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**DRAFT WASTE DISCHARGE REQUIREMENTS ORDER R5-2024-XXXX
FOR NONPOINT SOURCE DISCHARGES RELATED TO CERTAIN ACTIVITIES
CONDUCTED BY THE UNITED STATES FOREST SERVICE AND THE BUREAU OF
LAND MANAGEMENT**



ORDER INFORMATION

Order Type(s):	Waste Discharge Requirements (WDRs)
Status:	Draft
Program:	Forest Activities Program
Region 5 Office:	Redding
Discharger:	United States Forest Service (USFS), Pacific Southwest Region
Address:	1323 Club Drive, Vallejo, CA 94592
Discharger:	Bureau of Land Management (BLM), Northern California and Central California Districts
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CERTIFICATION

I, PATRICK PULUPA, Executive Officer, hereby certify that the following is a full, true, and correct copy of the order adopted by the California Regional Water Quality Control Board, Central Valley Region, on XX<DATE>.

PATRICK PULUPA,
Executive Officer

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I. FINDINGS

Whereas the California Central Valley Regional Water Quality Control Board (Central Valley Water Board or Board) finds the following:

Legal Basis

1. This Order serves as waste discharge requirements (WDRs) pursuant to California Water Code section 13263 for nonpoint source discharges of waste related to certain land management activities that could affect waters of the state and that are conducted by, or on behalf of, the United States Forest Service Pacific Southwest Region (USFS) and Bureau of Land Management Northern California and Central California Districts (BLM) (individually Permittee or Federal Agency) on federal lands within the Central Valley Region. The Controllable Sediment Source Reduction Program (CSSRP) section of this Order also serves as a Cleanup and Abatement Order pursuant to Water Code sections 13267 and 13304.
2. This Order does not serve as a National Pollutant Discharge Elimination System (NPDES) permit or water quality certification under the Clean Water Act. Discharges subject to these requirements must obtain separate permits.

Background and Rationale for Requirements

3. The purpose of this Order is to ensure the protection and restoration of the beneficial uses of waters of the state from nonpoint source pollution resulting from activities conducted by, or on behalf of, the USFS and BLM (Permittees) on federal lands within the Central Valley Region.
4. Wastes regulated under this Order include earthen materials (soil, silt, sand, clay and rock); organic materials (slash, sawdust, bark, wood chips and ash); anthropogenic materials (petroleum products, pesticides and nutrients) (Water Code section 13050).
5. The Monitoring and Reporting Program (Attachment B) and Fact Sheet (Attachment E) contain background information, rationale, and additional findings for the requirements in this Order and are incorporated into and constitute Findings for this Order.

Order Requirements and Programmatic Framework

6. Other regional water quality control boards have existing, or are currently developing, similar regulatory programs for federal land management activities. The Central Valley Water Board commits to ongoing coordination with the State Water Resources Control Board (State Water Board), other regional water quality control boards, and the Permittees to assess whether there could be

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improvements in efficiency and consistency by developing statewide standards for management of discharges from activities on federal lands, while recognizing regional differences.

7. This Order requires the Permittees to implement Best Management Practices (BMPs) to ensure adequate protection of water quality when conducting projects and activities that meet the criteria and conditions under Category A and Category B and Emergency Response Actions, as set forth in this Order. Finding 10, below, specifies activity types subject to this Order.
 - a. Category A projects are those that typically include activities that result in no or minimal ground disturbance to areas that have the potential for hydrologic connection to surface waters and meet Category A eligibility criteria. Projects meeting these criteria are automatically covered in the Order and the Permittee must conduct required annual monitoring and reporting obligations.
 - b. Category B projects are those that typically include ground disturbing operations that may cause disruption to soils, road drainage, or riparian zones and/or WLPZ and are near or have the potential to be hydrologically connected to surface waters. Projects meeting Category B criteria are not automatically covered, but instead, the Permittees must submit a Notice of Planned Operations.
8. This Order also requires implementation of a CSSRP and associated Watershed Treatment Plans (WTP) to abate ongoing discharges or threatened discharges of sediment to waters of the state in a systematic manner over time. The CSSRP is intended to complement existing watershed-level water quality evaluations and processes currently employed by the Permittees.
9. Definitions applicable to this Order are included in Attachment A.

Covered Land Management Activities

10. This Order applies to the following land management activities:
 - a. **Vegetation Management.** Actions taken to manage vegetation to restore and maintain ecosystem health, resiliency, and productivity across federal lands. Vegetation management activities covered under this Order include commercial and non-commercial timber harvest (including non-emergency post-wildfire operations), prescribed burning, mastication of fuels, pesticide use, or other means to meet vegetation management objectives.
 - b. **Transportation Management.** Actions taken to manage motorized and non-motorized road and trail networks serving multiple uses across federal

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lands. Transportation management activities may include the construction, reconstruction, maintenance, or decommissioning of roads or trails, and associated watercourse crossings.

- c. **Recreation Facilities Management.** Actions taken to meet multiple-use objectives such as providing recreational opportunities for the public including construction, maintenance, and management of recreation facilities such as campgrounds, staging areas or parking lots, off highway vehicle areas, and managed recreation sites.
- d. **Post-Emergency Recovery Activities.** Activities taken after emergency actions in response to flooding, landslides, severe storm damage, wildfire, or other emergencies, have ceased and recovery activities begin AND where NEPA has been completed (including NEPA exemptions and Categorical Exclusions). Operations conducted as part of post-emergency recovery activities can include, but are not limited to, implementation of erosion and sediment controls, temporary watercourse crossing installation and removal, permanent watercourse crossing repair or replacement, timber salvage, hazard tree removal, revegetation activities, and pesticide application.
- e. **Restoration Activities.** Actions taken to improve, enhance, or sustain ecological health on federal lands. These activities are restorative in nature and are often designed to improve habitat, prevent degradation, and reduce long-term erosion and sedimentation to surface waters. Restoration activities may include watercourse crossing removal, channel and bank stabilization, stream channel and floodplain habitat enhancement, and wetland restoration.

Monitoring and Reporting

11. This Order requires monitoring and reporting pursuant to Water Code section 13267 to determine the effects of each Permittee's nonpoint source activities on water quality, to verify the effectiveness of management measures designed to ensure activities do not negatively impact water quality in a manner that exceeds water quality objectives as defined in the applicable Basin Plan¹, and to evaluate the Permittee's compliance with the terms and conditions of this Order. Monitoring and reporting requirements are contained within the Monitoring and Reporting Program (MRP) (Attachment B). The burden, including costs, of these

¹ The Central Valley Water Board has adopted two Water Quality Control Plans (Basin Plans), one for the Sacramento River and the San Joaquin River Basins, and one for the Tulare Lake Basin. These Basin Plans satisfy federal requirements under the Clean Water Act for the State to adopt and maintain a water quality management planning program. (40 CFR 130.00 et seq.)

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reports bears a reasonable relationship to the need for the reports and benefits to be obtained therefrom. The Executive Officer may review, modify, and reissue the MRP at any time, or issue site-specific and individually developed monitoring and reporting requirements to the Permittee.

California Environmental Quality Act

12. For the purposes of adoption of this Order, the Central Valley Water Board is the lead agency pursuant to the California Environmental Quality Act (CEQA) (Public Resources Code, section 21000 et seq.). The Central Valley Water Board has prepared and circulated an Environmental Impact Report (EIR) that analyzes the potential environmental impacts of this Order. The Central Valley Water Board certified the EIR pursuant to CEQA on <DATE> pursuant to Resolution R5-2024-XXXX, and CEQA findings therein are incorporated into and constitute Findings for this Order. Mitigation measures to address the potential significant impacts are identified in the CEQA mitigation monitoring and reporting program (MMRP), included as Attachment C to this Order.

Public Comment

13. The Central Valley Water Board notified the Permittee, California tribes, disadvantaged communities potentially affected by the Order, and other interested persons of the Board's intent to adopt this Order and of the opportunity to submit written comments. (Wat. Code, § 13167.5.)
14. The Central Valley Water Board, at a public meeting, heard and considered all comments pertaining to this Order.

Administrative Review

15. Any person aggrieved by this Central Valley Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 et seq. To be timely, the petition must be received by the State Water Board by 5:00 pm on the 30th day after the date of this Order; if the 30th day falls on a Saturday, Sunday or state holiday, the petition must be received by the State Water Board by 5:00 pm on the next business day. The law and regulations applicable to filing petitions are available on the [State Water Board's website](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) at: (http://www.waterboards.ca.gov/public_notices/petitions/water_quality). Copies will also be provided upon request.

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II. REQUIREMENTS

IT IS HEREBY ORDERED, pursuant to Water Code sections 13263, 13267, and 13304, as applicable, that the USFS and BLM (Permittees) must individually comply with all prohibitions, provisions, general and category-specific conditions, and all other requirements described in this Order.

A. Prohibitions

1. The Permittee must not create a condition of pollution, contamination, or nuisance, as defined by Water Code section 13050.
2. The Permittee must not cause or contribute to an exceedance of any applicable state or federal water quality criteria, including the National Toxics Rule² and California Toxics Rule.
3. The Permittee must not discharge waste classified as “hazardous” as defined in California Code of Regulations, title 22, section 66261.1 et seq.
4. The Permittee must not cause or contribute to an exceedance in the receiving waters of any applicable Basin Plan water quality objective (whether numeric or narrative). Specific applicable objectives include, but are not limited to the following (excerpts from the Basin Plans can be found in Attachment D):
 - Oil and Grease
 - Pesticides
 - Sediment
 - Settleable Material
 - Suspended Material
 - Toxicity
 - Temperature
 - Turbidity
5. The discharge of any waste not specifically regulated by this Order is prohibited unless the Permittee complies with Water Code section 13260, subdivision (a) by submitting a report of waste discharge and the Central Valley Water Board either issues individual WDRs pursuant to Water Code section 13263 or an individual conditional waiver of WDRs pursuant to Water Code section 13269; or (b) 140 days have expired after

² 40 CFR sections 131.36 - 131.38.

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compliance with Water Code section 13260, the discharge does not create or threaten a condition of pollution or nuisance, and the applicable CEQA requirement within Water Code section 13264, subdivision (a) has been satisfied.

B. General Provisions

1. **Regulatory Coverage.** This Order shall not create a vested right to discharge waste to waters of the state, and all such discharges of waste shall be considered a privilege, as provided in Water Code section 13263, subdivision (g). Regulatory coverage provided by this Order: (a) may be modified or terminated at any time, either in its entirety or as to any project or activity; (b) does not preclude the need for permits which may be required by federal, local, or other governmental agencies; and (c) does not preclude the Central Valley Water Board from issuing any other orders pursuant to the Water Code and as allowed by law.
2. **Order Effective Date.** This Order is effective upon adoption by the Central Valley Water Board on <DATE> and remains in effect unless rescinded or revised by the Central Valley Water Board.
3. **Initial Order Implementation.** During the first year (12 months) after Order adoption, the requirements for initial and appurtenant road Controllable Sediment Discharge Source (CSDS) assessments for Category B projects (Order sections II.E.3.b.) are waived. The Permittees must comply with all other provisions of the Order, including the requirement to submit a Notice of Planned Operations (NPO), where applicable. Beginning 14 December 2025, the initial and appurtenant roads CSDS assessment requirements will be enforced for all new Category B NPO submittals.
4. **Timber General Order Enrollments.** USFS projects enrolled under the Central Valley Water Board's Waste Discharge Requirements General Order for Discharges Related to Timberland Management Activities for Non-Federal and Federal Lands, Order R5-2017-0061 (2017 Timber General Order) may proceed under the conditions of that Order until 15 August 2025, including submission of an Annual Report on 15 August 2025; coverage will be automatically terminated on 16 August 2025. USFS projects that will operate past 15 August 2025, and that meet the eligibility requirements for Category B under this Order must submit a NPO prior to that date. No new applications for USFS project coverage under the 2017 Timber General Order will be accepted after the adoption date of this Order (No. R5-2024-XXXX).
5. **Reasonable Inspection Access.** The Permittee must allow Central Valley Water Board staff reasonable access onto property, consistent with

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Division 7 of the Water Code, where activities covered by this Order occur when requested by Central Valley Water Board staff for the purpose of performing inspections, including sample collection, measuring, and photographing/taping to determine compliance with Order conditions.

6. Discharge Incident Notification. If waste is found to be discharging or threatening to discharge to waters of the state and is not otherwise authorized by the Central Valley Water Board, and the discharge is determined to be in quantities that exceed or threaten to exceed a Basin Plan objective, the Permittee must notify the Central Valley Water Board by telephone or email within 24 hours of detection of the Discharge Incident, or the next business day, whichever comes first in accordance with the MRP (Attachment B, Section III.A.).
7. Antideficiency Act. Nothing in this Order shall be interpreted to require obligation or payment of funds in violation of the Antideficiency Act, 31 U.S.C. section 1341. Specific projects or activities that involve the commitment of funds, services, or property are contingent upon the availability of appropriated funds. Pursuant to federal Executive Order 12088, Dischargers must ensure sufficient funds for compliance with applicable pollution control standards are requested in their agency budgets. (43 FR 47707, 47708) (Oct. 13, 1978). Section 1-5 (Funding), revoked in part by Executive Order 13148 (Apr. 21, 2000) (65 Fed. Reg. 24595.)

