
 - WB-1d Broken Culverts. Culverts broken by the contractor during work will be addressed expeditiously and may require a permit (storm water or water quality certification) from California Water Boards. In such instances consultation

with the California Water Boards, CalFire, and the Army Corps of Engineers to determine permitting requirements will be initiated prior to work.

- WB-1e Septic. Septic systems broken by the contractor will be addressed expeditiously, and consultation with the appropriate resource agencies, such as the county Environmental Health Department, to fix it will occur. The contractor will submit a plan to remedy within 3 days of an incident. Communications with a property owner will occur immediately.

- WB-1f Temporary crossings. New and replacement temporary watercourse crossings will be removed immediately after debris and hazard tree removal work has been completed or stabilized before winter. Permanent watercourse crossing will accommodate the estimated 100-year flood flow, including debris and sediment loads and must be permitted.

- WB-1g Shade-producing canopy. Maintain canopy to the maximum extent practicable. Consultation with the California Water Boards will be sought prior to operations.

- WB-1h Disturbance and creation of bare areas. Will be planned to avoid sediment discharge to waterbodies. At pre-processing and processing sites, the contractor will receive coverage under a stormwater permit administered by the appropriate RWQCB. Generally, coverage is required for soil disturbances of one acre or more, or when part of a larger plan of development.

- WB-1i Water drafting locations. If deemed necessary, water drafting associated with surface waters will be treated with BMPs to prevent overflow from transporting sediment to the waterbody.

- Wb-1i.a Water drafting locations will be treated with BMP's to prevent petroleum products from entering the waterbody. Intakes will be screened to prevent entrainment of aquatic species. Consultation with Federal, ROW EX State and Local agencies will occur before such an activity.

- WB-1j Waste Discharge Requirements. General Conditions for the Central Valley RWQCB 2017 Order Waste Discharge Requirements ([Order No. R5-2017-0061](#)) for Categories 2A, Industrial Fire Salvage and Non-Industrial Fire Salvage with No Residences, and 2B, Non- Industrial Fire Salvage with Residences are specified in Exhibit 7A, pages 16 through 20 will be referenced for discharges related to timberland management activities across RWQCBs.
- WB-1k SWPPP. At pre-processing and processing sites, if stormwater or other RWQCB specific permit coverage is required, the designated contractors' Qualified SWPPP Developer (QSD) will develop a Stormwater Pollution Prevention Plan that meets permit requirements. For soil disturbance at other project areas, sediment, and erosion control Best Management Practices to minimize water related erosion will, at a minimum, include the following protective measures:
- WB-1k.i Operating Equipment and Vehicle Leaks. Any equipment or vehicles driven and/or operated within, or adjacent to a WLPZ will be checked and maintained daily to prevent leaks of materials that could be deleterious to aquatic and terrestrial life or riparian habitat.
- WB-1k.ii Stationary Equipment Leaks. Stationary equipment such as motors, pumps, generators, and welders, located or adjacent to the stream/lake will be positioned over drip pans. Stationary heavy equipment will have suitable containment to handle a catastrophic spill/leak. Crews will maintain spill containment kits on-site at all times during project operations and/or staging or fueling of equipment.
- WB-1k.iii Equipment Maintenance and Fueling. No equipment maintenance, fueling or storage will occur within or near any stream channel, wetland, or lake margin where petroleum products or other pollutants from the equipment may enter these areas.
- WB-1k.iv No Dumping. No litter or construction debris will be deposited within a stream or lake, or where it may pass into a stream or lake. All debris and waste will be

picked up and removed daily. All trash cans will remain covered except when in use and covered at the end of each workday.

- WB-1k.v Sawdust and other non-hazardous wastes. Sawdust, soil, silt, clay, rock, felled trees, slash, sawdust, bark, and ash will be controlled in such a way that it does not enter a watercourse.
- WB-1k.vi Hazardous Materials. Debris, ash, soil, silt, bark, slash, sawdust, rubbish, creosote-treated wood, raw cement/concrete or washings thereof, asphalt, pesticides, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, wildlife, or riparian habitat resulting from the Project related activities will be prevented from contaminating the soil and/or entering any watercourse.
- WB-1k.vii Dust Control. Implement dust control practices, such as rocking temporary access road entrances and exits and covering temporary stockpiles when weather conditions require.
- WB-1k.viii Permanent erosion control. Incorporate permanent erosion control measures such as bio-filtration strips and swales to receive storm water discharges from the project work areas to the maximum extent practicable.
- WB-1k.ix Pesticides. No use of herbicides or pesticides will occur.
- WB-1k.x Should operations extend into the winter period, as defined by the Forest Practice Rules (FPR), limitations on operations related to using saturated roads, stabilizing erodible soils, and installing erosion control measures will be followed.
- WB-1k.xi Protect drop inlet structures near work areas.
- WB-1k.xii Monitoring for project effectiveness and effectiveness of resource protection measures should be conducted. Including monitoring of areas with potential erosion.
- WB-2 **Watercourse Crossings**

- WB-2a CEQA. Watercourse Crossings do not fall under 14 CCR 11041.1 Right-of-Way Exemption, therefore causing the activity to require a separate Notice of Emergency THP Exemption. CEQA coverage, or an exemption under CEQA, is required for watercourse crossings at pre-processing and processing sites, which require consulting with Water Board staff prior to installing new crossings to ensure CWA protections are adhered to.
- WB-2b Clean Water Act Compliance. If a new watercourse crossing must be installed, or existing watercourse crossing is in need of maintenance within a Water of the United States or Water of the State in a pre-processing or processing area, the Environmental Unit will consult with the US Army Corps of Engineers, and the California Water Boards to ensure environmental standards within the of Clean Water Act Section 404 and 401 permits or WDRs are in place before work will occur. The contractor will provide a work plan to aid in the drafting of the permit.
- WB-2c Endangered Species Act Consultation. If a new watercourse crossing must be installed, or existing watercourse crossing needs maintenance, the crossing site will be inspected by a wildlife biologist for fish and wildlife species prior to entering the watercourse. If a California Endangered Species Act (CESA) or Federal Endangered Species Act (FESA) listed species is found within the crossing location, the site will be flagged and avoided until consultation with the Department of Fish and Wildlife occurs.
- WB-2d Cultural/Tribal Consultation. If a new watercourse crossing must be installed, or existing watercourse crossing needs maintenance, the crossing site will be inspected by a Secretary of the Interior (SOI) qualified Archaeologist and Tribal Monitor. Confirmation that the site complies with Section 106 of the National Historic Preservation Act (NHPA) must be confirmed before work will occur.
- WB-2e Winter Period. Installation of temporary crossings will attempt to be installed outside of the Winter Period where work is occurring.
- WB-2f Watercourse Crossings – New. Should new watercourse crossings be necessary, the following will apply:

- WB-2f.i Consultation with the California Water Boards and DFW will be sought prior to construction
- WB-2f.ii Crossings should meet, or exceed the 100-year flood flow and associated debris standard in the FPR
- WB-2g Silt protection. Silt barriers, geotextile fabrics, and swamp mats will be utilized during installation
- WB-2h Equipment in-water. If equipment must cross a watercourse, equipment will be utilized that is the lightest to achieve the installation of the crossing. Additional RWCQB specific conditions may apply. Equipment will not enter the water without express permission from US Army Corps of Engineers, the California Water Boards, and the relevant Federal or State Department of Fish and Wildlife. Any in-water work may require coverage under a CWA section 401 Water Quality Certification or WDRs from the California Water Boards. This activity is not covered by CALFIRE's Utility ROW Exemption.
- WB-2i Do Not Impair Water Flow. The installation of bridges, culverts or other structures shall be installed such that water flow is not impaired and upstream or downstream passage of fish and all aquatic life-forms is assured at all times. If structures and associated materials are not designed to withstand high seasonal flows, they shall be removed before such flows occur.
- WB-2j Fill Materials. Materials and methods used for temporary crossings shall cause minimal turbidity or siltation. Clean 2-6-inch pit run rock, screened river gravels, clean washed 2-inch plus rock or gravel, and/or logs in fill materials shall be included. Bridge abutments below the high-water mark shall be rock or logs. When fill material is removed from the crossing, the channel shape and gradient shall be returned to pre-project condition and stabilized to the extent feasible, and any adjacent bare soil shall be stabilized by mulching or other effective method (see subsection WB-2h & WB-2i). Any new permanent fill or excavation in Waters of the US and/or Waters of the State may require coverage under a CWA section 401 Water

Quality Certification or WDRs issued by the California Water Boards.