C. General Conditions for Category A and B Coverage

1. Notification and Pre-Project Consultation. The Permittee must include the Central Valley Water Board on interested party or stakeholder lists for a project's NEPA compliance, including initial project proposals, scoping notices, and draft document publication for any activity or project that may be covered under this Order and engage in pre-project consultations with Central Valley Water Board staff upon request.
2. Incorporation of Recommended Water Quality Measures. The Permittee must incorporate management practices and water quality protective measures resulting from Central Valley Water Board staff participation in project review processes such as scoping, pre-project consultations, and during project implementation. However, the Permittee may propose alternative management practices if it can demonstrate to the satisfaction of the Executive Officer that the proposed alternatives will meet water quality requirements. Alternative management practices proposed by the Permittee must comply with the Prohibitions of this Order. Until such alternative management practices receive written approval, the Discharger

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shall adhere to those management practices provided by Regional Water Board staff.

3. NEPA Compliance. Projects covered under this Order must be implemented in accordance with any associated NEPA document(s) prepared for the project including, but not limited to the implementation of BMPs, site-specific prescriptions, resource protection measures, management actions, mitigation measures, and monitoring plans.
4. Agency-Specific Guidance. The Permittee must comply with its agency-specific BMP guidance documents, including those prepared by or for the USFS and BLM³ for use in the state of California when conducting projects covered under this Order.
5. Modifications to Agency-Specific Guidance. Compliance with the Permittee's BMP guidance documents includes any modifications to those documents made during the life of this Order, so long as the modifications are equally or more protective of water quality, as determined by the Central Valley Water Board's Executive Officer.
6. Site-Specific Design Prescriptions. When designing and implementing projects, the Permittee must develop and implement site-specific design prescriptions necessary to further describe and refine the broader National and/or California specific BMPs. The Permittee must include these site-specific design prescriptions in relevant documents (e.g., contracts, work plans, or other agreements) used to direct the activities of persons responsible for project implementation on behalf of the Permittee to ensure water quality protection measures are implemented appropriately and in compliance with this Order. These design prescriptions must be made available to the Central Valley Water Board upon request.
7. Mitigation Monitoring and Reporting Program. As applicable, projects covered under this Order must comply with the CEQA Mitigation Monitoring and Reporting Program (MMRP) (Attachment C).
8. Training Certification. Persons responsible for the design, implementation, or monitoring of projects conducted under this Order shall have a current certificate of completion of the Training Program or work directly under managers or staff that have completed the Training Program and retain current certification (Order section II.I.).

³ California-specific BMPs for BLM titled: Implementing Clean Water Act Non-Point Source Provisions in California

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9. Copies of Order. The Permittee must provide a copy of this Order to contractors, federal staff, volunteers, and any other persons responsible for the implementation and/or monitoring of projects covered by this Order.
10. Adaptive Management. The Permittee must employ corrective actions and adaptive management principles for the modification of site-specific BMPs where they are found to be ineffective or deficient. Modifications to BMPs must be made as required to meet the Permittee's resource management objectives or to comply with the requirements of this Order. The Permittee must address deficiencies prior to the upcoming winter period. If deficiencies are identified during the winter period, they must be addressed as soon as conditions allow.
11. BMP Evaluations. BMPs must be evaluated, pursuant to the MRP (Attachment B, section II.), to ensure that all management measures are implemented effectively to avoid adverse impacts to water quality.
12. Project Category Eligibility Changes. Any proposed change to a project that results in a change in eligibility criteria under this Order from Category A to Category B must comply with all eligibility criteria, conditions, monitoring, and reporting requirements for Category B projects.
13. Order Eligibility. The Central Valley Water Board may at any time determine that a project, based on size, intensity, or potential water quality impacts, does not qualify for coverage under the category identified by the Permittee or that the project does not qualify for coverage under this Order. If the Central Valley Water Board makes such a determination, timely written notice, including justification, will be provided to the Permittee. A timeframe for Permittee response will be specified in the notice.
14. Category B Determinations. In instances where a project encompasses multiple activities that would meet the eligibility criteria for either Category A or Category B, the Permittee must identify the entire project as Category B. Should questions arise as to whether a project meets the eligibility criteria for Category A or B coverage, the Permittee must either identify the project as a Category B or consult with Central Valley Water Board staff to make an appropriate determination. Order sections D. and E. below describe the eligibility criteria for each category of coverage.
15. Monitoring and Reporting. The Permittee must conduct monitoring and associated reporting for projects covered under Category A or Category B as described in the MRP (Attachment B).

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16. Notification of Project Completion. Upon completion of all land disturbing activities associated with the project, and after completion of applicable monitoring and reporting has been conducted and discharges of waste have ceased, the Permittee must provide notification of project completion in an Annual Report in compliance with the MRP (Attachment B, section III.D.).
17. Records Retention. All records for projects covered under this Order must be retained by the Permittee for the life of the project and at least five years after all covered project activities have ceased. Project records, including documents outlined above, such as site-specific design prescriptions relevant to Order conditions and requirements, must be made available to the Central Valley Water Board upon request.
18. Pesticide Application. The Permittee must adhere to all pesticide label application and storage instructions.
 - a. Category A and B Projects that propose only direct individual treatment types of application (i.e. hack and squirt, individual stump application, individual invasive species treatment) of pesticide require no notification (see Definitions, Attachment A)
 - b. For Category A and B Projects that include broadcast or aerial application of pesticides, the Permittee must:
 - i. Not apply pesticides within the Watercourse and Lake Protection Zone (WLPZ) widths identified in Table 1.
 - ii. Not apply pesticides in areas burned within the previous 3 years on slopes greater than 30%, unless 50% or greater effective ground cover is present to prevent chemical and sediment transport to downslope surface waters.
 - iii. Notify the Central Valley Water Board, in writing, **at least 15 days prior** to the proposed application of pesticides. The notification must contain information on the category(s) and name(s) of pesticides, the Environmental Protection Agency (EPA) registration number(s), application method, and areas of application in compliance with the MRP (Attachment B, section III.B.).
 - iv. Submit changes to the pesticide application proposal in writing no less than 48 hours prior to pesticide application.

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Table 1. Watercourse Classification and Watercourse and Lake Protection Zone Widths^{4,5}

California Watercourse Classification				
Water Class	Class I	Class II	Class III	Class IV
Water Class Characteristics or Key Indicator of Beneficial Use	1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or 2) Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.	1) Fish always or seasonally present offsite within 1000 feet downstream and/or 2) Aquatic habitat for non-fish aquatic species. 3) Excludes Class III waters that are tributary to Class I waters.	No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high water flow conditions after completion of activities.	Man-made watercourses, usually downstream of established domestic, agricultural, hydroelectric supply or other beneficial use
Minimum Watercourse and Lake Protection Zone Widths				
Water Class	Class I	Class II	Class III	Class IV
Slope Class (%)	Width Feet	Width Feet	Width Feet	Width Feet
<30	75	50	25	25
30-50	100	75	50	50
>50	150	100	75	75

⁴ Minimum unless more stringent buffers are dictated by labels/guidance, statute, policy, or regulation.

⁵ Adapted from California Code of Regulations, Title 14, Section 936.5

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D. Category A Eligibility Criteria and Conditions

1. Eligibility Criteria: To qualify for Category A coverage, the following eligibility criteria must be met:
 - a. The project has approved NEPA documentation, such as an Environmental Impact Statement (EIS) or Environmental Assessment (EA), or the proposed activities have been determined to be subject to a Categorical Exclusion (EX) under Code of Federal Regulations, title 36, sections 220.6(d)(4) and (5).

AND

- b. Project activities pose a low threat to water quality, meaning they are unlikely to negatively impact beneficial uses of waters of the state. Such project activities would typically include activities that result in no or minimal ground disturbance to areas that have the potential for hydrologic connection to surface waters. The Permittee must consider the following in determining Category A eligibility:
 - i. Proposed work involving roads, trails (motorized and non-motorized), landings, skid trails, parking lots, staging areas, or developed campgrounds will have a low potential for hydrologic connectivity to surface waters.
 - ii. Proposed grading of roads and/or trail drainage facilities will be limited to resurfacing (e.g., rolling dips, waterbars, drainage ditches, ditch relief culverts, cross drains, and surface drains) and will be conducted in a manner that will not create or threaten to create a discharge of sediment or sediment laden runoff to receiving waters.
 - iii. Proposed work will occur outside the WLPZ as described in Table 1. except where proposed work on roads and/or trail approaches to watercourse crossings (permanent and temporary) or water drafting locations will be minor and conducted in a manner that will not create or threaten to create a discharge of sediment or sediment laden runoff to receiving waters.
 - iv. Proposed work will not occur on unstable areas with the potential to deliver sediment, or sediment laden runoff to receiving waters.

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- v. To allow for adequate road drainage and to reduce the potential for hydrologic connectivity of concentrated road surface runoff, the Permittee must deliberately breach or remove and stabilize off-site roadside berms or other sidecast material generated from transportation management activities (e.g., road grading), unless these features are serving as part of a designed drainage system.
 - vi. Waste generated from project activities such as spoil piles from the removal of sediment, debris, asphalt grindings, stockpiles of woody debris, or other earthen materials from the road surface or drainage features must be removed from riparian or WLPZ and stabilized so that there is no potential for that material to discharge or threaten to discharge to surface waters except where associated with a specific restoration activity.
2. Order Coverage: Projects meeting the eligibility criteria listed above are **automatically** covered under this Order; submittal of a Notification of Planned Operations to the Central Valley Water Board is not required for Category A projects.
3. Conditions: Category A projects must be conducted in compliance with Order sections II.A. Prohibitions, II.B. Standard Provisions, and II.C General Conditions for Category A and B Coverage, and monitoring and annual reporting requirements as described in the MRP (Attachment B).

E. Category B Eligibility Criteria and Conditions

Projects requiring coverage under Category B are those projects that pose an increased risk of causing or contributing to exceedances of water quality objectives and typically include ground disturbing operations that may cause disruption to soils, road drainage, or riparian zones and/or WLPZ as defined in Table 1 and are near or have the potential to be hydrologically connected to surface waters.

1. Eligibility Criteria: To qualify for Category B coverage, the following eligibility criteria must be met:

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- a. The project has approved NEPA documentation, such as an Environmental Impact Statement (EIS) or Environmental Assessment (EA) or the proposed activities have been determined to be subject to a Categorical Exclusion (EX) under Code of Federal Regulations, title 36, sections 220.6(d)(4) and (5).

AND

- b. Project activities do not meet the eligibility criteria for Category A coverage (Order section II.D.) and as such, pose an increased risk of causing or contributing to exceedances of water quality objectives.
2. Order Coverage: Projects meeting the eligibility criteria listed above for Category B may be covered under this Order provided the Permittee submits a Notice of Planned Operations (NPO) to the Central Valley Water Board prior to commencement of project activities, except as provided by Order section II.B.4. An NPO is required for all Category B projects.
 3. Conditions: When conducting land management activities covered under Category B, the Permittee must comply with the following conditions:
 - a. Submittal of a NPO at least 15 days prior to commencing project activities, or no later than 30 days after the start-up of ground disturbing operations if the project is part of Post-Emergency Recovery efforts. NPO content requirements are provided in the MRP (Attachment B, section III.C.).
 - i. An NPO shall remain in effect for **1 year (365 days)** from the Permittee's signature date, after which the NPO shall expire. If covered project activities are planned to extend beyond 1 year, an updated NPO must be submitted at least **15 days prior** to the expiration date. If an NPO has expired and the Permittee wishes to resume activities previously covered, then an updated NPO must be submitted at least **15 days prior** to ground disturbing operations commencing.
 - b. Controllable Sediment Discharge Source (CSDS) Assessment and Inventory. The Permittee must assess and inventory CSDS for treatment (see Definitions, Attachment A) as follows, except as waived in Order section II.B.3 and exempted as provided in Order section II.E.3.b.iv. below:
 - i. Initial Project Assessment. Prior to submitting an NPO, the Permittee must conduct an initial assessment to identify