- WB-2k Recreate Channel Grade. During crossing removal, all fill material shall 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.
- WB-2l Stabilize Crossing Sites. All bare mineral soil exposed in conjunction with crossing construction, deconstruction, maintenance, or repair, shall be treated for erosion immediately upon completion of work on the crossing, and prior to the onset of precipitation capable of generating runoff. Erosion control will be used as specified to stabilize the approach and bank of the watercourse. If the site is seeded, planting and seeding with native species, or a sterile seed mix and mulching is acceptable.
- WB-2m Stabilize and Inspect Decommissioned and Abandoned Road Crossings. Decommissioned/abandoned roads and crossings, once used by Operations, shall be stabilized, and then inspected following the first storm event producing bank full stage flows and again prior to filing the completion report. The inspection should verify the effectiveness of the stabilization measures in preventing sediment discharges to the watercourse and to ensure the measures are functioning to restore natural drainage and hillslope stability. If stabilization measures are found to be ineffective, further stabilization measures shall be applied, unless reentering the site would cause greater damage than leaving the ineffective stabilization measures. Such inspection results shall be reported to the California Water Boards and will likely be included as supplemental monitoring requirements under the Timberland General Order.
- WB-2n Access Prevention Barricades. Barricades shall be constructed at all points of access to the decommissioned or abandoned road to effectively prevent use by any passenger vehicle or equipment.
- WB-3 **Sediment Control**

- WB-3a Best Management Practices (BMP's). Use of CASQA and/or Forest Practice BMP Standards and/or standards established through WDRs by the California Water Boards will be met.
- WB-3b Disturbed Soils. Prior to any ground disturbing work at a project site, erosion control materials (fiber rolls, bonded fiber matrix, erosion control mats, soil tackifiers) will be stockpiled on site. All disturbed soils within the Project site will be stabilized to reduce erosion potential, both during and following construction. Planting and seeding with native species, or a sterile seed mix and mulching is acceptable erosion control BMPs. Where suitable vegetation cannot reasonably be expected to become established, non-erodible materials, such as coconut fiber matting, will be used for such erosion control stabilization. At pre-processing and processing sites, coverage under a stormwater permit administered by the California Water Boards may be required. Generally, coverage is required for soil disturbances of one acre or more, or when part of a larger plan of development. sterile seed mix and mulching is acceptable erosion control BMPs. Where suitable vegetation cannot reasonably be expected to become established, non-erodible materials, such as coconut fiber matting, will be used for such erosion control stabilization. At pre-processing and processing sites, coverage under a stormwater permit administered by the California Water Boards may be required. Generally, coverage is required for soil disturbances of one acre or more, or when part of a larger plan of development.
- WB-3c Revegetation. If required, as a result of agency consultation, or as required by an applicable permit, disturbed areas will be revegetated with local native species suitable to the restoration. Such as the decommissioning of an access road leading to a temporary crossing.
- WB-3d Trenching / Excavation /Grading Spoils. As required by an applicable permit, castings or spoils from the trenching / excavation operations will be placed on the stream side of the trenching / excavation /Grading site.

WB-3e Bank Stabilization. Bank stabilization will be constructed with suitable non-erodible materials that will withstand wash out. The bank stabilization material will extend above the ordinary high-water mark. Only clean material such as rock riprap that is free of trash, debris and deleterious material will be used as bank stabilization. Asphalt and concrete will not be considered an acceptable material. Generally, bank stabilization work will require a CWA section 401 permit or WDRs from the California Water Boards, as well as other applicable regulatory agencies.

WB-3f Sediment and Erosion Control Measures. Biodegradable sediment and erosion control measures will be utilized throughout all phases of operation where sediment runoff from exposed slopes threatens to enter a river, stream, wetland, or lake. If there is a 30 percent chance of a rain event within 24 hours, sediment and erosion control will be inspected (before and after the event), and repaired, or upgraded to prevent any runoff. Measures will be maintained in good operating condition until the site is signed off by the Operations Chief. Maintenance includes, but is not limited to, removal of accumulated sediment and/or replacement of damaged silt fencing, compost socks, coir logs, coir rolls, and/or straw bale dikes. Modifications, repairs, and improvements will be made to the sediment and erosion control measures whenever it is needed. If the sediment barrier fails to retain sediment, corrective measures will be employed, and an Environmental Specialist notified, immediately. Materials used in the sediment barriers will not pose an entanglement risk to fish or wildlife (e.g. plastic monofilament netting

WB-3g Silt Barriers. If work or vehicle crossings must occur within a wetted stream or lake area, precautions to minimize turbidity and siltation will be employed and may require the placement of geotextile fabrics, 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. Equipment will be placed on swamp mats, where the ground is softer. Materials used in the silt barrier will not pose an entanglement risk to fish or wildlife (no plastic monofilament netting). The contractor will obtain coverage under a storm water

permit and/or a CWA section 401 Water Quality Certification from the California Water Boards, refer to the specific permit requirements regarding sediment and erosion control.

- WB-3h Removal of Silt from Barriers. Silt collected around the silt barriers will be removed on an as needed basis to prevent silty/turbid water from flowing around the silt barriers during storm events. Silt barriers which trap sediment will 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. Silt fencing used through the rainy season may require adaptive placement or removal if storm flooding would dislodge and discharge downstream. The stream will then be restored to a clean and natural condition. For coverage under a storm water permit and/or a CWA section 401 Water Quality Certification from the California Water Boards, refer to the specific permit requirements regarding sediment and erosion control.
- WB-3i Mapping. The contractor will map out the placement of BMPs, to be kept in the Environmental Tree Removal Data Management System, to account for where they have been placed, what type, and how much material was used.
- WB-4 **Pre-processing and processing sites**
- WB-4a In addition to any other required permit coverage or authorization, pre-processing and processing sites may require coverage under a general Industrial Stormwater Permit, and/or Waste Discharge Requirements issued by the California Water Boards, depending on the type of operation, exposure of materials, and other factors. Pre-project consultation with the California Water Boards is recommended.
- WB-5 **Drinking Water Operations and Coordination**
- WB-5a Coordination with California Water Boards staff and area involved water systems.
- WB-5b Coordination with area involved water systems – All activities necessitating the use of area water, such as, and not limited to dust suppression, cleaning, washing,

sweeping, and irrigation, will be coordinated with the area involved water system to avoid any potential conflicts. All activities that may affect, impede, or impact the ability of the area involved water system from executing their duties will be coordinated with the area involved water system to avoid any potential conflicts.

- WB-5c Use of water from the area involved water system will be conducted such that low operational pressures will be avoided. Low operational water system pressures can risk public health and result in the issuance of unsafe water alerts – boil water notice, or other. Coordinate with the area involved water system as to where to connect for water service as well as the rate of use and the equipment to use.
- WB-5d If and as required, local permits will be obtained and use of water meters will be implemented. Contact the local jurisdiction to verify this requirement – City, County, area involved water system.
- WB-5e Any digging, debris removal, earth or soil work, or excavation can result in damage to water facilities including waterlines. Coordinate with the area involved water system so to understand where the water facilities, such as waterlines, are located to avoid these conflicts. The water service to the defunct locations may need to be shut off at the meter to prevent uncontrolled loss of water and water pressure. The area involved water system may need to shut-off the utility service valve and pull the meter, severing the connection to the customer line. Service connections will need to be staked painted blue to maintain visibility for any crews working in the area.
- WB-5f Placement of debris piles may impede area involved water system access to their waterlines and facilities. Coordinate with area involved water system over the proper location of placement of debris materials and waste.
- WB-5g Area involved water systems may be conducting restorative activities, such as, but not limited to, flushing waterlines, repairing water facilities, and replacing water facilities. Staging of materials,

equipment and machinery may impede area involved water system access to their waterlines and facilities. Coordinate with area involved water system over the proper location of staging of materials, equipment, and machinery

Attachment 2

**California Natural Resources Agency (CNRA)
California Department of Fish and Wildlife (CDFW)**

2020 Statewide Fires –Environmental Protection Plan

**2020 Statewide Fires –Environmental Protection Plan
California Department of Fish and Wildlife (CDFW)
Post Fire Statewide Best Management Practices
2020 Statewide Fires**

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1.0 Introduction

This document summarizes statewide and county specific Best Management Practices (BMPs) for California Department of Fish and Wildlife (CDFW) Regions in Sections 2.0 and 3.0. The BMPs have been developed for use and reference in the Private Property Debris Removal Program (PPDR) for each of the four Debris Removal Operation Center (DROC) Branches (i.e., Northern, Inland, Bay and Southern).

2.0 Statewide BMPs

2.1 Watercourse Buffer

Equipment Limitation Zone. A minimum 25-foot watercourse buffer 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, or vehicles will limit operations within the ELZ unless removal of structures or debris are necessary within the ash footprint. If an existing or new watercourse crossing must be used, the crossing site should be inspected for fish and wildlife species prior to entering the watercourse. If a California Endangered Species Act (CESA) listed species is found within the crossing location, the site should be flagged and avoided until consultation with a biological monitor occurs.

Associated and Applicable California Fish and Game Code (CFGF) sections:

- CFGF § 1600 (et seq); Lake or Streambed Alteration Agreement, notification of significant alteration to stream channel, bank, or bed.
- CFGF § 5650 and § 5652; Deposition of deleterious material into waters of the state.
- CFGF § 5901; Fish passage.
- CFGF § 5937; Sufficient water for fish.
- CFGF § 5948; Obstruction of stream.
- California Endangered Species Act (CESA); FGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

2.2 Vegetation Clearing

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

Applicable regulations include:

- CFGF § 3503 and § 3503.5; Protection for bird nests and eggs and birds of prey.
- CESA; CFGF § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

Remove Cleared Material from Stream. All trimmed or cleared material/vegetation should be removed from the area and deposited where it cannot re-enter the stream.