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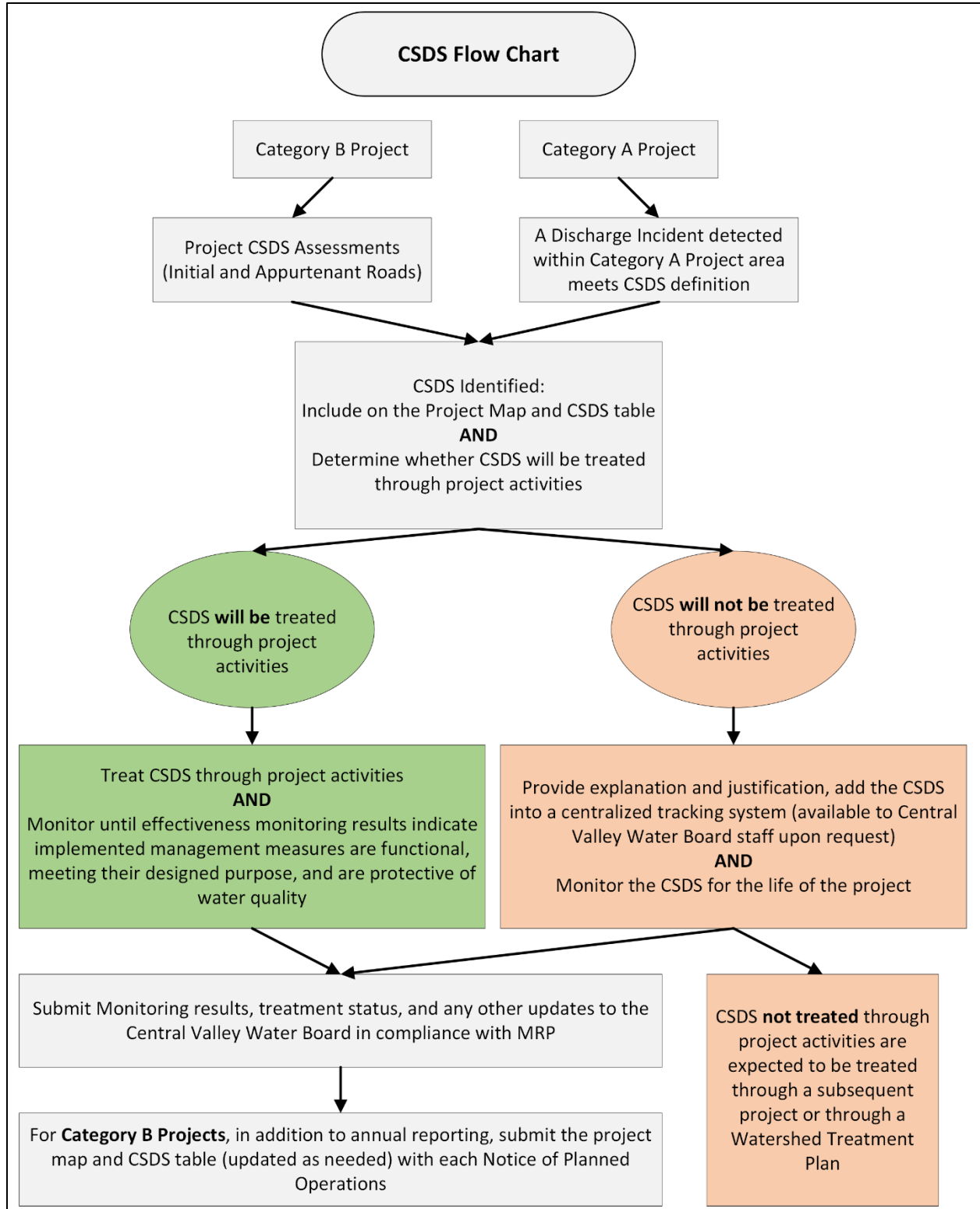
- CSDS associated with infrastructure within the project boundary, including designated roads and excluding Appurtenant Roads, that will be used in support of project activities (see Figure 1, CSDS Assessment Chart).
- ii. Appurtenant Road Assessment. Within 12 months of the signature date of the NPO, the Permittee must conduct and submit a CSDS assessment on Appurtenant Roads within the project boundary. For definition of Appurtenant Roads (see Definitions, Attachment A).
 - iii. CSDS Inventory. All CSDS identified during the project and appurtenant road assessments, during project implementation and through each monitoring and reporting period must be identified on a project map (see Attachment B, section III.C.3.k. for inventory information requirements and Attachment B, section III.C.3.l for mapping requirements), tracked in the CSDS inventory, and submitted with each NPO and annual report as described in the MRP (Attachment B).
 - iv. CSDS Assessment Exemptions. Category B Projects implemented under the Controllable Sediment Source Reduction Program (Order section II.G. below) and associated Watershed Treatment Plan(s) are exempt from project specific CSDS assessments.
- d. CSDS Treatment
- i. Identification of CSDS for Treatment. The Permittee must identify which CSDS identified during the project and appurtenant road assessments will be treated as part of the project, and those proposed to be deferred.
 - ii. Timing of CSDS Treatment. The Permittee must treat all CSDS that are identified for treatment through project activities prior to project completion, and monitor and report in accordance with the MRP (Attachment B).
 - iii. Identification of CSDS for Deferred Treatment. CSDS identified during project assessments that the Permittee proposes to **defer for treatment** must be added to a centralized CSDS Inventory tracking system and monitored for the life of the project in accordance with the MRP (Attachment B). The centralized CSDS Inventory must be

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maintained by the Permittee and made available to Central Valley Water Board staff upon request. The Permittee must provide justification of the determination of deferral of treatment. The justification must include an estimate of sediment discharge volume expected to occur and reasons as to why treatment as part of project activities is infeasible. Deferred CSDS treatments will be completed through subsequent projects or through a Watershed Treatment Plan (see section G below).

- iv. Site-Specific Order. The Central Valley Water Board or its delegate may issue a site-specific order requiring the Permittee to implement corrective action(s) to address **ANY** CSDS.

Figure 1. CSDS Assessment Flow Chart.



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- e. CSDS Assessment Time Extension
- i. The Permittee may request a time extension to complete the CSDS assessments, where the following conditions are met:
- The Project exceeds 15,000 acres in size, or
 - The Project includes over 50 miles of designated roads, and
 - An Emergency impacts the project area or requires a diversion of resources from normal management activities.
- ii. An extension request must be submitted to the Central Valley Water Board in writing prior to the CSDS assessment deadline. The request for extension **must not exceed 12 months**, and must include the following information:
- An explanation why the assessment cannot be completed in compliance with section II.E.3. above,
 - A proposed date for submittal of the assessment, and
 - Signature of a USFS Forest Supervisor/District Ranger or BLM Field Office Manager.
- iii. The Executive Office or the Executive Officer's delegee shall approve or deny the time extension request, in writing, within 30 business days of receipt of the request. If the Executive Officer or the Executive Officer's delegee does not approve or deny the extension request within 30 days, the time extension will automatically be granted.
- iv. Where a time extension request is denied by the Executive Officer, the Permittee must comply with all conditions under section II.E.3.b-d of this Order.
- f. Additional Water Quality Protective Measures
- i. The Permittee must stabilize earthen materials disturbed by project activities within designated riparian zones or WLPZ in accordance with the following:

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- If the National Weather Service forecasts a “chance” (30 percent or more) of rain within the next 24 hours, stabilization must occur either prior to sunset or at the conclusion of operations for the day, whichever is sooner.
 - If operations are occurring during the winter period, stabilization must occur at the conclusion of operations for the day and prior to any equipment shutdown periods.
- ii. The Permittee must design permanent watercourse crossings to accommodate 100-year flood flows, including associated sediment and debris, and to allow for aquatic organism passage during all stages of life.
 - iii. To allow for adequate road drainage and to reduce the potential for hydrologic connectivity of concentrated road surface runoff, the Permittee must deliberately breach or remove and stabilize off-site roadside berms or other sidecast material generated from transportation management activities (e.g., road grading), unless these features are serving as part of a designed drainage system.
 - iv. Waste generated from project activities such as spoil piles from the removal of sediment, debris, asphalt grindings, stockpiles of woody debris, or other earthen materials from the road surface or drainage features must be removed from riparian or WLPZ and stabilized so that there is no potential for that material to discharge or threaten to discharge to surface waters except where associated with a specific restoration activity.

F. Emergency Response Actions

1. This Order acknowledges that during an Emergency, the Permittee will conduct Emergency Response actions. (See Definitions, Attachment A).
2. When conducting Emergency Response actions, the Permittee must adhere to its agency-specific BMP guidance documents, as well as consider the probable environmental consequences of the emergency response action and mitigate foreseeable adverse environmental effects to the extent practical.

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3. The Permittee must comply with reporting requirements in the MRP (Attachment B, section III.D.5).
4. Post-Emergency Recovery projects (see Definitions, Attachment A) must meet the eligibility criteria and conditions for Category A or B to be covered under this Order. Post-Emergency Recovery projects that may be eligible for coverage include, but are not limited to, the following:
 - a. Wildfire suppression repair and recovery (e.g., fire line rehabilitation, post fire salvage logging, reforestation, and landscape restoration activities).
 - b. Hazard tree removal, processing, and log decking.
 - c. Flood and storm damage infrastructure repair or decommissioning.
 - d. Road or trail construction, repair, or decommissioning.
 - e. Watercourse crossing construction, repair, or decommissioning.

G. Controllable Sediment Source Reduction Program

1. **Overview of CSSRP.** Under the CSSRP, the Permittee must identify and abate actual or threatened discharges of waste to surface waters from CSDS on lands owned or managed by the Permittee in targeted hydrologic unit code (HUC) 12 watersheds over time. The CSSRP is intended to ensure that the Permittee selects HUC 12 watersheds where its efforts under a Watershed Treatment Plan will result in positive improvements to water quality in the form of measurable and consequential reduction in erosion and sediment discharges associated with their lands.
 - a. The Permittee must identify one or more watersheds meeting specified criteria (provided below); prepare and submit a work plan, including a time schedule to assess CSDS within each watershed; complete field assessments to identify and characterize CSDS; prepare Watershed Treatment Plans (WTP) to abate CSDS for Board approval; and submit interim progress and final completion reports documenting implementation progress and completion of sediment source reduction efforts within each watershed. The Permittee must complete each WTP within 10 years from the date of Board approval.
 - b. The Permittee must repeat this process for one or more successor HUC 12 watersheds on a 7-year cycle through the duration of this

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Order. The CSSRP Schedule is included within the MRP
(Attachment B, Table 1).

2. CSSRP requirements are issued pursuant to Water Code sections 13267 and 13304 and may be modified by the Executive Officer.
3. CSSRP Requirements
 - a. **Targeted Watershed Selection Criteria.** The Permittee must identify one or more HUC 12 watersheds for assessment and treatment of CSDS on lands owned or managed by the Permittee. Selected HUC 12 watershed(s) must meet **two or more** of the following criteria:
 - i. For the USFS, ownership exceeds 50% or more of the land in the selected watershed(s); for the BLM, ownership exceeds 30% or more of the land in the selected watershed(s).
 - ii. The selected watershed drains to a source watershed as defined in Water Code section 108.5.
 - iii. The selected watershed average erosion hazard rating on lands under the Permittee's ownership or control is moderate or severe as listed in the Natural Resources Conservation Service (NRCS) Web Soil Survey's⁶ Erosion Hazard rating for Off-Road and Off-Trail.
 - iv. The selected watershed is listed or drains to a water body that is listed on the State Water Board's Clean Water Act Section 303(d) List of Impaired Waters in a manner that may benefit from sediment source reduction activities. Such listings may include, but not be limited to, sediment, temperature, toxicity, total dissolved solids, pesticides, metals, dissolved oxygen and mercury.
 - v. Current receiving water conditions within the watershed are such that CSDS treatments will benefit sensitive or threatened aquatic species.

⁶ Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. [Web Soil Survey](http://websoilsurvey.sc.egov.usda.gov). Available online at the following link: (<http://websoilsurvey.sc.egov.usda.gov>)

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- vi. Cumulative Watershed Effects (CWE), and/or Watershed Condition Index (WCI) analyses and/or other similar cumulative impacts assessments or studies conducted by the Permittee demonstrate impacts or potential impacts to water quality resulting from sediment transport.
 - vii. The watershed has been subject to other relevant assessments or studies that identified existing watershed impacts due to road, watercourse crossing, or watershed condition, including CSDS inventories created as required by this Order.
 - viii. The watershed is subject to Federal Agency directives related to water quality protection, improvement, and/or watershed restoration.
4. **Field Assessment Work Plan Preparation, Submittal and Approval.** The Permittee must select one or more HUC 12 watersheds and prepare and submit a Field Assessment Work Plan (Assessment Work Plan) that meets the requirements described in the MRP (Attachment B, section III.E.1.) for Executive Officer review and approval in compliance with the schedule in the MRP (Attachment B, Table 1. CSSRP Schedule).
 5. **Field Assessment Work Plan Implementation.** The Permittee must implement the Assessment Work Plan in accordance with the MRP (see Table 1, CSSRP Schedule). If the Permittee needs to modify the approved Assessment Work Plan at any time, the Permittee must notify the Executive Officer in writing as soon as it becomes aware that modifications are necessary and provide information in compliance with the MRP (Attachment B, section III.E.1.e.).
 6. **Watershed Treatment Plan Preparation, Submittal and Approval.** The Permittee must prepare a Watershed Treatment Plan (WTP) for each selected watershed based on the results of the approved Assessment Work Plan. WTPs serve to document proposed actions to remedy all CSDS on lands owned or managed by the Permittee, including those identified during the field assessments, and must be submitted in accordance with the MRP (Attachment B, section III.E.2.). WTPs will be considered for approval by the Central Valley Water Board at a regularly scheduled meeting (see MRP Table 1, CSSRP Schedule).
 7. **Watershed Treatment Plan Implementation.** Unless an extension is granted pursuant to Order section II.G.9.c., the Permittee must implement and complete the approved WTP(s) no more than 10 years (120 months) from the date of Board approval.