Applicable regulations include:

- CFGC § 5650 and § 5652; Deposition of deleterious material into waters of the state.

2.3 Sediment Control

Disturbed Soils. Prior to any ground disturbing work at a project site, erosion control materials should be stockpiled on site. All disturbed soils within the Project site should be stabilized to reduce erosion potential, both during and following construction. Planting and seeding with native species, or a noxious weed-free seed mix and mulching is acceptable. Where suitable vegetation cannot reasonably be expected to become established, non-erodible materials, such as coconut fiber matting, should be used for such stabilization.

Applicable regulations include:

- CFGC § 5650 and § 5652; Deposition of deleterious material into waters of the state.

Trenching / Excavation Spoils. No castings or spoils from the trenching / excavation operations should be placed on the stream side of the trenching / excavation site.

Applicable regulations include:

- CFGC § 5650 and § 5652; Deposition of deleterious material into waters of the state.

Bank Stabilization. Bank stabilization should be constructed 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 deleterious material shall be used as bank stabilization. Asphalt and concrete should not be considered an acceptable material.

Applicable regulations include:

- CFGC § 1600 (et seq); Lake or Streambed Alteration Agreement, notification of significant alteration to stream channel, bank, or bed.
- CFGC § 5650 and § 5652; Deposition of deleterious material into waters of the state.
- CFGC § 5901; Fish passage.
- CFGC § 5937; Sufficient water for fish.
- CFGC § 5948; Obstruction of stream.

Sediment and Erosion Control Measures. Sediment and erosion control measures should be utilized throughout all phases of operation where sediment runoff from exposed slopes threatens to enter a river, stream, or lake. Measures should be maintained in good operating condition until the site is approved by the Incident

Management Team (IMT). Maintenance includes, but is not limited to, checking control measures for trapped or entangled fish and wildlife, removal of accumulated sediment and/or replacement of damaged silt fencing, compost socks, coir logs, coir rolls, and/or straw bale dikes. Modifications, repairs, and improvements should be made to the sediment and erosion control measures whenever it is needed. If the sediment barrier fails to retain sediment, corrective measures should be employed, and a biological monitor notified, immediately. **Materials used in the sediment barriers should not pose an entanglement risk to fish or wildlife.**

Applicable regulations include:

- CFGC § 5650 and § 5652; Deposition of deleterious material into waters of the state.
- CFGC § 5901; Fish passage.
- CFGC § 5937; Sufficient water for fish.
- CFGC § 5948; Obstruction of stream.

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. Erosion control structures such as straw bales and/or siltation control fencing 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.

Applicable regulations include:

- CFGC § 5650 and § 5652; Deposition of deleterious material into waters of the state.

Silt Barriers. If work or vehicle crossings must occur within a wetted stream or lake area, precautions to minimize turbidity and siltation should be employed 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.**

Applicable regulations include:

- CFGC § 1600 (et seq); Lake or Streambed Alteration Agreement, notification of significant alteration to stream channel, bank, or bed.
- CFGC § 5650 and § 5652; Deposition of deleterious material into waters of the state.
- CFGC § 5901; Fish passage.
- CFGC § 5937; Sufficient water for fish.
- CFGC § 5948; Obstruction of stream.

Removal of Silt from 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. Silt barriers which 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 restored to a clean and natural condition.

Applicable regulations include:

- CFGC § 1600 (et seq); Lake or Streambed Alteration Agreement, notification of significant alteration to stream channel, bank, or bed.
- CFGC § 5650 and § 5652; Deposition of deleterious material into waters of the state.
- CFGC § 5901; Fish passage.
- CFGC § 5937; Sufficient water for fish.
- CFGC § 5948; Obstruction of stream.

2.4 Pollution

Operating Equipment and Vehicle Leaks. Any equipment or vehicles driven and/or operated within or adjacent to the stream/lake should be checked and maintained daily to prevent leaks of materials that could be deleterious to aquatic and terrestrial life or riparian habitat.

Applicable regulations include:

- CFGC § 5650 and § 5652; Deposition of deleterious material into waters of the state.

Stationary Equipment Leaks. Stationary equipment such as motors, pumps, generators, and welders, located within or adjacent to the stream/lake should be positioned over drip pans. Stationary heavy equipment should have suitable containment to handle a catastrophic spill/leak.

Applicable regulations include:

- CFGC § 5650 and § 5652; Deposition of deleterious material into waters of the state.

Equipment Maintenance and Fueling. No equipment maintenance, fueling, or storage should occur within or near any stream channel or lake margin where petroleum products or other pollutants from the equipment may enter these areas.

Applicable regulations include:

- CFGC § 5650 and § 5652; Deposition of deleterious material into waters of the state.

No Dumping. No litter or construction debris should be deposited within a stream or lake, or where it may pass into a stream or lake. All debris and waste should be picked up, contained, and removed daily.

Applicable regulations include:

- CFGC § 5650 and § 5652; Deposition of deleterious material into waters of the state.

Hazardous Materials. Debris, soil, silt, bark, slash, sawdust, 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 which could be hazardous to aquatic life, wildlife, or riparian habitat resulting from the Project related activities should be prevented from contaminating the soil and/or entering any watercourse.

Applicable regulations include:

- CFGC § 5650 and § 5652; Deposition of deleterious material into waters of the state.

2.5 Watercourse Crossings

Do Not Impair Water Flow. The installation of bridges, culverts or other structures should be installed such that water flow is not impaired and upstream or downstream passage of fish and all aquatic life-forms is assured at all times. If structures are to be utilized during high seasonal flows, such structures should accommodate those flows or should be removed before such flows occur.

Applicable regulations include:

- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.
- CFGC § 5901; Fish passage.
- CFGC § 5937; Sufficient water for fish.
- CFGC § 5948; Obstruction of stream.

Fill Materials. Materials and methods used for temporary crossings should cause minimal turbidity or siltation. 2-6-inch pit run rock (as appropriately sized), screened river gravels, clean washed 2-inch or more rock or gravel, and/or logs in fill materials should be included. Bridge abutments below the high-water mark shall be rock or logs. When fill material is removed from the crossing, the channel shape and gradient should be returned to pre-project condition to the extent feasible, and any adjacent bare soil should be stabilized by mulching or other effective method.

Applicable regulations include:

- CFGC § 1600 (et sec); Lake or Streambed Alteration Agreement, notification of significant alteration to stream channel, bank, or bed.
- CFGC § 5901; Fish passage.
- CFGC § 5937; Sufficient water for fish.
- CFGC § 5948; Obstruction of stream.

Recreate Channel Grade. During 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, as approved by the regulatory agencies.

Applicable regulations include:

- CFGC § 1600 (et sec); Lake or Streambed Alteration Agreement, notification of significant alteration to stream channel, bank, or bed.
- CFGC § 5901; Fish passage.
- CFGC § 5937; Sufficient water for fish.
- CFGC § 5948; Obstruction of stream.

Stabilize Crossing Sites. All bare mineral soil exposed in conjunction with crossing construction, deconstruction, maintenance, or repair, should be treated for erosion immediately upon completion of work on the crossing, and prior to the onset of precipitation capable of generating runoff. Erosion control should consist of packed slash or weed-free straw mulch in a mosaic of depths of ½ to 2 inches. If the site is seeded, planting and seeding with native species, or a noxious weed-free seed mix and mulching is acceptable.

Applicable regulations include:

- CFGC § 1600 (et sec); Lake or Streambed Alteration Agreement, notification of significant alteration to stream channel, bank, or bed.
- CFGC § 5650 and § 5652; Deposition of deleterious material into waters of the state.

Stabilize and Inspect Decommissioned and Abandoned Road Crossings.

Decommissioned/abandoned road crossings should be stabilized and then inspected following the first storm event producing bank full stage flows and again prior to filing the completion report. The inspection should verify the effectiveness of the stabilization measures in preventing sediment discharges to the watercourse and to ensure the measures are functioning to restore natural drainage and hillslope stability. If stabilization measures are found to be ineffective, further stabilization measures should be applied, unless reentering the site would cause greater damage than leaving the ineffective stabilization measures.

Applicable regulations include:

- CFGC § 1600 (et seq); Lake or Streambed Alteration Agreement, notification of significant alteration to stream channel, bank, or bed.
- CFGC § 5650 and § 5652; Deposition of deleterious material into waters of the state.

Access Prevention Barricades. Barricades should be constructed at all points of access to the decommissioned or abandoned road to effectively prevent use by any passenger vehicle or equipment.

Applicable regulations include:

- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

2.6 Wildlife Protection

Leave Wildlife Unharmred. If any wildlife is encountered during the course of construction, said wildlife will be allowed to leave the construction area unharmed. If any CESA listed wildlife is encountered, a biological monitor should be notified.

Applicable regulations include:

- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

Trees with Active Nests/Dens/Roosts/Nest Cavities. Prevent disturbance of trees that contain active nests/dens/roosts/nest cavities. If surveys identify an active nest/den/roost/nest cavity, a buffer should be established between the construction activities and the active nest/den/roost/nest cavity so that nesting activities are not interrupted. The buffer should be delineated by temporary fencing or markers and remain in effect throughout project activities or until the nest/den/roost/nest cavity is no longer active. The buffer(s) should be determined by the biological monitor based upon the life history of the individual species, 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 nearby and within watercourses and downed logs that may provide food source and shelter for wildlife.

Applicable regulations include:

- CFGC § 3503 and § 3503.5; Protection for bird nests and eggs and birds of prey.
- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

Rock outcrops and downed logs. When these habitat elements are present, create a buffer around rock outcrops and downed logs that may provide shelter for CESA-listed species (e.g., Southern Rubber Boa). If downed logs and/or boulders must be moved, a qualified biologist should survey area prior to start of removal activities to prevent wildlife mortality to the extent possible.

Applicable regulations include:

- CFGC § 86 where "Take" shall be avoided. Take is defined as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.
- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

Dens and burrows. Project areas should be visually inspected for the presence of potential dens and burrows. A work buffer should be marked to maintain these resources undisturbed to the maximum extent possible during work.

Applicable regulations include:

- CFGC § 86 where "Take" shall be avoided. Take is defined as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.
- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

Wildlife Trees. 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 or features providing valuable habitat where no immediate risk to infrastructure exists. On-site review of trees by an arborist to determine their viability should occur before removing burnt trees.

Applicable regulations include:

- CFGC § 3503 and § 3503.5; Protection for bird nests and eggs and birds of prey.
- CFGC § 86 where "Take" shall be avoided. Take is defined as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.
- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

Escape Ramp in Trench. At the end of each workday, an escape ramp should be placed at each end of any open trench to allow any animals that may have become entrapped in the trench 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.

Applicable regulations include:

- CFGC § 86 where “Take” shall be avoided. Take is defined as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.
- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

Aquatic Species Surveys. If work or dust abatement activities are proposed within a watercourse, a biologist who is knowledgeable in the identification of CESA listed fish and amphibian species, should survey the work area prior to initiating operations within or immediately adjacent to the watercourse. If a CESA listed species or evidence of their presence are found, the site should be flagged and all water drafting, vegetation and ground disturbing operations at that location site should cease until consultation with a biological monitor occurs to identify measures to minimize and avoid impacts where feasible.

Applicable regulations include:

- CFGC § 86 where “Take” shall be avoided. Take is defined as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.
- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.
- CFGC § 1600 (et sec); Lake or Streambed Alteration Agreement, notification of significant alteration to stream channel, bank, or bed.
- CFGC § 5901; Fish passage.
- CFGC § 5937; Sufficient water for fish.
- CFGC § 5948; Obstruction of stream.

2.7 Plant and Habitat Protection

Special-Status Botanical Species. Avoid impacts to non-target 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 exclusion zone (EEZ) should be placed around the population. If trees are to be harvested within the EEZ, trees should be felled away from the core plant populations if feasible.

Applicable regulations include:

- CFGC § 86 where “Take” shall be avoided. Take is defined as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.
- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

Wet meadows and vernal pools. Visual inspection prior to Project activities to identify sensitive areas, such as meadows and vernal areas should take place. Work buffers should be marked to avoid impacts to sensitive mesic habitats. Water drafting should

be avoided in watersheds that support wet meadows and/or vernal pools. Water drafting may reduce groundwater levels supporting endemic, small distribution plant species that are at critically low population levels.

Applicable regulations include:

- CFGC § 86 where “Take” shall be avoided. Take is defined as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.
- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

Sensitive land surface types. Visually inspect for and avoid 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.

Applicable regulations include:

- CFGC § 86 where “Take” shall be avoided. Take is defined as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.
- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

2.8 Spread of Invasive Species

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 entering the work area. This material includes dirt or plant seeds on construction equipment, tools, boots, and clothing.

Applicable regulations include:

- CFGC § 5650 and § 5652; Deposition of deleterious material into waters of the state.

3.0 County-Specific BMPs based on CDFW Region

3.1 CDFW 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 at <https://wildlife.ca.gov/Portals/0/Images/reg-2-3-detail.jpg>.
- **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 at <https://wildlife.ca.gov/Portals/0/Images/reg-2-3-detail.jpg>.

- **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.

Only the counties impacted by the 2020 Statewide Wildfires are identified below and are illustrated in Exhibits 1 through 30, figures depicting Special Status Species and Watershed by County and declared disaster.

3.2 Species

Marbled Murrelet (MAMU) (Mendocino, Sonoma, Santa Cruz, and Monterey counties).

Prior to any tree removal, the project area should be evaluated for suitable MAMU habitat and the project area and adjacent parcels should be evaluated for MAMU presence or occupancy. If the project area sustained a high to severe burn intensity and contains suitable MAMU habitat, retain trees with canopy deformities and/or limbs exceeding 4-inches in diameter, that provide relatively flat suitable nesting platforms in addition to adjacent screen trees.

If the project area sustained low to moderate burn intensity and contains suitable MAMU habitat, avoid work during the breeding season, March 24 to September 15, and retain trees with canopy deformities and/or limbs exceeding 4-inches in diameter, that provide relatively flat suitable nesting platforms in addition to adjacent screen trees. If the project area is within 500 feet of late seral habitat, known occupied habitat, or suitable habitat, avoid work from March 24 to September 15. If work cannot be completed outside of the breeding season, CDFW should be contacted for consultation and additional measures may be developed.

Applicable regulations include:

- CFGC § 86 where “Take” shall be avoided. Take is defined as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.
- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

Northern Spotted Owl (NSO) (Mendocino, Sonoma, Siskiyou, Trinity, Shasta, and Lake counties).

Prior to any tree removal, the project area and adjacent parcels (within 0.7 miles) should be evaluated for any known NSO Activity Centers (AC) utilizing CDFW's Spotted

Owl Database (<https://wildlife.ca.gov/Data/CNDDDB/Spotted-Owl-Info>). If the project area sustained a high to severe burn intensity and an AC is known within or adjacent to the project area, retain the AC and nest tree(s) in addition to adjacent screen trees if feasible. CDFW should be contacted for consultation for any ACs that appear to no longer function as habitat.

If the project area sustained low to moderate burn intensity and an AC is known within or adjacent to the project area, avoid work during the breeding season, February 1 to July 31, and retain the AC and nest tree(s) in addition to adjacent screen trees if feasible. If work cannot be completed outside of the breeding season, CDFW should be contacted for consultation and additional measures may be developed.

For known ACs that were **not** compromised during the fire, seasonal disturbance buffers (1/4 mile) should be observed for occupied sites during the breeding season (Feb 1-July 31) or at least until protocol surveys support probable absence, non-nesting, nest failure, or fledgling flight can be determined. No operations, other than the use and maintenance of existing roads, should occur within 1,000 feet of any occupied NSO AC. If NSO are heard or observed during timber operations, all operations should cease and CDFW should be contacted for consultation.

Applicable regulations include:

- CFGC § 86 where "Take" shall be avoided. Take is defined as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.
- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

Sudden Oak Death (SOD) (for Alameda, Contra Costa, Humboldt, Lake, Marin, Mendocino, Monterey, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma, and Trinity counties).

To prevent the spread of SOD, host material smaller than 4 inches in diameter should not leave the area of origin; host debris (leaves, twigs, branches, etc.) should be inspected for and removed from equipment, water vehicles should not transport water to different watersheds, vehicles, saws, boots, etc.; vehicles should be washed at a commercial wash station, or pressure washed with soap at their own facility prior to working on another property; and work should be limited during wet weather to prevent the spread of spores.

Swainson's Hawk (Los Angeles and Yolo counties).

If suitable habitat exists within the project area or along access routes, nest surveys should be conducted according to the Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California (survey protocol is available at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83991&inline>).

Applicable regulations include:

- CFGC § 86 where "Take" shall be avoided. Take is defined as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.
- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

Joshua tree (Los Angeles, Mono, and San Bernardino counties).

- Disturbance or removal of vegetation within Joshua tree habitat should be kept to the minimum necessary to complete operations.
- Vehicles and heavy equipment within Joshua tree habitat should be operated from disturbed areas and existing roads and should not be operated from natural areas.
- Joshua trees should only be removed if the tree is determined to be an ongoing safety hazard.
- Below ground portions of removed Joshua trees should be retained.
- Where possible, Joshua trees that are damaged by fire should be retained because they may sprout and regenerate from branches, root crown, or underground rhizomes.
- A 10-foot equipment exclusion zone (EEZ) should be established around any retained Joshua tree present during operations.
- Wire cages may be installed around regenerating Joshua tree sprouts to reduce impacts from herbivores that likely have reduced post-fire food and water availability.

Applicable regulations include:

- CFGC § 86 where "Take" shall be avoided. Take is defined as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.
- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

Foothill Yellow Legged Frog (Butte, Fresno, Lake, Los Angeles, Madera, Mendocino, Mono, Monterey, Napa, Nevada, Plumas, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Trinity, Tulare, Tuolumne, Yolo, and Yuba counties).

If work needs to be conducted within or adjacent to suitable foothill yellow-legged frog habitat, the work should occur between October 1 - December 31 to avoid

impacts to frogs. If work must be conducted outside this window, a qualified biologist should inspect the work site for frogs in any life stage. If found during inspections, exclusion fencing should be erected between the work area and the frog habitat. If work must occur within the habitat, CDFW should be contacted for coordinating avoidance measures prior to work starting.