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- a. Each project conducted as part of the WTP will be covered under Category A or Category B of this Order based on eligibility criteria, unless otherwise permitted by the Central Valley Water Board or the State Water Board (e.g., State Water Board's Restoration Order) and be subject to the requirements applicable to that Category including the MRP (Attachment B). Such projects are exempt from CSDS assessment and inventory requirements for Category B (Order section II.E.3.b-c. above).
 - b. After Board approval of the first WTP, subsequent WTP development activities will overlap with ongoing, approved WTP implementation (see MRP Table 1, CSSRP Schedule).
8. **Watershed Treatment Plan Reporting Requirements.** Each WTP is subject to annual interim progress and completion reporting as specified in the MRP (Attachment B, section III.E.3. and 4.).
- a. **Annual Interim Progress Report.** The Permittee must submit an Annual Interim Progress report for each approved WTP, beginning 1-year (365 days) from the date of Board approval of the WTP and annually thereafter until WTP completion. Annual Interim Progress Reports must include information on the status of implementation activities and a prediction of upcoming annual activities described in the MRP (Attachment B, section III.E.3.).
 - b. **Final Completion Report.** Within 60 days after completion of each Board-approved WTP or no more than 10 years (120 months) from the date of Board approval, whichever is sooner, a Final Completion Report must be submitted for Central Valley Water Board review and approval. The Final Completion Report must include a list of the approved treatment sites; a list of completed treatment activities, including sites added during the implementation period; maps; and an estimated quantification of sediment discharges treated (volume) resulting from implementation activities as specified in the MRP (Attachment B, section III.E.4.).
9. **Requests for WTP Modification or Extension.**
- a. WTP Modification or Extension requests may only be submitted for Executive Officer or the Executive Officer's delegee review and approval under the following situations:

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- i. Where an emergency has occurred within the area covered by a Board-approved WTP that will impact the implementation of the WTP, or
 - ii. Where an emergency has occurred outside the area covered by a Board-approved WTP that will result in a diversion of resources such that WTP completion will be delayed.
- b. WTP Modification Request
 - i. The Permittee may submit a written request to modify or add CSDS treatment sites to those identified in a Board-approved WTP pursuant to requirements in the MRP (Attachment B, section III.E.5.).
- c. WTP Extension Request
 - i. The Permittee may submit a written request to extend implementation of an existing Board-approved WTP up to a period not to exceed 3 years (36 months).
 - ii. To request an extension to complete a Board-adopted WTP, the Permittee must submit a request in writing and provide sufficient information to demonstrate to the satisfaction of the Executive Officer that, if granted additional time, the Permittee will complete the applicable WTP activities. The written request must meet the requirements described in the MRP (Attachment B, section III.E.5.).

H. Auditing

Auditing serves to ensure that the Permittee is in compliance with Order requirements. Audits will be conducted by Central Valley Water Board staff and may include review of numerous covered projects at one time to better determine compliance at office or district scales.

- 1. This Order requires the Permittee to provide requested project documentation within 30 days from the date the Central Valley Water Board provides notification of an audit. Project documentation that may be requested, includes, but is not limited to the following:
 - a. NEPA documentation (including specialist reports)
 - b. Relevant maps

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- c. Project BMPs, resource protection measures, site-specific prescriptions, or any other water quality protection measures prescribed for the project
- d. Current CSDS inventory information
- e. Relevant monitoring records
- f. BAER Reports or other relevant post-emergency assessments
- g. Training and Certification records

I. Training and Certification Program

This Order requires all federal agency staff responsible for Order compliance to complete a training course prepared in consultation with the USFS and BLM and provided by the Central Valley Water Board.

1. The Permittee must ensure that all staff (permanent or seasonal) responsible for Order compliance (i.e., submittal of reports and notifications, evaluation and assessment of water quality conditions including CSDS assessments, selection of BMPs, design of site-specific prescriptions, monitoring, and reporting, etc.) complete the Training Program and obtain a certificate of completion (certification) or work directly under managers or staff that have completed the Training Program and retain current certification.
2. All documents required for submittal under this Order (see also MRP, Attachment B) (e.g., NPO, Annual Report, Discharge Incident, Pesticide Notification, Reports under the CSSRP and associated WTPs, etc.) must be signed by an authorized representative with current certification.
3. Certification under the Training Program must be renewed every 2 years (24 months).
4. The Permittee must retain current records of all certified staff.

**ATTACHMENT A
ACRONYMS AND DEFINITIONS
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GLOSSARY

ACS.....Aquatic Conservation Strategy
AMS.....Aquatic Management Strategy
BAER.....Burned Area Emergency Response
BLM.....Bureau of Land Management
BMP.....Best Management Practice
CE or CX...Categorical Exclusion
CEQA.....California Environmental Quality Act
CFR.....Code of Federal Regulations
CSDS.....Controllable Sediment Discharge Source
CSSRP.....Controllable Sediment Source Reduction Program
CWA.....California Porter-Cologne Clean Water Act
CWE.....Cumulative Watershed Effects
EA..... Environmental Assessment
EIR.....Environmental Impact Report
EIS.....Environmental Impact Statement
ERA.....Equivalent Roaded Acreage
FLPMA.....Federal Land Policy and Management Act
FONSI.....Finding of No Significant Impact
FSH.....Forest Service Handbooks
FSM.....Forest Service Manuals
GIS.....Geographic Information Systems
GPS.....Global Positioning System
HUC.....Hydrologic Unit Code
IB.....Information Bulletins

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IM.....Instruction Memorandums
LRMP.....Land and Resource Management Plan
MAA.....Management Agency Agreement
MMRP.....Mitigation Monitoring and Reporting Program
MOU.....Memorandum of Understanding
MP.....Management Practice
MRP.....Monitoring and Reporting Program
NEPA.....National Environmental Policy Act
NPDES.....National Pollutant Discharge Elimination System
NPO.....Notice of Planned Operations
NPS.....Nonpoint Source
NRCS.....Natural Resource Conservation Service
NTU.....Nephelometric Turbidity Unit
NWFP.....Northwest Forest Plan
RCA.....Riparian Conservation Area
ROD.....Record of Decision
RWQCB....Regional Water Quality Control Board
SNFPA.....Sierra Nevada Forest Plan and Amendments
USC.....United States Code
USFS.....United State Forest Service
WCI.....Watershed Condition Index
WDR.....Waste Discharge Requirements
WLPZ.....Watercourse and Lake Protection Zone
WQMA....Water Quality Management Agency
WTP.....Watershed Treatment Plan

DEFINITIONS

“Activities” means the implementation of planned management actions to meet federal agency objectives (e.g., vegetation management activities to achieve fuel reduction goals). Activities may include different levels of operations in support of the management action (e.g., vegetation management activities may include timber harvesting operations, mechanical thinning operations, manual fuel treatments, prescribed burning operations, etc.).

“Adaptive Management” is a structured, iterative process for decision making to reduce uncertainty through structured hypothesis testing and monitoring and is a system of facilitating management changes that will best ensure that desired outcomes are met or re-evaluated.

“Aerial Application” see “Pesticide Application”.

“Appurtenant Road” means all roads under the Permittee’s control within a specified area. For projects, appurtenant roads are those within the project boundaries but not used to actively implement project activities. For Assessment Work Plans, appurtenant roads are those within the subject HUC 12 under the Permittee’s control.

“Authorized Representative” means a person that has successfully completed the Training and Certification Program under the Order and is authorized by the Permittees to sign reports, monitoring forms, or other documentation required by the Order for submittal to the Central Valley Water Board.

“Basin Plans” means Water Quality Control Plans which designate and establish for the waters within a specified area, the beneficial uses to be protected, water quality objectives to protect those beneficial uses, and a program of implementation needed for achieving the objectives. Basin Plans are prepared and adopted pursuant to the California Water Code 13240 and supported by Federal Clean Water Act Section 303. The Central Valley Water Board has adopted two Water Quality Control Plans, one for the Sacramento River Basin and the San Joaquin River Basin, Fifth Edition, revised February 2019, and one for the Water Quality Control Plan for the Tulare Lake Basin, Third Edition, revised May 2018.

“Beneficial Uses” means designated uses of waters of the state that may be protected against quality degradation including, but not limited to, domestic, municipal, agricultural, and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Designated beneficial uses of waters of the state within the Central Valley Region are listed in the Basin Plans.

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“Best Management Practices (BMPs)” refers to a practice, or a combination of practices that may include structural, nonstructural, and managerial techniques that are recognized to be the most effective and practical means to control nonpoint source discharges of waste.

“Broadcast Application” see “Pesticide Application”.

“Controllable Sediment Discharge Source (CSDS)” meets all of the following conditions:

- Causes or threatens to cause a discharge of sediment to surface waters in violation of applicable water quality standards,
- Was caused or affected by anthropogenic activity,
- Is under the Permittee’s ownership and/or control, and
- Can be treated through implementation of management measures (such as planned project, activities, routine maintenance, storm-proofing, emergency work, or as a stand-alone project)

A CSDS may include but is not limited to the following features: roads, watercourse crossings, road drainage facilities, trail systems, public use areas including recreational facilities, haul roads, landings, skid trails, and water drafting locations.

“Controllable Sediment Source Reduction Program (CSSRP)” is a program designed to address and abate controllable sediment sources on federally managed lands in a systematic manner over time under this Order.

“Corrective Actions” are actions taken to address existing or threatened nonpoint source discharges of waste. Includes correcting deficient or improperly installed BMPs, impacts to water quality resulting from operations, and sites identified during monitoring or by Central Valley Water Board staff.

“Designated Roads” means roads located within project boundaries, that are actively utilized to implement project activities. Designated roads can include state roads, county roads, privately owned roads, federally managed roads, and other roads authorized by the federal government for motor vehicle use.

“Discharge Incident” means waste, including sediment, that is currently discharging or threatens to discharge to surface or ground water in quantities and/or concentrations that exceed Water Quality Objectives or result in significant individual or cumulative adverse impacts to the beneficial uses of waters. See definition of “Waste”.

“Effective Groundcover” means organic and inorganic matter that provides stabilization of underlying soils. Includes: slash (lopped and in close contact with the ground), mulch (large wood chips, wood shreds, wood strand blends, straw, hydroseed mixtures, bark, or surface rock fragments larger than ¾ inch), live vegetation, and plant litter.

“Effectiveness Monitoring” means a thorough visual evaluation of a project site after the winter period. Its purpose is to ensure that management measures applied to a project site functioned as designed and were effective in protecting water quality.

“Emergency” means a situation on federally managed lands for which the immediate action is necessary to protect human life and property. Includes wildfire, flooding, debris flows, etc. (Also refers to Emergency Activities and Emergency Response).

“Emergency Response” means those activities necessary to respond to an emergency.

“Ephemeral Watercourse” see “Watercourse”.

“Ground Disturbance” means any work, operation or activity that results in the manipulation of the terrain or of earth materials. Such activities can result in soil compaction or decompaction that may result in hardened, less permeable surfaces and/or leaves bare mineral soil exposed.

“Hand-Application” see “Pesticide Application”.

“Hydrologic Disconnection” means the removal of direct routes of drainage or overland flow of road and trail runoff to surface waters.

“Hydrologically Connected” means roads and/or trails with drainage systems that discharge directly to surface waters.

“Infrastructure” means permanent or temporary structures, facilities, or resources required to support an activity. Under this Order, infrastructure includes features such as roads, road drainage facilities, watercourse crossings, water drafting sites, landings, skid trails, recreational trails, campsites and their facilities, watercraft launching sites (other than those currently permitted by the Central Valley Water Board), parking lots, staging areas, etc.

“Integrated Design Features” are resource protection measures developed by USFS and BLM resource specialists to minimize or prevent any adverse environmental effects from project implementation and are incorporated into federal project documents (including NEPA) that guide project implementation. Integrated Design Features are in addition to standard BMPs.

“Implementation Monitoring” means a thorough visual evaluation of a project site upon completion of prescribed activities. Its purpose is to ensure that water quality protection measures were fully and properly implemented and are expected to function as designed and as required by this Order prior to the upcoming winter period.

“Intermittent Watercourse” see “Watercourse”.

“Management Measures” means BMPs, integrated design features, site-specific prescriptions (see site-specific prescriptions), corrective actions, or any other water quality protection measures constructed, installed, or applied to prevent or mitigate nonpoint source discharges of waste to waters of the state.

“Manual Treatment” means the use of only hand tools to implement project activities, such as the manual treatment of fuels (e.g., hand thinning).

“Nonpoint Source Pollution” occurs when rain, snowmelt, or other sources of runoff moves over or through the land picking up and carrying natural or human-made pollutants and discharges them to surface waters.

“Operations” means project implementation involving ground disturbing activities requiring permit coverage. A variety of operations may occur to achieve the objectives of a single management activity (e.g., vegetation management activities may include timber harvesting operations, thinning operations, manual fuel treatments, prescribed burning operations, etc.).

“Perennial Watercourse” see “Watercourse”.

“Pesticide” means (1) any substance, or mixture of substances which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, which may infest or be detrimental to vegetation, man, animals, or households, or be present in any agricultural or nonagricultural environment whatsoever, or (2) any spray adjuvant, or (3) any breakdown products of these materials that threaten beneficial uses. Includes but is not limited to; pesticides, miticides, herbicides and fungicides.

“Pesticide Application” means the manner in which pesticides are delivered to their intended targets, including the physical method and intended area of coverage that pesticides will be applied. Pesticide application methods include, but are not limited to, the following:

- **Hand/Spot Application** is a method utilizing sprayers, including backpack and handheld sprayers, and intended selective applications including, but not limited to; foliar and basal spot spraying, stem injection (hack-and-

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squirt), cut-stump/cut-stem treatment (borax/paint-on-stem), crack-and-crevice treatment (for use inside or around buildings).

- **Broadcast Application** is a method utilizing sprayers and intended for uniform application of a pesticide over an entire area.
- **Aerial Application** is a method utilizing sprayers attached to an aircraft, either fixed wing or rotary, and intended for uniform application of a pesticide over an entire area.

“Post-Emergency Recovery” means those activities that were initiated due to an emergency but have since undergone an environmental review process resulting in a signed NEPA decision to continue those activities. Post-Emergency Recovery activities can include, but are not limited to, implementation of erosion and sediment controls, temporary watercourse crossing installation and removal, permanent watercourse crossing repair or replacement, timber salvage, hazard tree removal, revegetation activities, and pesticide application.

“Project” means an entire NEPA planning area in which certain land management activities are proposed to occur and includes any “sub-projects” such as individual timber sales within the NEPA planning area. Under the Order, the entire NEPA planning area is considered a single project.

“Resource Protection Measures” means design features identified to eliminate or avoid potential undesired effects, or a project-specific design feature or mitigation measure developed to minimize or eliminate a known potential effect of a particular action.

“Riparian Zone” means lands along the edges of waterbodies where soils and vegetation are shaped by the presence of water.

“Site-Specific Prescription” means a water quality protection measure that was designed for an individual site.

“Specialist Report” means reports prepared as part of NEPA that pertain to a specific area of specialty, including but not limited to: hydrology, soils, range management, cultural resource, etc.

“Storm Proofing” means management measures implemented prior to the winter period or a predicted storm event to minimize runoff and subsequent sediment delivery to surface waters from roads and/or trails. Includes: dispersing concentrated road and/or trail surface drainage, protecting watercourse crossings from failure or diversion,

and preventing failure of unstable cutbanks or fill slopes from delivering sediment to a watercourse.

“Waste” means products or materials, including sediment, that enter or threaten to enter waters of the state that may adversely affect the condition of water quality or impact beneficial uses of the receiving waters. Waste is further defined in California Water Code section 13050 as: “...sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.”.

“Water Quality” means the chemical, physical, biological, bacteriological, radiological, and other properties and characteristics of water which affect its use.

“Water Quality Objectives” means the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area as detailed in the Central Valley Water Board’s *Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin, Fifth Edition, revised May 2018*, and the *Water Quality Control Plan for the Tulare Lake Basin, Third Edition, revised May 2018* (Basin Plans).

“Watercourse” means any location with a defined bed, bank, and channel where water naturally flows such as rivers or streams. Watercourses are further classified as:

- **Class I Watercourse:** a watercourse that has that exhibits the following characteristics: 1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area; and/or 2) Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.

Class I watercourses generally relate to a Perennial watercourse, having flowing water year-round during a typical year, a water table located above the streambed for most of the year, and groundwater being the primary source of water for stream flow supplemented by stormwater runoff.

- **Class II Watercourse:** a watercourse that exhibits the following characteristics: 1) Fish always or seasonally present offsite within 1000 feet downstream; and/or 2) Aquatic habitat for non-fish aquatic species. Additionally, Class II watercourses exclude Class III waters that are directly tributary to Class I waters. Class II watercourses generally relate to an Intermittent watercourse, having flowing water present periodically during the year when groundwater provides water for stream flow. During

dry periods, intermittent watercourses may not have flowing water, and stormwater is a supplemental source of water for stream flow.

- **Class III Watercourse:** a watercourse that exhibits the following characteristics: a watercourse that has no aquatic life present, but shows evidence of being capable of sediment transport to Class I and II waters under normal high water flow conditions after completion of activities. Class III watercourses generally relate to an Ephemeral watercourse, having flowing water only during, and for a short time after, precipitation events in a typical year. Ephemeral streambeds are located above the water table year-round, and groundwater is not a source of water for the stream.
- **Class IV Watercourse:** a man-made watercourse, usually for the purpose of downstream domestic, agricultural, hydroelectric supply, or other beneficial use.

“Watercourse Protection Zones” means watercourse and riparian protection buffers. Includes buffers designated by the BLM or USFS such as Aquatic Management Zones, Streamside Management Zones, Riparian Reserves, or Riparian Conservation Areas.

“Waters of the state” means any surface water or groundwater, including saline waters, within the boundaries of the State of California.

“Watershed” means a region or area bounded peripherally by a divide and draining ultimately to a particular watercourse or body of water.

- **“HUC 12”** means a hydrologic unit code for a sub-watershed (12-digit) 6th level, typically between 10,000 and 40,000 acres in size as established by the U.S. Geologic Survey in the nationwide Watershed Boundary Dataset (WBD).

“Watershed Treatment Plan (WTP)” means a watershed-specific long-term treatment plan implemented as part of the Controllable Sediment Source Reduction Program in a systematic, progressive manner under this Order.

“Wetlands” means areas that, under normal circumstances, (1) has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area’s vegetation is dominated by hydrophytes or the area lacks vegetation.

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A.10

“Winter Period” means the period extending from November 15 to April 1, when prolonged or regular precipitation is expected to occur and when saturated road conditions normally exist, or roads become inaccessible due to wet weather or snow. While November 15 to April 1 is strictly defined as the winter period, due to geographic differences throughout the region, ground conditions noted in this definition should be used for operational considerations and BMP implementation outside of this date range.

**ATTACHMENT B
MONITORING AND REPORTING PROGRAM
FOR
ORDER NO. R5-2024-XXXX**

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I. INTRODUCTION

This Monitoring and Reporting Program (MRP) is issued pursuant to Water Code section 13267 and includes requirements for project activities covered under the General Waste Discharge Requirements for Nonpoint Source Discharges Related to Certain Activities Conducted by the Bureau of Land Management and United States Forest Service on Federal Lands, Order No. R5-2024-XXXX (hereinafter referred to as the “Order”).

Water Code section 13267 provides the Central Valley Regional Water Quality Control Board (Central Valley Water Board or Board) with the authority to require technical and monitoring reports. The technical and monitoring reports required in the Monitoring and Reporting Program will be used to determine the effects of each Permittee’s nonpoint source activities on water quality, to verify the effectiveness of best management practices designed to comply with applicable water quality objectives as defined in the Basin Plans, and to evaluate each Permittee’s compliance with the terms and conditions of this Order. The burden, including costs, of this monitoring bears a reasonable relationship to the need for that information and the benefits to be obtained from that information. Additional findings regarding the MRP are included in Attachment F to the Order.

The Executive Officer may review, modify, and reissue the MRP at any time or issue site-specific and individually developed monitoring and reporting requirements to the Permittee for land use activities that could affect the quality of waters of the state.

All monitoring and reporting records for projects covered under this Order must be retained by the Permittees for the life of the project and at least five years after project completion. All relevant monitoring and reporting records not otherwise submitted to the Central Valley Water Board pursuant to this MRP must be made available to the Central Valley Water Board at any time upon request.

The monitoring and reporting cycle is between 16 August and 15 August the following year, with an annual report due by September 30 each year. Specific requirements and timeframes for monitoring and reporting are included in the following sections of this MRP.

II. MONITORING REQUIREMENTS BY CATEGORY

A. Category A Monitoring

1. Agency Monitoring. The Permittee must monitor Category A Projects in accordance with the Permittee’s agency directives such as National Environmental Policy Act (NEPA) mitigation requirements, monitoring

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protocols as determined by agency Best Management Practices (BMPs) guidance documents, Forest Plans, or Resource Management Plans.

2. Discharge Incident. Should Agency Monitoring result in the identification of Discharge Incidents, additional monitoring and reporting may be required in accordance with MRP section III.A.

B. Category B Monitoring. Monitoring requirements are designed to focus field evaluations on areas where land disturbing project activities have the potential to negatively impact water quality due to hydrologic connectivity or proximity to surface waters.

1. **Monitoring Locations.** The Permittees must conduct Implementation Monitoring and Effectiveness Monitoring for all Category B Projects at the following focus areas, where applicable:
 - a. Designated Roads, motorized and non-motorized trail systems, landings, skid trails, earthen parking lots and staging areas, and developed campgrounds,
 - b. Designated Road and/or trail drainage facilities including but not limited to rolling dips, waterbars, drainage ditches, ditch relief culverts, cross drains, and surface drains,
 - c. Permanent and temporary watercourse crossings and approaches to watercourse crossings,
 - d. Water drafting locations and approaches,
 - e. Watercourse and lake protection zones,
 - f. Unstable areas, and
 - g. All identified CSDS must be monitored every year covered project activities take place, unless the CSDS was treated, and implementation, effectiveness, and photo-point monitoring (where required) has been completed, and monitoring results indicate that management measures are functional and meeting their designed purpose, and all existing discharges have ceased, and potential discharges associated with the CSDS have been treated.
2. **Implementation Monitoring.** Implementation monitoring is a thorough visual evaluation of a project site upon completion of project activities. Its purpose is to ensure water quality protection measures were fully and

properly implemented and are expected to function as designed and as required by this Order prior to the upcoming winter period. Implementation monitoring serves as the primary means of verifying whether BMPs, site-specific prescriptions, or corrective actions were implemented in accordance with the requirements of this Order, applicable BMP guidance documents, NEPA documents, or other documents used to direct the design, permitting and implementation of project activities in a manner that is protective of water quality.

- a. **Implementation Monitoring Locations.** The Permittee must conduct implementation monitoring within the focus areas described in Monitoring Locations (section II.B.1.) above.
 - b. **Frequency.** The Permittee must conduct implementation monitoring following project completion, in the timeframe described in Monitoring Timeframe (section II.B.2.c.) below, unless any of the following has since occurred: (1) new ground disturbing operations have occurred that require Implementation Monitoring; (2) installation of additional water quality protection measures within the project area; (3) new active or threatened discharges of waste have occurred that require treatment; or (4) other corrective actions have been implemented that require treatment. In instances where these activities have occurred, the Permittee must conduct implementation monitoring of those areas, following the timeframe described below.
 - c. **Monitoring Timeframe.** The Permittee must conduct implementation monitoring following completion of ground-disturbing project activities and prior to the upcoming winter period, before saturated road conditions exist, or roads become inaccessible due to wet weather or snow, but no later than November 15 each year.
 - i. Where winter operations are conducted, the Permittee must conduct implementation monitoring immediately following cessation of operations to ensure management measures are in place and secure.
3. **Effectiveness Monitoring.** The purpose of effectiveness monitoring is to determine whether applied management measures were effective in preventing nonpoint source discharges of waste to waters of the state. Effectiveness monitoring is a visual evaluation of the performance of management measures after being tested by a winter period applied to Category B projects.

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B.5

- a. Effectiveness Monitoring Locations. The Permittee must conduct effectiveness monitoring within the focus areas described in section II.B.1. above.
 - b. Frequency.
 - i. Where completed Category B projects have received both implementation and effectiveness monitoring AND effectiveness monitoring results indicate implemented management measures were protective of water quality, the Permittee is only required to complete Effectiveness Monitoring once.
 - ii. Where effectiveness monitoring identifies impacts, or threatened impacts, to water quality associated with inadequate management measures or failure to implement management measures, Discharge Incident reporting may be required (MRP section III.A.), and additional reporting (MRP section III.D.4.c., Annual Report Requirements) may be triggered.
 - c. Monitoring Timeframe. Effectiveness monitoring of Category B projects must occur between April 1 and August 15 to provide adequate time for mitigations to be implemented where necessary, based on Effectiveness Monitoring results, prior to the upcoming winter period.
4. **Photo-Point Monitoring.** Photo-point monitoring is used to illustrate issues or conditions at specific sites that may be difficult to fully describe in writing or in order to document changes in site conditions over time. Photo-point monitoring may be required by Central Valley Water Board staff for specific sites, with frequency to be determined based on-site circumstances.
- a. Photo-Point Locations and Information. The Permittee must delineate photo-point monitoring locations on the site map and shall identify (i.e., monument) locations in the field by use of rebar, flagging, or other method that will last throughout the desired monitoring period. Photos should include a scale and indicate direction photo was taken.