Applicable regulations include:

- CFGC § 86 where "Take" shall be avoided. Take is defined as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.
- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

California Red Legged Frog (Butte, Fresno, Lake, Los Angeles, Madera, Mendocino, Monterey, Napa, Nevada, Plumas, San Diego, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Solano, Sonoma, Stanislaus, Tulare, Tuolumne, and Yuba counties).

If work needs to be conducted within or adjacent to suitable CA red-legged frog habitat, the work should occur between May 1 - February 24 to avoid impacts to frogs. If work must be conducted outside this window, a qualified biologist should inspect the work site for frogs in any life stage. If found during inspections, exclusion fencing should be erected between the work area and the frog habitat. If work must occur within the habitat, CDFW should be contacted for coordinating avoidance measures prior to work starting.

Applicable regulations include:

- CFGC § 86 where "Take" shall be avoided. Take is defined as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.
- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

Least Bell's Vireo (Butte, Fresno, Los Angeles, Monterey, San Diego, San Mateo, Santa Clara, Yolo, and Yuba counties).

If work needs to be conducted within or adjacent to riparian habitat with potential suitability for Least Bell's vireo, work should be conducted between September 15 and March 15. If work must occur outside this window, a qualified biologist should evaluate the project area and adjacent areas for habitat suitability for least Bell's vireo. If the qualified biologist determines that suitable habitat for the species exists CDFW should be contacted for coordinating avoidance measures prior to work starting.

Applicable regulations include:

- CFGC § 86 where "Take" shall be avoided. Take is defined as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.
- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

Willow Flycatcher (Butte, Fresno, Lassen, Los Angeles, Madera, Mono, Monterey, Nevada, Plumas, San Diego, San Mateo, Santa Clara, Shasta, Sierra, Siskiyou, Stanislaus, Trinity, Tulare, Tuolumne, and Yolo counties).

If work needs to be conducted within or adjacent to riparian habitat with potential suitability for the Southwestern willow flycatcher, work should be conducted between September 15 and March 15. If work must occur outside this window, a qualified biologist should evaluate the project area and adjacent areas for habitat suitability for the southwestern willow flycatcher. If the qualified biologist determines that suitable habitat for either species exists CDFW should be contacted for coordinating avoidance measures prior to work starting.

Applicable regulations include:

- CFGC § 86 where "Take" shall be avoided. Take is defined as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.
- CESA; CFGC § 2050-2115.5; prohibition of the Take of any species designated as Endangered, Threatened, or candidates for listing.

4.0 EXHIBITS

4.0 EXHIBITS

2020 Statewide Fires Special Status Species and Watershed Areas, by County

Attachment 3

**United States Fish and Wildlife Service and National Marine Fisheries Service
Avoidance and Minimization Measures**

2020 Statewide Fires

USFWS, Sacramento Fish and Wildlife Office (SFWO) Response to Emergency Consultation for Private Property Debris Removal related to federal disaster declarations FEMA-4558-DR-CA and 4569-DR-CA

November 30, 2020

The following are recommendations from SFWO in response to FEMA's October 23, 2020, letter initiating emergency consultation on Private Property Debris Removal related to federal disaster declarations FEMA-4558-DR-CA and 4569-DR-CA. FEMA requested that the USFWS provide recommended measures that may be implemented to avoid and minimize potential adverse effects from the proposed project to any federally listed species or designated Critical Habitat that may be present within the burn scars as illustrated in the burn scar maps and GIS layers FEMA provided to the USFWS.

For species within the San Francisco Bay-Delta Fish and Wildlife Office jurisdiction (California clapper rail, delta smelt, and salt marsh harvest mouse), the proposed project will not result in take of these species, since the project footprint does not overlap with the habitats of these species.

The following conservation measures are recommended to minimize the effects of the emergency response action on listed species or their critical habitat. In that context, these measures are recommended to FEMA, as practicable in recognition that human health and public safety are paramount.

General Guidance

1. FEMA should identify any listed species that may occur at each location and determine potential effects to species.
2. A biologist will be present where it is determined that species may occur.

Guidance from the March 27, 2019, Programmatic Biological Opinion (FEMA's PBO; Service File No. 0SESMF00-2018-F-3331-1)

1. The existing species measures in FEMA's PBO should be followed as closely as possible. In the event the project requires to deviate significantly from the existing measures FEMA will notify USFWS for guidance.
2. Species-specific conservation measures are suggested where it is determined species may occur for the following:
 - a. California Red-Legged Frog California Tiger Salamander Central California DPS, California Tiger Salamander, Sonoma DPS
 - CRLF-CTS-1 Biological Monitor
 - CRLF-CTS-2 Seasonal Avoidance
 - CRLF-CTS-3 Rain Event Limitations
 - CRLF-CTS-4 Pre-construction Survey
 - CRLF-CTS-5 Daily Clearance Surveys
 - CRLF-CTS-6 Environmentally Sensitive Areas
 - CRLF-CTS-7 Wildlife Exclusion Fencing
 - CRLF-CTS-8 Entrapment Prevention

- CRLF-CTS-9 Encounters with Species
 - CRLF-CTS-11 Environmental Awareness Training
 - CRLF-CTS-12 Disease Prevention and Decontamination Procedures
 - CRLF-CTS-13 Pump Screens
 - CRLF-CTS-14 Hand Clear Vegetation
 - CRLF-CTS-16 Accidental Spills, SWPPP, Erosion Control, and BMPs
 - CRLF-CTS-22: Removal of Diversion and Barriers to Flow (see comment below regarding this measure)¹
- b. Giant Garter Snake
- GGS-1 Seasonal Avoidance
 - GGS-2 Site Restrictions
 - GGS-3 Clearance Surveys
 - GGS-5 Fencing
 - GGS-6 Contacting the Service
 - GGS-7 Biological Monitor
 - GGS-8 Reporting
- c. Alameda Whipsnake
- AWS-1 Environmental Awareness Training
 - AWS-2 Site Restrictions
 - AWS-3 Biological Monitor
 - AWS-4 Habitat Avoidance
 - AWS-5 Seasonal Avoidance
 - AWS-6 Use Hand Operated Equipment
 - AWS-7 Pre-Construction Surveys
 - AWS-8 Clearance Surveys
 - AWS-9 Entrapment Prevention
 - AWS-10 Wildlife Exclusion Fencing
 - AWS-11 Fencing
 - AWS-12 Using Cover Boards
 - AWS-13 Reporting
 - AWS-14 Suitable Erosion Control Materials
 - AWS-15 Limitation on Rodenticide Use
 - AWS-16 Encounters with Species
- d. Valley Elderberry Longhorn Beetle
- VELB-1 Fencing
 - VELB-2 Avoidance Area
 - VELB-3 Worker Education
 - VELB-4 Biological Monitor
 - VELB-5 Seasonal Avoidance
 - VELB-9 Erosion Control and Revegetation
 - VELB-11 Impacts to Individual Shrubs
- e. California Freshwater Shrimp
- CAFS-1 Biological Monitor
 - CAFS-3 Seasonal Avoidance
 - CAFS-4 Habitat Protection
 - CAFS-6 Site Restrictions

- CAFS-8 Erosion Control
- CAFS-9 Suitable Erosion Control Materials
- CAFS-12 Waste Management
- CAFS-13 Fueling Restrictions
- f. Multiple Butterfly Species Conservation Measures (Bay Checkerspot Butterfly, Myrtle's Silverspot Butterfly, and San Bruno Elfin)
 - LEP-1 Pre-construction Surveys
 - LEP-2 Biological Monitor
 - LEP-3 Fencing
 - LEP-4 Monitoring Log
 - LEP-5 Dust Control
- g. Vernal Pool Fairy Shrimp, Conservancy Fairy Shrimp, Longhorn Fairy Shrimp, Vernal Pool Tadpole Shrimp
 - VPBR-1 Pre-construction Surveys
 - VPBR-2 Biological Monitor
 - VPBR-3 Exclusion Areas
 - VPBR-4 Seasonal Avoidance
 - VPBR-5 Work Restrictions During Dry Season
 - VPBR-6 Work Restrictions During Wet Season
 - VPBR-7 Erosion Control
 - VPBR-8 Suitable Erosion Control Materials
 - VPBR-9 Dust Control
 - VPBR-10 Monitoring During Wet Season
 - VPBR-11 Vehicle Maintenance
 - VPBR-12 Site Restrictions
 - VPBR-13 Use of Native Plants for Revegetation
 - VPBR-14 Invasive Plant Species Prevention
- h. Conservation Measures for Vernal Pool Listed Plants
 - VP PLANT-1 Pre-construction Surveys
 - VP PLANT-2 Flagging
 - VP PLANT-3 Biological Monitor
 - VP PLANT-4 Exclusion Areas
 - VP PLANT-5 Seasonal Avoidance
 - VP PLANT-6 Work Restrictions During Dry Season
 - VP PLANT-7 Work Restrictions During Wet Season
 - VP PLANT-8 Erosion Control
 - VP PLANT-9 Suitable Erosion Control Materials
 - VP PLANT-10 Dust Control
 - VP PLANT-11 Monitoring During Wet Season
 - VP PLANT-12 Vehicle Maintenance
 - VP PLANT-13 Site Restrictions
 - VP PLANT-14 Use of Native Plants for Revegetation
 - VP PLANT-15 Invasive Plant Species Prevention
- i. Marbled Murrelet
 - MAMU-1 Work Restrictions in Occupied Habitat
 - MAMU-2 Work Restrictions in Unoccupied Habitat

- MAMU-3 Work Restrictions in Marbled Murrelet Critical Habitat
- j. Northern Spotted Owl
 - NSO-1 Contact the Service for NSO Data Records
 - NSO-2 Protocol Level Surveys
 - NSO-3 Work Restrictions in Previously Surveyed Landscape
 - NSO-4 Work Restrictions in Previously Un-surveyed Landscape
 - NSO-5 Noise Abatement
 - NSO-6 Habitat Avoidance
 - NSO-7 Avoid Reducing Habitat Quality
 - NSO-8 Avoid Foraging Habitat
 - NSO-9 Work Restrictions in NSO Critical Habitat

Additional Guidance Species Covered under PBO

Tidewater Goby

1. Any cleanups that are on watersheds leading to coastal lagoons will take priority to prevent debris/slides from flowing into closed lagoons.