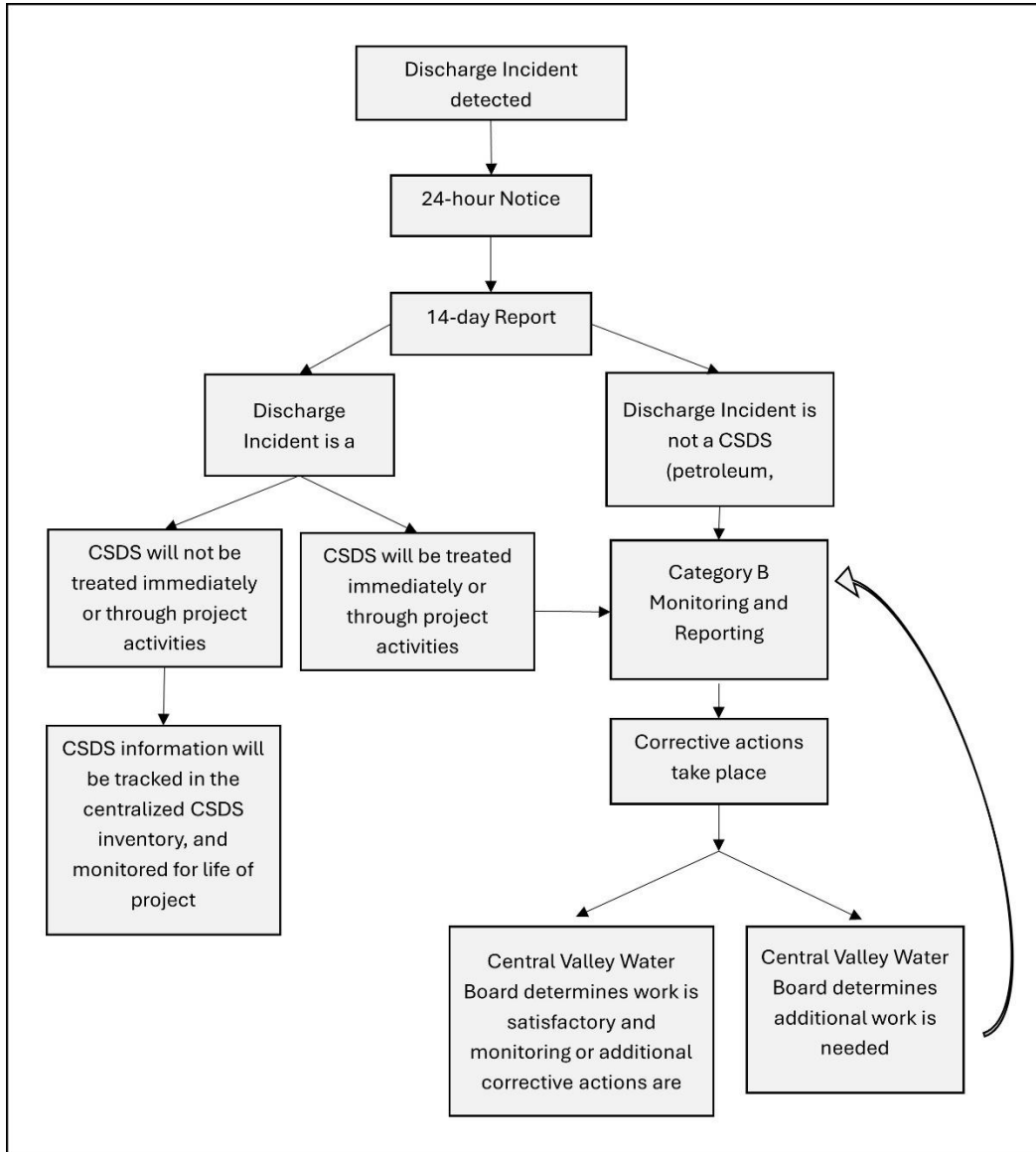
III. REPORTING

A. Discharge Incident

1. **Discharge Incident Initial Notification** (see Table 2). The Permittee must report Discharge Incidents (see Attachment A, Definitions and Figure 1 below) to the Central Valley Water Board by phone or email within 24 hours of detection. The initial notification must contain a description of the incident, including the type of waste involved, the location of the incident, whether the discharge is threatened, ongoing or has ceased, and any observed impacts to receiving water(s).
2. **Discharge Incident Written Report Due Date.** The Permittee must submit a written report regarding the Discharge Incident(s) to the Central Valley Water Board **within 14 days** of detection.
3. **Discharge Incident Written Report Contents.** The Discharge Incident Report must include the following:
 - a. The date incident(s) was/were discovered,
 - b. The name, contact information and title of person(s) discovering incident(s) and those responsible for incident follow-up,
 - c. Map showing location of the Discharge Incident(s) and proximity to water conveyance structures, and threatened or impacted receiving waters,
 - d. Description of the nature and extent of the incident(s) including the estimated volume and concentration of pollutant(s) and sediment volume loss estimate(s) or discharge, as applicable,
 - e. Colored digital photographs of the incident(s) to include scale reference, general surroundings, proximity to water conveyance structures, and threatened or impacted receiving waters,
 - f. Description of any corrective actions implemented to date, or if no corrective actions have been implemented, a description of planned corrective actions and anticipated implementation schedule, and
 - g. The name, title, and contact information of the authorized representative preparing the report.
 - h. Signature and Certification as described in Submission section G below.

4. **Discharge Incident - CSDS Report.** If the Discharge Incident also meets the definition of a CSDS, the Permittee must follow all applicable CSDS monitoring and reporting requirements.

Figure 1. Discharge Incident Flow Chart.



B. Pesticide Application Reporting Requirements (for Category A and Category B Projects)

1. **Pesticide Application Notification Due Date and Updates** (see Table 2). For all Category A and B Projects that include **broadcast or aerial application of pesticides**, the Permittee must submit a notification **at least 15 days** prior to application.
2. **Pesticide Application Notifications Contents:**
 - a. Federal Administrative Unit,
 - b. Project name,
 - c. Pesticide Category and product(s) to be applied (trade name),
 - d. EPA Registration Number,
 - e. Proposed date(s) of application,
 - f. Proposed method(s) of application (spot, broadcast, or aerial),
 - g. Area(s) of pesticide application (include map with classified waterbodies), and
 - h. Explanation of changes to a previous Pesticide Application Notification.
 - i. Signature and Certification as described in Submission section G below.
3. **Changes to Previously Submitted Pesticide Application Notifications.** Changes must be submitted in writing at least **48 hours** prior to pesticide application.

C. Notice of Planned Operations Reporting Requirements (for Category B Projects)

1. **Notice of Planned Operations Due Date** (see Table 2). Each Permittee must submit a Notice of Planned Operations (NPO) for Category B projects at least **15 days prior** to commencing project activities, or no later than **30 days after** the start-up of ground disturbing operations if the project is part of Post-Emergency Recovery efforts.

2. **NPO Expiration, Amendments or Updates.** An NPO remains in effect for 1 year (365 days) from the signature date, after which the NPO shall expire. If covered project activities are planned to continue longer than 1 year, the Permittee must submit an updated NPO at least 15 days prior to the expiration date. If Category B project activities are expected to resume after the expiration date, then the Permittee must submit an updated NPO at least 15 days prior to project activities commencing.

3. **NPO Contents.** A NPO must include the following:

Federal Agency Information

- a. Federal Agency (USFS or BLM) and Administrative Unit (USFS Forest and Ranger District, or BLM Field Office).
- b. Project contact information including name, title, phone number, email address, and mailing address.

Project Information

- c. NEPA review type (Categorical Exclusion, Environmental Assessment, Environmental Impact Statement, etc.) with a link (URL) to all applicable NEPA documents¹, including a signed NEPA decision document.
- d. Project name (NEPA name), project description, size (acres or miles), county/counties where project is located, and an indication if the project is part of an approved Watershed Treatment Plan (section III.E.2 below).
- e. A project map (see below for mapping requirements).
- f. Indicate if the project is part of Post-Emergency Recovery efforts and the type of all covered land management activities (Order section I.10., Covered Land Management Activities) that are planned to take place.
- g. Pesticide application and methods proposed for the project.
- h. Expected commencement date of operations (Month, Year), or if operations have already commenced for the project

¹ If project NEPA documents are not linked to a URL, they must be submitted via hard copy (see Attachment B, MRP for instructions on the submission of reports)

(i.e., Post-Emergency Recovery) indicate the date operations began (Month, Year).

- i. Indicate if winter period operations are planned to occur and the expected timeframe of operations, including details on ground and site conditions conducive to allow for operations during the winter period (i.e., soil conditions necessary for winter operations, hard frozen conditions, snow depths for over snow operations, etc.).

CSDS Information

- k. CSDS information required under Order section II.E.3.c - d. If CSDS information is not included with the NPO, provide an explanation as to why (i.e., no CSDS were identified, project is exempt from CSDS assessments, etc.). CSDS information must include, at a minimum, the following elements:
 - i. Date the CSDS was identified
 - ii. How the CSDS was identified (project related assessments, discharge incident, monitoring, etc.)
 - iii. CSDS ID, which must correspond to CSDS ID on Project Map, and coordinates of CSDS in decimal degrees
 - iv. If identified on a road, the road name. If associated with other infrastructure, include identifying name or reference to the infrastructure
 - v. HUC 12 watershed name and number
 - vi. Name of waterbody affected, or potentially affected, by the CSDS
 - vii. If located at a watercourse crossing, identification of the watercourse classification and crossing type
 - viii. If actively discharging or previously discharged, a volume estimate of sediment delivery, or if threatening to discharge include a volume estimate of potential sediment delivery
 - ix. Proposed treatment, or if proposing to defer treatment an explanation and justification for proposing to defer
 - x. Priority for treatment (high, medium, low, deferred)

- High – treatment to occur prior to the winter period
 - Medium – treatment to occur within one year of startup of project activities
 - Low – treatment to occur prior to the end of project activities
- xi. Current treatment status

Project Map Requirements

- I. A project map must be submitted digitally and formatted as a georeferenced PDF compatible with ArcMap/GIS applications, that includes the following information:
- i. Title (project name, federal administrative unit, and date),
 - ii. Legend, scale, north arrow,
 - iii. Project boundary (NEPA planning area),
 - iv. General location of where operations are planned to take place during the next 1-year period (may include a separate sub-project map(s) for specific work such as timber sale, restoration work, road work, etc.),
 - v. Type and name of all designated roads and trails within the project boundary,
 - vi. Names and classification of all watercourses (Attachment A, Definitions) and identification of all wetlands, or lakes within the project boundary (refer to definitions document),
 - vii. Water drafting sources and locations to be used in support of project activities, and
 - viii. All CSDS with a unique identifier tied to the CSDS Inventory.
- m. The NPO must be signed by an authorized representative (see Attachment A, Definitions), certifying that the project meets all criteria and conditions for Category B coverage under this Order (see Submission section G below).

D. Monitoring Results Annual Reporting

1. **Monitoring Results Annual Report Due Date** (see Table 2). Each Permittee must submit one comprehensive annual report to the Central Valley Water Board by **September 30**, for Category A and B projects that were active during the previous reporting period.
2. **Monitoring Results Annual Reporting Period.** The reporting period shall occur from August 16 through August 15 the following year. Reportable activities that occur, or continue, after August 15 must be included in the next calendar year's annual report.
3. **Annual Report Components for Category A and B Projects**
 - a. **Active Projects.** The Annual Report must include a list, by each National Forest and Ranger District, and BLM Field Office of all Category A and Category B Projects, and Project status (i.e. pending, active or completed).
4. **Annual Report Components for Category B Projects Only**
 - a. **Location of Operations Maps.** An updated project map or sub-project map (e.g., individual timber sale) showing the location where Category B activities took place during the reporting period. Locations must be clearly delineated and show project boundaries.
 - b. **CSDS Project Information.** All CSDS must be identified on the project map and CSDS inventory table for the life of the project regardless of treatment status (including those that will be deferred for future treatment).
 - i. A project map (may be combined with the Location of Operations Map) with all CSDS identified and
 - ii. Project specific CSDS inventory table. The inventory table must include all CSDS inventory information detailed in section III.C.3.k above.
 - c. **Effectiveness Monitoring Report.** Permittees shall include an Effectiveness Monitoring Report as part of their Annual Report that identifies all Category B projects where effectiveness monitoring identified water quality impacts, threatened or actual, associated with inadequate management measures or failure to implement

management measures. The Effectiveness Monitoring Report must include the following information:

- i. Project name,
 - ii. Site identification (unique identifier),
 - iii. Location of site(s) (GPS coordinates or Map),
 - iv. Date deficiencies were observed,
 - v. Description of site conditions, observed deficiencies, and volume estimates of sediment delivery in cubic yards if applicable,
 - vi. Description of implemented or planned corrective actions, and
 - vii. Date when corrective actions took place or an anticipated time schedule for when corrective actions will take place.
 - viii. Photo point monitoring results where required or where used to illustrate specific site conditions/changes.
- d. Signature and Certification as described in Submission section G below.

5. Annual Report Components for Emergency Response Actions

- a. The Emergency Response Actions Report must include the following:
 - i. Name and nature of the emergency and the date the emergency began,
 - ii. A summary of emergency response actions conducted during the reporting period,
 - iii. The location(s) of emergency response actions that have caused or threaten to cause water quality impacts or discharges of waste during the reporting period and that have not been mitigated,

- iv. Description of water quality impacts (include constituent and estimated concentration and/or volume of waste discharged),
- v. Date the water quality impact occurred, or was observed or reported,
- vi. Name, title, and contact information of person(s) responsible for incident follow-up,
- vii. Any reports, including maps and accompanying data (or links to), that were prepared as a result of the emergency. Examples include, but are not limited to: BAER Reports, suppression repair maps, debris flow assessments and reports, flood impact and damage assessment reports, etc.,
- viii. Description of proposed corrective actions to address water quality impacts and potential impacts along with estimated time for completion.
- ix. Signature and Certification as described in Submission section G below.

E. Controllable Sediment Source Reduction Program (CSSRP) Reporting

1. Field Assessment Work Plan Preparation and Submittal.

- a. **Watershed Selection.** The Permittee must select one or more HUC 12 watersheds to conduct a Field Assessment based on criteria defined in Order section II.G.3.
- b. **Assessment Work Plan Due Date** (see Table 2). Upon selection of one or more targeted watersheds pursuant to Order section G, the Permittee must prepare and submit a Field Assessment Work Plan (Assessment Work Plan) for Executive Officer review and approval based on the schedule in Table 1, CSSRP Schedule below. Assessment Work Plans must be submitted on a 7-year cycle.
- c. **Assessment Work Plan Contents.** The Assessment Work Plan must include the following:
 - i. Name and location of targeted watershed(s),

- ii. Justification for targeted watershed selection with explanation of findings from the analysis of every Criteria provided for Selection of Targeted Watersheds under Order section II.G.3.a.i – viii.
 - iii. Map of watershed with sufficient detail to identify ownership boundaries, designated and appurtenant roads, trail systems, watercourses, and watercourse classification,
 - iv. Proposed time schedule for completion of CSDS field assessment and inventory activities in compliance with the deadlines in Table 1, CSSRP Schedule, and
 - v. Signature and Certification as described in Submission section G below.
- d. Central Valley Water Board staff will review and provide comments to the Permittee, which must be taken into consideration prior to further development of the WTP(s).
 - e. The Permittee must notify the Executive Officer in writing as soon as it becomes aware that modification of the approved Assessment Work Plan is necessary. Notification must include an explanation of the reason for modification, what modification is necessary and whether the modification will impact the time schedule.