Guidance on Species Not Covered in PBO

San Francisco Garter Snake

1. Any Project Coast side San Mateo or Santa Cruz Counties (Particularly the areas around Ano Nuevo State Park) will require a biological monitor experienced in identifying San Francisco garter snakes.
2. No garter snakes will be handled or relocated during work. All work will cease, and the snake will be allowed to leave on its own.
3. FEMA will notify USFWS should any San Francisco garter snakes are identified.

Fisher – Southern Sierra Nevada DPS

Applicable only for debris removal/home sites within the Creek Fire and Sequoia Complex/Castle Fire footprints. Follow applicable measures in the FEMA Programmatic Biological Opinion general avoidance measures. Additional measures are recommended:

1. Maintain or enhance special habitat features
 - a. Prior to vegetation treatments in or adjacent to potential denning habitat¹, design measures to protect important habitat structures, such as large diameter live and dead conifers and oaks, clumps of dense large trees, large trees with cavities for denning, clumps of small understory trees, and large logs.
 - b. Retain conifers greater than 30 inches and hardwoods greater than 20 inches in diameter.
 - i. Large trees (>24 inches diameter at breast height [dbh]) with deformities, broken tops, large branches, and cavities should be prioritized for retention over other trees.
 - ii. Within potential denning habitat retain all conifer snags greater than 35 inches in diameter and all hardwood snags greater than 27 inches in diameter.
 - iii. If possible, instead of removing entire hazard trees, work crews can remove the top half of trees (or whatever portion of the tree needs to be cut down to remove the hazard) and leave the lower half as future wildlife habitat (snag).

2. To reduce disturbance from noise during the denning season
 - a. If elevated (above ambient) noise disturbance of extended time (e.g., > 2 hours) in known occupied or potential denning habitat²;
 - i. Do not generate noise at night.
 - ii. Do not conduct noise-producing activities (i.e., heavy equipment use that would occur during debris removal) before June 30. Note: activities with less noise (i.e., chainsaw level) for less than 2 hours total duration can be conducted after May 1. This LOP doesn't restrict activities with normal ambient noise levels like driving a vehicle, which are not likely to disturb denning fishers.

Yosemite Toad

This species has the potential to occur in the Creek Fire footprint. If working in suitable Yosemite toad upland and aquatic habitat, FEMA should follow the applicable measures outlined for the CRLF/CTS, as outlined in the previous section.

Lahontan Cutthroat Trout and Little Kern Golden Trout

One creek within the Creek Fire footprint is documented to have occurrences of Lahontan Cutthroat Trout (Portuguese Creek); the closest home sites are a little over 3 miles from this creek. However, other occurrences are possible as CDFW stocks this species, and not all locations are in CNDDDB. It is recommended that FEMA work with USFS, CDFW, and USFWS to determine occurrences of Lahontan Cutthroat Trout.

Little Kern golden trout only occurs in the Sequoia Complex/Castle Fire footprint. Based on the information provided, one home site is located near an occupied LKGT stream, an unnamed stream off the Little Kern River, near Doe Meadow.

Applicable general measures from the FEMA PBO should be followed. Additional measures are recommended for the trout species:

1. Biological Monitor: A SFWO-approved biologist(s) will be onsite during all activities that may result in take of trout species.
2. Environmentally Sensitive Areas: Prior to the start of construction, Environmentally Sensitive Areas (ESAs) - defined as areas containing sensitive habitats adjacent to or within construction work areas for which physical disturbance is not allowed - will be clearly delineated using high visibility orange fencing. The ESA fencing will remain in place throughout the duration of the proposed action, while construction activities are ongoing, and will be regularly inspected and fully maintained at all times. The final project plans will depict all locations where ESA fencing will be installed and will provide installation specifications. The bid solicitation package special provisions will clearly describe acceptable fencing material and prohibited construction related activities including vehicle operation, material and equipment storage, access roads and other surface-disturbing activities, within ESAs. With prior approval from the Service, a hybrid ESA/WEF fencing material that is both hi-visibility and impermeable to wildlife movement may be used in place of paired ESA fencing and WEF fencing. Also with prior approval from the Service, an exception to the foregoing fencing measures may apply on a case-by-case basis during the following situations: (1) at work sites where the duration of work activities is very short (e.g., 3 days or less), the work activities occur during the

dry season, and the installation of ESA fencing will result in more ground disturbance than from project activities; or (2) at work sites where the substrate (i.e., rock, shale, etc.) or topography (i.e., slopes > 30 degrees) inhibit the safe and proper installation of fencing materials. In these cases, biological monitoring will occur during all project activities at that site.

3. **Pump Screens:** If a water body is to be temporarily dewatered by pumping, intakes will be completely screened with wire mesh not larger than 5 millimeters and the intake will be placed within a perforated bucket or other method to attenuate suction to prevent trout species from entering the pump system. Pumped water will be managed in a manner that does not degrade water quality and upon completion be released back into the water body, or at an appropriate location in a manner that does not cause erosion. No rewatering of the water body is necessary if sufficient surface or subsurface flow exists to fill it within a few days, or if work is completed during the time of year the water body will have dried naturally. To avoid effects to eggs and larvae, work within seasonal ponds will be conducted when the pond has been dry naturally for at least 30 days
4. **Accidental Spills, SWPPP, Erosion Control, and BMPs:** Prior to the onset of work, a plan will be in place for prompt and effective response to any accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to implement if a spill occurs. Storm-water pollution prevention plans and erosion control BMPs will be developed and implemented to minimize any wind- or water-related erosion. These provisions will be included in construction contracts for measures to protect sensitive areas and prevent and: minimize storm-water and non-storm-water discharges. Protective measures will include, at a minimum:
 - a. No discharge of pollutants from vehicle and equipment cleaning is allowed into any storm drains or watercourses.
 - b. Vehicle and equipment fueling and maintenance operations must be at least 50 feet away from aquatic or riparian habitat and not in a location where a spill may drain directly toward aquatic habitat, except at established commercial gas stations or at an established vehicle maintenance facility. The monitor will implement the spill response plan to ensure contamination of aquatic or riparian habitat does not occur during such operations.
 - c. Concrete wastes will be collected in washouts and water from curing operations is to be collected and disposed of properly. Neither will be allowed into watercourses.
 - d. Spill containment kits will be maintained onsite at all times during construction operations and/ or staging or fueling of equipment.
 - e. Dust control will be implemented, and may include the use of water trucks and non-toxic tackifiers (binding agents) to control dust in excavation and fill areas, rocking temporary access road entrances and exits, and covering of temporary stockpiles when weather conditions require.
 - f. Graded areas will be protected from erosion using a combination of silt fences, fiber rolls, etc. along toes of slopes or along edges of designated staging areas, and erosion control netting (such as jute or coir) as appropriate on sloped areas. No erosion control materials that use plastic or synthetic monofilament netting will be used.

- g. Permanent erosion control measures such as bio-filtration strips and swales to receive storm water discharges from paved roads or other impervious surfaces will be incorporated to the maximum extent practicable.
 - h. All grindings and asphaltic-concrete waste will be stored within previously disturbed areas absent of habitat and at a minimum of 50 feet from any aquatic habitat, culvert, or drainage feature.
5. Removal of Diversion and Barriers to Flow: Upon completion of construction activities, any diversions or barriers to flow will be removed in a manner that will allow flow to resume with the least disturbance to the substrate. Alteration of creek beds will be minimized to the maximum extent possible; any imported material will be removed from stream beds upon completion of the project. ¹

Kern Primrose Sphinx Moth

This species is only a concern in the Stagecoach Fire footprint, Kern County. Based on the information provided, USFWS is unable to determine if home sites are located in suitable habitat for this species. It is recommended that FEMA work to determine if the project may affect the Kern primrose sphinx moth. If applicable, FEMA should work with SFWO to adapt measures from the FEMA PBO for this butterfly species.

Coastal Plant Guidance

1. For any plant species FEMA determines may be affected, a qualified biologist will flag habitat to be avoided in the identified work area and extending 100 feet. Work will stay on defined access routes and work areas.