2. **Watershed Treatment Plan**

- a. **Watershed Treatment Plan Due Date** (see Table 2). The Permittee must prepare the WTP(s) based upon the results of the approved Assessment Work Plan. WTPs will be considered for approval by the Central Valley Water Board at a regularly scheduled Board meeting. Submittals shall follow the schedule in Table 1, CSSRP Schedule below.
- b. **Watershed Treatment Plan Contents.** WTPs submitted for board consideration and approval must include the following:
 - i. The approved Assessment Work Plan.
 - ii. Report of Findings - A summary of CSDS field assessment results within the targeted watershed(s) including but not limited to a table, or other appropriate format, identifying all CSDS, their location, type (road segment, watercourse

crossing, etc.), and estimated or modeled volume of sediment discharged or threatened discharge at each identified CSDS. The Report of Findings must include pertinent maps of targeted watershed(s) showing point and lateral extent of CSDS surveyed.

- iii. A description of proposed corrective actions to abate the discharges of sediment to receiving waters from all CSDS. The description must include the identification of each CSDS along with a description of the proposed action(s) to abate the discharge or threatened discharge of sediment to receiving waters.
- iv. Identification of any other relevant project types to be completed under the approved WTP (e.g., meadow restoration, streambank erosion/headcutting, etc.).
- v. Maps showing locations of planned CSDS and other proposed treatments.
- vi. Description of required permitting actions necessary to complete identified CSDS and other proposed treatments.
- vii. Description of any planned community outreach/engagement activities required for WTP implementation.
- viii. A proposed time schedule for planning and implementation activities necessary to complete WTP implementation within no more than 10 years (120 months) from Board approval, including interim milestones designed to ensure progress toward reaching the target.
- ix. Signature and Certification as described in Submission section G below.

3. Annual Interim Progress Report.

- a. **Annual Interim Progress Report Due Date** (see Table 2). The Permittee must submit an Annual Interim Progress Report each year beginning 1-year (12 months) from the date of Board approval of the WTP.
- b. **Annual Interim Progress Report Contents.** The Annual Interim Progress Report shall include the following:

- i. Document compliance with milestones within the approved WTP,
- ii. An updated status summary of projects and activities necessary to complete the WTP (NEPA process status, funding status, implementation status, etc.), including a prediction of upcoming annual activities,
- iii. An explanation of any implementation delays,
- iv. A summary of implementation progress, and
- v. Signature and Certification as described in Submission section G below.

4. Final Completion Report.

- a. **Final Completion Report Due Date** (see Table 2). The Permittee must submit a Final Completion Report no more than 60 days after completion of Watershed Treatment Plan activities or no later than 10 years (120 months) from the date of WTP approval, whichever is sooner. For WTPs with approved extensions, submission is due no later than 60 days after the extension deadline.
- b. **Final Completion Report Contents.** The Final Completion Report must include the following:
 - i. A listing and description of Watershed Treatment Plan activities completed.
 - ii. The specific projects (name) that implemented WTP activities.
 - iii. A list of treatment sites included in the approved WTP and related completed treatment activities.
 - iv. An estimated quantification of CSDS discharge volumes treated.
 - v. A list of sites added/discovered during the implementation period and whether or not those sites were treated.
 - vi. An estimated quantification of CSDS discharge volumes of untreated sites remaining and explanation as to why sites were left untreated.

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- vii. A summary of the current condition of the watershed(s) treated, and how the post-treatment condition complies with, and will be monitored and maintained in alignment with, the goals of the CSSRP and WTP.
- viii. Signature and Certification as described in Submission section G below.

Table 1. CSSRP Schedule

		Item	Responsible Party	Deadline - No Later Than
Board Adoption	1	Central Valley Water Board Adoption of Order	---	---
First Controllable Sediment Source Reduction Program (CSSRP) Watershed Treatment Plans (WTP)	1.a.	Submit Field Assessment Work Plan (FAWP) per selected watershed	Permittee	1 July 2025
	1.b.	Complete FAWP	Permittee	1 July 2026
	1.c.	Submit Watershed Treatment Plan(s) (WTP) per selected watershed	Permittee	1 December 2026
	1.d.	Review and approve WTPs	Central Valley Water Board	June 2027 Board Meeting
	1.e.	Begin Implementing Approved WTP(s)	Permittee	Upon Board Approval
	1.f.	Submit Interim Annual Progress Reports	Permittee	1 June 2028 and annually thereafter until WTP completion
	1.g.	Complete Approved WTP	Permittee	1 June 2037

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Item		Responsible Party	Deadline - No Later Than	
	1.h.	Report on Completion of WTP(s)	Permittee	1 August 2037
Second Controllable Sediment Source Reduction Program (CSSRP) Watershed Treatment Plans (WTPs)	2.a.	Submit Field Assessment Work Plan (FAWP) per selected watershed	Permittee	1 July 2032 (84 months from 1 st FAWP Submittal)
	2.b.	Complete FAWP	Permittee	1 July 2033 (12 months from 2 nd FAWP Submittal)
	2.c.	Submit Watershed Treatment Plan (WTP) per selected watershed	Permittee	1 December 2033 (17 months from 2 nd FAWP Submittal)
	2.d.	Review and Approve WTP(s)	Central Valley Water Board	June 2034 Board Meeting
	2.e.	Begin Implementing Approved WTP(s)	Permittee	Upon Board Approval
	2.f.	Submit Interim Annual Progress Reports	Permittee	1 June 2035 and annually thereafter until WTP completion
	2.g.	Complete Approved WTP(s)	Permittee	1 June 2044 (120 months from WTP Approval)
	2.h.	Report on Completion of WTP(s)	Permittee	1 August 2044
Cycle continues as above throughout duration of Order.				

5. **Requests for Watershed Treatment Plan Modification and/or Extension.** Modification and Extension requests of a Board-approved WTP may only be submitted for Executive Officer or the Executive Officer's delegee review and approval under the following situations:

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- a. Where an emergency has occurred within the area covered by a Board-approved WTP that will impact the implementation of the WTP, or
- b. Where an emergency has occurred outside the area covered by a Board-approved WTP that will result in a diversion of resources such that WTP completion will be delayed.
- c. To modify or add post-emergency identified CSDS treatment to those identified in a Board-approved WTP, the Permittee must submit a written request for modification that includes the following:
 - i. An explanation of the emergency that impacted the WTP and the resulting recommendations for modification or addition of CSDS treatments (include BAER report if applicable to the WTP HUC 12),
 - ii. Confirmation that funding for the recommended CSDS treatments has been secured and that implementation will be completed within the remaining time allotted for the Board-approved WTP, and
 - iii. A time schedule and map of all CSDS treatments to be completed within the remaining time allotted for the approved WTP, or as described under Extension Requests below.
- d. To request an extension of no more than 3 years (36 months) to complete a Board-approved WTP, the Permittee must submit a request in writing and provide sufficient information to demonstrate to the satisfaction of the Executive Officer that, if granted additional time, the Permittee will complete the applicable WTP activities. The written request must include the following:
 - i. An explanation and justification of the need for additional time to complete WTP activities,
 - ii. The amount of additional time requested and new proposed date for WTP completion,
 - iii. If the requested time extension exceeds one year, the proposed schedule shall include interim milestones and the date(s) for their achievement, and

- iv. A demonstration that the time extension requested is no longer than reasonably necessary to complete the WTP.
- e. The total time of extension for a Board-approved WTP shall not, in any case, exceed a maximum of 3 years.
- f. The Executive Officer will review the request for modification or extension of an approved WTP and provide a written response.

F. CEQA Mitigation Monitoring And Reporting

- 1. The Permittees must comply with the Mitigation Monitoring and Reporting Program (MMRP) developed as a component of the CEQA review and included in this Order as Attachment C.

G. Submission Of Reports

- 1. Submission. The Central Valley Water Board is a paperless office; therefore, work plans/reports should be submitted in searchable Portable Document Format (PDF), Word, and/or Excel when feasible. Documents that are less than 50 MB should be emailed to the appropriate office:

Rancho Cordova Office: centralvalleysacramento@waterboards.ca.gov

Redding Office: centralvalleyredding@waterboards.ca.gov

Fresno Office: centralvalleyfresno@waterboards.ca.gov

In the subject line of the email, include the program (Forest Activities Program), subject (e.g., Annual Report, Discharge Incident Report, NPO, Pesticide Notification, etc.), and the name of the staff person that will receive the document(s) (if known).

- 2. Certification Statement. All reports described above must include the following certification statement and signature of the Authorized Representative:

I am aware that monitoring and technical reports submitted pursuant to Water Code § 13267 are submitted under penalty of perjury, and I certify that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

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Table 2. Summary of Reporting Requirements under Monitoring and Reporting Program

MRP Section	Description	Category	Reporting Due Date	Reporting Interval
III.A	Discharge Incident Initial Notification	Category A & B	Within 24 hours of detection	Ongoing
III.A	Discharge Incident Report	Category A & B	Within 14 days of detection	Ongoing
III.B	Pesticide Application Notification	Category A & B	At least 15 days prior to application	Ongoing
III.B	Changes to Pesticide Application Notification	Category A & B	At least 48 hours prior to application	Ongoing
III.C	Notice of Planned Operations	Category B	At least 15 days prior to commencing project activities	Ongoing
III.C	Notice of Planned Operations	Category B, Post-Emergency Recovery	Within 30 days of commencing ground-disturbing activities	Ongoing
III.C	Updated Notice of Planned Operations	Category B	At least 15 days prior to expiration of current NPO or project activities commencing	Ongoing
III.D	Monitoring Results Annual Report	Category A & B	September 30	Annual
III.E	Assessment Work Plan	CSSRP	See Table 1	Every 7 years
III.E	Watershed Treatment Plan	CSSRP	See Table 1	Every 7 years
III.E	Annual Interim Progress Report	CSSRP	See Table 1	Annual
III.E	Final Completion Report	CSSRP	See Table 1	Every 7 years

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MRP Section	Description	Category	Reporting Due Date	Reporting Interval
III.F	CEQA MMRP	Category A & B	Various, submitted upon request	Ongoing

Table 2. is intended to summarize reporting requirements under the Monitoring and Reporting Program to aid compliance. In the event of any inconsistency, the requirements within the Monitoring and Reporting Program control.

ATTACHMENT C
CEQA MITIGATION MONITORING AND REPORTING PROGRAM
FOR
ORDER NO. R5-2024-XXXX

1. Mitigation Monitoring and Reporting Program Summary Table

The following mitigation monitoring and reporting program (MMRP) summary table includes the mitigation measures identified in the environmental impact report (EIR) prepared in compliance with the California Environmental Quality Act (CEQA) for the proposed Waste Discharge Requirements for Nonpoint Source (NPS) Discharges Related to Certain Activities Conducted by the United States Forest Service (USFS) and the Bureau of Land Management (BLM) on Federal Lands (Proposed Project or Federal NPS Permit). For each mitigation measure, this table identifies monitoring and reporting actions that must be carried out and the monitoring schedule.

The USFS, BLM, and/or their contractors are responsible for complying with all mitigation measures in the EIR and this MMRP summary table. The USFS, BLM, and/or their contractors must determine whether their proposed activities (e.g., management measures) are subject to individual mitigation measures and, if applicable, take the necessary actions to ensure the mitigation measures are fully implemented. In some cases, this may involve hiring a professional (e.g., biologist, archaeologist) and becoming familiar with applicable laws and regulations.

The USFS and BLM must report their compliance with mitigation measures in summary reports, which are to be maintained as part of their overall compliance reporting for the proposed Federal NPS Permit and submitted to the Central Valley Water Board upon request. As the CEQA Lead Agency, the CVWB is ultimately responsible for ensuring compliance with the mitigation measures identified in the EIR. The Central Valley Water Board will accomplish this through review of summary reports to confirm that USFS' and BLM's reported actions fully meet the requirements of the applicable mitigation measures. The CVWB may also confirm mitigation measure compliance during periodic inspections of individual activity sites.

The MMRP will be made available to the USFS and BLM and they may use the checklist to help document their compliance with applicable mitigation measures. The Central Valley Water Board may also use the MMRP checklist to confirm and document compliance.