Sierra Cascade Plants - Layne's Butterweed, Pinehill Flannelbush, Stebbin's Morning Glory, Mariposa Pussypaws, and Springville Clarkia

Layne's Butterweed species would be a higher concern for the home sites in Nevada and Yuba counties. There are known occurrences south of the Claremont Bear Fire as well. Pinehill Flannelbush is a listed gabbro dependent plant that occurs in Yuba County. Stebbin's Morning Glory is a gabbro/serpentine soils plant that occurs in Nevada County. Mariposa Pussypaws is found in open, granitic soils and has the potential to be located in Creek Fire footprint. Springville Clarkia is generally found in granitic soils and has the potential to be located in Sequoia Complex/Castle Fire footprint.

To avoid and minimize adverse effects to the gabbro/serpentine and granitic soils plants, the measures listed below will be implemented in the project footprint where suitable habitat occurs, and the species have potential to occur.

1. Pre-construction Surveys: If possible, prior to construction activities, a SFWO approved biologist will conduct protocol-level bloom-season plant surveys where suitable habitat occurs (gabbro/serpentine or granitic soils) within the project footprint. If any listed plants are detected, FEMA will work with USFWS to determine if additional measures are appropriate to avoid impacts to listed plant species.
2. Flagging: Flagging or other field markers identifying the plants, or in the event protocol-level surveys were not conducted - the suitable habitat, will be placed prior to each work event and removed after that work event is completed for all phases of the proposed project.

3. Biological Monitor: A SFWO-approved biologist will monitor all construction activities within 250 feet of suitable habitat for listed plants to ensure that no unnecessary loss or destruction of habitat occurs.
4. Use of Native Plants for Revegetation: When revegetating upland areas to pre-project condition, native plants will be used to the maximum extent practicable.
5. Invasive Plant Species Prevention: To minimize the introduction of invasive plant species, construction vehicles will be cleaned prior to entering any gabbro/serpentine or granitic soils plants habitat.

¹ An onsite biologist and/or hydrologist should make the call if logs, vegetation, etc. should be left in and adjacent to streams after fires to reduce erosion

²Potential denning habitat is defined as: *habitat types* - Douglas fir, Eastside Pine, Jeffrey Pine, Montane Hardwood-Conifer, Montane Hardwood, Montane Riparian, Ponderosa Pine, Sierran Mixed Conifer, or White Fir; *CWHR size and density classes* - 4D, 5M, 5D, and 6; *Elevational range* - 3300-8000 feet (ft). These are areas with the potential to provide denning habitat either currently or in the future given continued stand development.

Date: 10/30/2020

To: FEMA

From: National Marine Fisheries Service

RE: Emergency ESA Section Consultation request – Private Property Debris Removal related to federal disaster declarations FEMA-4558-DR-CA and 4569-DR-CA involving the 2020 summer/fall wildfires in 26 California counties

Avoidance and Minimization Measures

1. Heavy equipment should not enter the water under any circumstance and there should be no driving of any kind below the OHW mark.
2. Root wads and stumps should be left in place during hazard tree removal to prevent soil erosion. Slash and branches left on ground may help stabilize soils.
3. No trimmed or cleared vegetation, including sawdust and bark to the extent possible, should be allowed to enter a waterbody. Slash and woody debris can be chipped and spread, piled, or removed from the site.
4. Standard erosion control measures (e.g., fiber rolls, silt fence, seeding with native or sterile seed, mulching) should be used.
5. A Storm Water Pollution Prevention Plan and erosion control BMPs should be developed and implemented. These materials will include measures to prevent equipment and vehicle leaks, fuel and hazardous material spills, litter and construction debris issues, dust issues, and the use of pesticides.
6. All hazardous materials should be stored in properly designated containers within a storage area with an impermeable membrane between the ground and the hazardous materials. The storage area would be encircled by a berm to prevent the discharge of pollutants to groundwater or runoff into the habitats of listed species.
7. All contractors should, to the maximum extent practicable, reduce the amount of disturbance at each site to the absolute minimum necessary to accomplish the project. Any topsoil removed by excavation, grading, trenching, or other means will be stockpiled, covered, and encircled with silt fencing to prevent loss or movement of the soil into listed species habitats. All topsoil will be replaced in a manner to recreate pre-disturbance conditions as closely as possible.
8. To protect sensitive CCC Steelhead and SCCC Steelhead all tree removal near rivers in Santa Cruz, Sonoma, Monterey, and western Napa Counties should be prioritized and completed before mid-December to the extent possible.



FEMA

**IN REPLY REFER TO:
EB-PA-DR-4558/4569-CA – PPDR**

December 2, 2020

Signatories to the 2019 Programmatic Agreement and Interested Parties

Re: Private Property Debris Removal for wildfires within multiple counties
FEMA-4558-DR-CA and FEMA-4569-CA – Private Property Debris Removal
**Expedited Review for Emergency Undertakings
Final Decision Regarding Treatment Measures to Resolve Potential Adverse Effects, in
Accordance with Stipulation II.B.2.v. of the FEMA/California Programmatic Agreement**

Dear Signatories and Interested Parties,

The U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA), in response to the wildfires that resulted in Presidentially declared Major Disaster Declarations FEMA-4558-DR-CA (Incident Period – August 14 – September 26, 2020) and FEMA-4569-CA (Incident Period – September 4 – November 17, 2020), proposes to provide Federal disaster assistance under its Public Assistance Program authorized under Section 403 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act Pub. L. No. 93-288 (1974) (codified as amended at 42 U.S.C. § 5121 et seq.) (Stafford Act).

The State of California has requested assistance for emergency Private Property Debris Removal (PPDR) within the declared counties. On November 11, 2020, FEMA provided notification of its intent to review the emergency undertaking for compliance with Section 106 of the National Historic Preservation Act (NHPA) in accordance with Stipulation II.B. regarding Expedited Review for Emergency Undertakings of the 2019 Programmatic Agreement among FEMA, the California State Historic Preservation Officer (SHPO), and the California Governor's Office of Emergency Services (Cal OES) (Agreement). The notification was provided to the SHPO, the Advisory Council on Historic Preservation (ACHP), the California Department of Resources Recycling and Recovery (Cal Recycle), and eighty-eight (88) federally recognized tribes that had been identified as having ancestral areas and potential interest within the declared counties.

As noted in the referenced November 11, 2020 notification, the Expedited Review for Emergency Undertakings process is not applicable to any PPDR operations that may occur on Tribal Reservations as the Agreement does not apply to Undertakings on or affecting Tribal Reservations. Should PPDR be requested and determined eligible for Tribal Reservations, FEMA will consult with the respective Tribes in accordance with Stipulation I.C of the Agreement and the Section 106 implementing regulations at 36 CFR § 800.2(c)(2)(i).

In response to the November 11, 2020 notification and at the request of several interested parties, FEMA facilitated two videotelephony meetings via the ZOOM software platform on November 17 and 18, 2020,

which were attended by representatives of thirteen federally recognized Native American tribes, ACHP, SHPO, Cal OES, and Cal Recycle. Comments were provided to FEMA during both sessions. Written comments and/or statements of interest were provided by seventeen (17) federally recognized tribes, with three stating that the operational areas were outside their areas of concern. Letters were received from SHPO dated November 13 and 19, and from ACHP dated November 13 and 20, that provided additional comments regarding FEMA's proposed Treatment Measures.

FEMA is providing this communication regarding its final decision in accordance with Stipulation II.B.2.v of the Agreement. FEMA has taken all comments into consideration and has modified the proposed Treatment Measures to avoid, minimize, and mitigate potential adverse effects to historic properties accordingly. Due to the emergency nature of the operation, not all requests can be reasonably implemented at the commencement of the operation, however FEMA will initiate consultation as requested to further address the concerns of the interested parties once the immediate threat to human health and safety has been adequately addressed. Similar comments were received from multiple sources; however, FEMA has determined it is infeasible to implement the following measures at the onset of the debris removal operation.

- Unlimited Archaeological Monitoring – Archaeological monitoring has been requested during all ground disturbing activities due to the potential to encounter previously unrecorded sites.
 - FEMA has determined that uninformed archaeological monitoring cannot be reasonably implemented at the initiation of the operation due to health and safety concerns, without impairing the State's ability to respond to the impending threat. Lack of sufficient data regarding previously recorded archaeological sites and project activities necessary to make informed decisions and implement a prudent strategy for archaeological monitoring. FEMA has determined that the Treatment Measures proposed, including cultural resource identification training and the provision of an Archaeological Coordinator and Tribal Cultural Advisor in each branch are a reasonable approach to limit potential adverse effects during the initial emergency operation, and FEMA will consider additional archaeological monitoring as more information is made available.
- Immediate Tribal Monitoring – Tribal monitoring has been requested during all ground disturbing activities within tribal ancestral areas of interest due to the potential to encounter resources of tribal cultural significance.
 - FEMA has determined that tribal monitoring cannot be implemented at the commencement of the emergency debris removal operation without impairing the State's ability to respond to the impending threat to public health and safety. FEMA will facilitate consultation with interested federally recognized tribes at the earliest convenience and will endeavor to implement tribal monitoring in areas where debris removal operations have the potential to effect resources of cultural significance to tribes as soon as possible.
- 30-Day Periodic Reports – Interim updates to interested parties regarding the implementation of Treatment Measures have been requested every 30-days due to operational speed, rather than 60-day intervals.
 - FEMA has determined that providing interim updates at 30-day intervals is not reasonable, and would interfere with the Archaeological Coordinators and Tribal Cultural Advisors, objective to provide guidance and training to debris removal crews, implement measures to avoid, minimize, and mitigate potential adverse effects, and to document encountered resources. FEMA proposes to implement additional Treatment Measures within

approximately 60-days from the start of the operation, which would coincide with the initial update to the interested parties.

In coordination with the SHPO, Cal OES and Cal Recycle, and participating Tribes, FEMA will require the following Treatment Measures to avoid, minimize, and mitigate potential adverse effects to historic properties, should they be encountered during the emergency phase of PPDR are implemented:

The following Treatment Measures take into account the requests and recommendations of interested parties, which can be implemented at the commencement of the undertaking and have been developed to avoid, minimize, and mitigate potential adverse effects to historic properties. These measures shall be implemented in all branches of operations as soon as practicable without resulting in operational delays.

Treatment Measures outlined below regarding tribal participation in cultural resource training and the presence of a Tribal Cultural Advisor will be limited to operational areas identified through responses submitted to FEMA by federally recognized Native American Tribes (tribe(s)), and will be specific to identified areas of ancestral interest within the burn scar locations.

A. Resource Training – Debris Removal Crews (to be provided by State operation)

Cultural resource sensitivity and awareness training shall be mandatory for all crews prior to working in the field in all branches of the operation as part of their operational orientation and instruction. Cultural resource sensitivity and awareness training content and materials shall be developed and delivered by Archaeological Coordinators assigned to each geographic Branch in coordination with the Tribal Cultural Advisor, in applicable branches of operation based on tribal participation.

Cultural resource sensitivity and awareness training shall include basic instruction regarding the identification, required protection and treatment process, and respect for Native American cultural resources.

B. Archaeological Coordinator – Assigned to each geographic Branch of the operation (to be provided by State operation)

An Archaeological Coordinator who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology as set forth in the Federal Register at 48 Fed. Reg. 44716-01 (September 29, 1983), as amended (SOI Qualified Archaeologist), as determined by FEMA, shall be assigned to each geographic Branch of the operation (to coordinate with the Incident Command) to serve as a resource for debris removal crews and to respond in the event of an inadvertent archaeological discovery during field operations. The Archaeological Coordinator will coordinate directly with the Tribal Cultural Advisor (as applicable) regarding the treatment of prehistoric period cultural resources encountered during field operations.

C. Tribal Cultural Advisor – A Tribal Historic Preservation Officer (THPO) and/or their designee will be assigned to each geographic Branch of the operation based on tribes' identification of ancestral areas and interest provided to FEMA, to coordinate directly with the Archaeological Coordinator regarding the treatment of prehistoric resources encountered during field operations. Tribal Cultural Advisors professional qualifications will be evaluated and approved in coordination with the interested federally recognized tribes.

- a. Duplication of effort should be avoided. When multiple tribes express duplicative areas of interest within a particular operational area, FEMA and the appropriate State operational

Branch will ask the THPOs (or appropriate tribal representative) to coordinate to identify the appropriate Tribal Cultural Advisor and provide the recommendation to State operational management.

- b. In the event that multiple tribes indicate areas of ancestral interest in an operational area that are not duplicative, a Tribal Cultural Advisor representing each tribe for independent areas of interest will be identified and assigned based on a recommendation from the federally recognized tribe.
 - c. Treatment Measures specifically identified to address the concerns of federally recognized tribes will be implemented as quickly as practicable and will be streamlined as the tribes provide information to FEMA regarding their concerns and areas of interest.
 - d. Tribes that have not contacted FEMA will not be precluded from providing feedback, comments, or requesting participation at a later date.
- D. Inadvertent Discoveries: Cal OES (or designee) will document inadvertent discoveries and potential impacts to historic properties and cultural resources identified during field operations and provide:
- a. As unanticipated resources are encountered and recognized by field crews who have participated in resource training, the Archaeological Coordinator and Tribal Cultural Advisor will be notified, and an archaeologist will be dispatched to document the discovery.
 - i. The archaeologist will recommend measures that may be reasonably implemented to avoid and or minimize effects.
 - ii. Documentation sufficient for the preparation of DPR forms will be collected for each discovery.
 - b. Inadvertent discoveries of historic period resources will be addressed via the Archaeological Coordinator with the intent to avoid or minimize impacts while limiting potential operational delays.
 - c. Inadvertent discoveries that contain both historic period and prehistoric period resources, as determined in coordination with the Tribal Cultural Advisor and Archaeological Coordinator, will be documented, and then addressed on site by the Tribal Cultural Advisor.
 - *No laboratory studies, scientific analysis, collection, curation, or video recording are permitted for tribal cultural resources without the prior written consent of the interested Native American tribes.
 - d. Inadvertent discovers which have cultural relevance to tribes only will be addressed via the Tribal Cultural Advisor.
- DI. Reporting Requirements: Cal OES (or designee) shall provide periodic and final reports that will document the implementation of the applicable Treatment Measures.
- a. Interim updates shall be provided every 60 days from the beginning of the operation to FEMA for distribution to the interested parties.

- b. A post-implementation summary report regarding the Treatment Measures implemented throughout the operation will include agency and Tribal recommendations for improvement to the protection of historic properties that may be incorporated in future protocols or agreements regarding Emergency Undertakings.
- c. A draft post-implementation summary report shall be submitted to FEMA within 120 calendar days following the conclusion of the operation, and will include the following:
 - i. Actions completed in accordance with A, B, C and D of the Treatment Measures
 - ii. A list of previously recorded historic standing structures destroyed by the 2020 wildfires to facilitate updates to the CHRIS.
- F. FEMA will provide the draft report to SHPO and the interested parties within 180 calendar days following the completion of the emergency undertaking for a 30-day review and comment period.
- G. FEMA will take into consideration the comments of the SHPO and interested parties in preparing a final report to be completed no later than 240 days following completion of the emergency undertaking. A copy of the revised report shall be provided to the SHPO and interested parties for a 30-day comment period prior to finalization and submittal to SHPO and participating THPOs.
- H. FEMA will communicate and coordinate with Cal OES to encourage project proponents of Emergency Undertakings to:
 - a. Work closely with Native American Tribes with ancestral interest operational areas.
 - b. Avoid adverse effects to identified historic properties, and if avoidance is infeasible, minimize adverse effects.
 - c. Limit ground disturbance to the greatest extent possible to “previously disturbed soils”.
- I. I. If suspected human remains are encountered, there shall be no further excavation or disturbance within a 100-foot radius of the discovery location, the remains will be covered with plastic sheeting, plywood, or trench plates for temporary protection, and the county coroner/medical examiner will be notified immediately in accordance with Section 7050.5 of the California Health and Safety Code. Activities will not resume until FEMA concludes consultation with the SHPO and interested parties. The term “human remains” encompasses more than human bones as the Tribe’s tradition periodically necessitated the ceremonial burning of human remains. See Cal. Pub. Res. Code § 5097.98.

The following Treatment Measures will be implemented as soon as practicable, as applicable data is received, and as FEMA facilitates meaningful consultation with federally recognized tribes as requested within approximately 60-days from the start of operations:

- Archaeological Monitoring – Archaeological monitoring will take place as soon as practicable, without resulting in operational delays. Once available, the California Historical Resources Information System (CHRIS) data will be reviewed by the State contractors, and Archaeological monitoring will be conducted during ground disturbing activities that take place on parcels containing previously identified archaeological sites and or cultural resources. Archaeological monitors will collect sufficient information to update DPR forms, that will be included in the final report.

- Tribal Monitoring – As determined through consultation with federally recognized tribes, FEMA will require that the State implement Tribal monitoring as soon as practicable, without resulting in operational delays. Tribes shall provide maps to FEMA identifying their ancestral areas of concern within the burn scars, which FEMA will then transmit to the appropriate State operational Branch along with tribal contact information to facilitate coordination for tribal monitoring.

For debris removal activities that take place outside of the initial emergency period and are anticipated to involve mainly the removal of hazardous trees within the public Right of Way or other public and or private property throughout the burn scars that pose an imminent threat of falling, FEMA will engage with all potential consulting parties including Tribes in accordance with the Agreement.

Thank you for your interest in historic properties and for your willingness to participate in the Section 106 process to resolve potential adverse effects as a result of these emergency undertakings. Should you have any questions or concerns please do not hesitate to contact me at emily.j.benz@fema.dhs.gov or (940) 218-0883.

Sincerely,

Emily J. Benz
Senior Environmental Protection Specialist
FEMA Region IX
Environmental and Historic Preservation Advisor
FEMA-DR-4558/4569-CA

Enclosures:

November 11, 2020 – Expedited Review for Emergency Undertakings, Notification
November 13, 2020 – Advisory Council on Historic Preservation, Response to Expedited Review
November 13, 2020 – State Historic Preservation Office, Response to Expedited Review
November 19, 2020 – State Historic Preservation Office, Response to Expedited Review
November 20, 2020 – Advisory Council on Historic Preservation, Response to Expedited Review