ACRONYMS AND ABBREVIATIONS

BLM	Bureau of Land Management
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CVWB	California Regional Water Quality Control Board, Central Valley Region
DEIR	Draft environmental impact report
EIR	Environmental impact report
MMRP	Mitigation monitoring and reporting program
NPS	Nonpoint source
Proposed Project	Waste Discharge Requirements for Nonpoint Source Discharges Related to Certain Activities Conducted by the United States Forest Service and the Bureau of Land Management on Federal Lands
USFS	United States Forest Service

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Mitigation Monitoring and Reporting Summary, Biological Resources

Mitigation Measure	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule	Completion Date and Initials
<p>BIO-1: Avoid and Minimize Impacts on Sensitive Biological Resources. To address potential impacts to California special-status species, as defined and listed in Section 3.4.3 and Appendix D, and sensitive vegetation communities within riparian habitat, waterways, or wetlands, USFS and BLM must complete a desktop analysis of all such areas where management measures will be implemented prior to implementation of any management measure(s). Where construction/installation of management measures could result in impacts to such species and habitat, USFS and BLM must consult a qualified biologist¹ and use the least impactful effective management measure (based on the recommendation of the biologist), to avoid or minimize impacts. Where implementation of management measures cannot be achieved without incurring potentially significant effects to such species and habitat, USFS and BLM must implement the following measures to</p>	<p>1. If not available through in-house resources, retain a qualified biologist¹. (Federal Agency)</p>	<p>1. During design and planning phase.</p>	
	<p>2. Ensure that the least impactful effective management measure is selected to avoid impacts to biological resources, based on the recommendation of the qualified biologist. (Federal Agency)</p>	<p>2. During design of management measure(s).</p>	
	<p>3. Where areas potentially containing sensitive biological resources cannot be avoided, ensure completion of a habitat and species assessment by the qualified biologist. (Federal Agency)</p>	<p>3. Prior to construction / installation of management measure(s).</p>	

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Mitigation Measure	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule	Completion Date and Initials
reduce those effects to levels that are less than significant. <ul style="list-style-type: none"> ▪ Avoid and minimize disturbance of riparian and other sensitive vegetation communities. ▪ Avoid and minimize disturbance to areas containing California special-status plant or animal species. ▪ Where construction in areas that may contain sensitive biological resources cannot be avoided through the use of management measures, conduct an assessment of habitat conditions and the potential for presence of sensitive vegetation communities or special-status plant and animal species prior to construction. This may include the hiring of a qualified biologist if one is not available through the federal agency's in-house resources to identify riparian and other sensitive vegetation communities and/or habitat for California special-status plant and animal species. 	4. Ensure that management measures will not disturb any special-status [CESA] species. (Federal Agency)	4. Prior to undertaking proposed activity.	
	5. For activities proposed during nesting season, ensure completion of survey for nesting birds and avoidance of nests / young. (Federal Agency)	5. Prior to undertaking proposed activity.	

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Mitigation Measure	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule	Completion Date and Initials
<ul style="list-style-type: none"> ▪ When constructing/installing management measures, ensure that such activities will not disturb any California special-status species that may be present. If installing/constructing management measures during the nesting season (generally February 1 to August 31), the qualified biologist shall inspect the surrounding trees, vegetation, and ground to ensure that nesting birds are not present within or adjacent to areas where such management measures will occur. If nests or young are identified in such areas, construct/install the management measures outside of the nesting season. ▪ If substantial adverse effects on sensitive biological resources cannot be avoided or reduced to a less-than-significant level, the activity will not be eligible for coverage under the Federal NPS Permit and the USFS or BLM will need to seek an individual permit from the Central Valley Water Board. 			

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Notes:

1 A qualified biologist is defined as an individual with at least a four-year degree in biological sciences, natural history, environmental science, or a related field and at least three years of experience performing field work and impact analysis for species protected under the Federal and California Endangered Species Act and/or related laws. This would include conducting surveys for the presence of special-status plant and animal species, as well as developing and implementing impact avoidance and minimization measures. A qualified biologist shall be knowledgeable and experienced in the biology and natural history of plant and wildlife species and habitats that could be present in the area.

**ATTACHMENT D
SPECIFIC WATER QUALITY OBJECTIVES
FOR
ORDER NO. R5-2024-XXXX**

Order No. R5-2024-XXXX prohibits the Permittees from causing or contributing to an exceedance in the receiving waters of any applicable Basin Plan water quality objective (whether numeric or narrative) and provides a non-exhaustive list of applicable objectives to the Order.

This attachment provides the full text of the water quality objectives as provided in both the Water Quality Control Plan (Basin Plan) for the Sacramento River Basin and the San Joaquin River Basin, California Regional Water Quality Control Board, Central Valley Region, Fifth Edition, Revised February 2019 (with approved Amendments) and the Water Quality Control Plan for the Tulare Lake Basin, Third Edition, Revised May 2018 (with Approved Amendments).

Any future amendments to these objectives shall supersede the information contained in this attachment.

**SACRAMENTO AND SAN JOAQUIN RIVER BASIN PLAN OBJECTIVES FOR
SPECIFIED CONSTITUENTS:**

Oil and Grease

Waters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.

Pesticides

No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.

Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses.

Total identifiable persistent chlorinated hydrocarbon pesticides shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the Executive Officer.

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Pesticide concentrations shall not exceed those allowable by applicable antidegradation policies (see State Water Resources Control Board Resolution No. 68-16 and 40 C.F.R. Section 131.12.).

Pesticide concentrations shall not exceed the lowest levels technically and economically achievable.

Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15.

Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of thiobencarb in excess of 1.0 µg/l.

Pesticide concentrations shall not exceed the levels identified in Table 3-4. Where more than one objective may be applicable, the most stringent objective applies.

For the purposes of this objective, the term pesticide shall include: (1) any substance, or mixture of substances which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, which may infest or be detrimental to vegetation, man, animals, or households, or be present in any agricultural or nonagricultural environment whatsoever, or (2) any spray adjuvant, or (3) any breakdown products of these materials that threaten beneficial uses. Note that discharges of "inert" ingredients included in pesticide formulations must comply with all applicable water quality objectives.

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TABLE 3-4 SPECIFIC PESTICIDE OBJECTIVES

PESTICIDE	MAXIMUM CONCENTRATION AND AVERAGING PERIOD	APPLICABLE WATER BODIES
Chlorpyrifos	0.025 µ g/L; 1-hour average (acute) 0.015 µ g/L; 4-day average (chronic) Not to be exceeded more than once in a three year period.	San Joaquin River from Mendota Dam to Vernalis (Reaches include Mendota Dam to Sack Dam (70), Sack Dam to Mouth of Merced River (71), Mouth of Merced River to Vernalis (83)), Delta Waterways listed in Appendix 42. Sacramento River from Shasta Dam to Colusa Basin Drain (13) and the Sacramento River from the Colusa Basin Drain to I Street Bridge (30). Feather River from Fish Barrier Dam to Sacramento River (40). Bear Creek (San Joaquin and Calaveras Counties), Bear River (43), Lower (below Camp Far West Reservoir), Berenda Creek (Madera County), Berenda Slough (Madera County), Colusa Basin Drain (29), Coon Creek, Lower (Sutter County), Deadman Creek (Merced County), Del Puerto Creek, Dry Creek (tributary to Tuolumne River at Modesto, E Stanislaus County), Duck Creek (San Joaquin County), French Camp Slough, Gilsizer Slough, Ingram Creek, Jack Slough, Live Oak Slough, Lone Tree Creek, Main Drainage Canal (Butte County), Merced River, Lower (McSwain Reservoir to San

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PESTICIDE	MAXIMUM CONCENTRATION AND AVERAGING PERIOD	APPLICABLE WATER BODIES
		Joaquin River) (81), Mormon Slough (from Stockton Diverting Canal to Bellota Weir), Morrison Slough (Sutter County), Orestimba Creek, Pixley Slough (San Joaquin County), Salt Slough, Spring Creek (Colusa County), Stanislaus River, Lower (Goodwin Dam to San Joaquin River) (90), Tuolumne River, Lower (Don Pedro Dam to San Joaquin River) (86), Ulatis Creek (Solano County), Wadsworth Canal, Westley Wasteway (Stanislaus County), Winters Canal (Yolo County), Yankee Slough (Placer and Sutter Counties) Waters with designated or existing ² WARM and/or COLD beneficial uses that are not upstream of the major dams in Table 3-5.
Diazinon	0.16 µ g/L; 1-hour average (acute) 0.10 µ g/L; 4-day average (chronic) Not to be exceeded more than once in a three year period.	As noted above for chlorpyrifos

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TABLE 3-5 MAJOR DAMS DEMARKING THE UPSTREAM EXTENT OF THE WATER BODIES WITH DIAZINON AND CHLORPYRIFOS WATER QUALITY OBJECTIVES

Dam	Associated Reservoir	River System
Monticello Dam	Lake Berryessa (55)	Putah Creek
Black Butte Dam	Black Butte Reservoir (26)	Stony Creek
Camanche Dam	Camanche Reservoir (62)	Mokelumne River
Camp Far West Dam	Camp Far West Reservoir	Bear River
Cache Creek Dam	Clear Lake (53)	Cache Creek
New Don Pedro Dam	Don Pedro Reservoir (85)	Tuolumne River
Buchanan Dam	Eastman Lake (Buchanan Reservoir) (76)	Chowchilla River
Folsom Dam	Folsom Lake (50)	American River
Englebright Dam	Harry L. Englebright Reservoir	Yuba River
Hidden Dam	Hensley Lake (Hidden Reservoir) (73)	Fresno River
Keswick Dam	Keswick Reservoir	Sacramento River
New Exchequer Dam	McClure Lake (Exchequer Reservoir) (79)	Merced River
Friant Dam	Millerton Lake (68)	San Joaquin River
New Hogan Dam	New Hogan Reservoir (65)	Calaveras River
Oroville Dam	Lake Oroville (39)	Feather River
San Luis Dam	San Luis Reservoir (91)	-
Scotts Flat Dam	Scotts Flat Reservoir	Deer Creek
Goodwin Dam	Tulloch Reservoir (89)	Stanislaus River
Whiskeytown Dam	Whiskeytown Reservoir (14)	Clear Creek

Sediment

The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

Settleable Material

Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses.

Suspended Material

Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.

Toxicity

All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances. Compliance with this objective will be determined by analyses of indicator organisms, species diversity, population density, growth anomalies, and biotoxicity tests of appropriate duration or other methods as specified by the Regional Water Board.

The Regional Water Board will also consider all material and relevant information submitted by the discharger and other interested parties and numerical criteria and guidelines for toxic substances developed by the State Water Board, the California Office of Environmental Health Hazard Assessment, the State Water Board Division of Drinking Water Programs, the U.S. Food and Drug Administration, the National Academy of Sciences, the U.S. Environmental Protection Agency, and other appropriate organizations to evaluate compliance with this objective.

The survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality factors shall not be less than that for the same water body in areas unaffected by the waste discharge, or, when necessary, for other control water that is consistent with the requirements for "experimental water" as described in *Standard Methods for the Examination of Water and Wastewater*, latest edition. As a minimum, compliance with this objective as stated in the previous sentence shall be evaluated with a 96-hour bioassay.

In addition, effluent limits based upon acute biotoxicity tests of effluents will be prescribed where appropriate; additional numerical receiving water quality objectives for specific toxicants will be established as sufficient data become available; and source control of toxic substances will be encouraged.

Temperature

The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses.

Temperature objectives for COLD interstate waters, WARM interstate waters, and Enclosed Bays and Estuaries are as specified in the *Water Quality Control Plan for*

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Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California including any revisions. There are also temperature objectives for the Delta in the State Water Board's 2006 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary.

At no time or place shall the temperature of COLD or WARM intrastate waters be increased more than 5°F above natural receiving water temperature. Temperature changes due to controllable factors shall be limited for the water bodies specified as described in Table 3-7. To the extent of any conflict with the above, the more stringent objective applies.

In determining compliance with the water quality objectives for temperature, appropriate averaging periods may be applied provided that beneficial uses will be fully protected.

TABLE 3-7 SPECIFIC TEMPERATURE OBJECTIVES

DATES	APPLICABLE WATER BODY
From 1 December to 15 March, the maximum temperature shall be 55°F. From 16 March to 15 April, the maximum temperature shall be 60°F. From 16 April to 15 May, the maximum temperature shall be 65°F. From 16 May to 15 October, the maximum temperature shall be 70°F. From 16 October to 15 November, the maximum temperature shall be 65°F. From 16 November to 30 November, the maximum temperature shall be 60°F.	Sacramento River from its source to Box Canyon Reservoir (9); Sacramento River from Box Canyon Dam to Shasta Lake (11)
The temperature in the epilimnion shall be less than or equal to 75°F or mean daily ambient air temperature, whichever is greater.	Lake Siskiyou (10)
The temperature shall not be elevated above 56°F in the reach from Keswick Dam to Hamilton City nor above 68°F in the reach from Hamilton City to the I Street Bridge during periods when temperature increases will be detrimental to the fishery.	Sacramento River from Shasta Dam to I Street Bridge (13, 30)

For Deer Creek, source to Cosumnes River, temperature changes due to controllable factors shall not cause creek temperatures to exceed the objectives specified in Table 3-8.

TABLE 3-8 DEER CREEK TEMPERATURE OBJECTIVES

Date	Daily Maximum (°F)^a	Monthly Average (°F)^b
January and February	63	58
March	65	60
April	71	64
May	77	69
June	81	74
July through Sept.	81	77
October	77	72
November	73	65
December	65	58

Turbidity

Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in turbidity attributable to controllable water quality factors shall not exceed the following limits: WATER QUALITY OBJECTIVES
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- Where natural turbidity is less than 1 Nephelometric Turbidity Unit (NTU), controllable factors shall not cause downstream turbidity to exceed 2
- Where natural turbidity is between 1 and 5 NTUs, increases shall not exceed 1 NTU.
- Where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent.
- Where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs.
- Where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.

In determining compliance with the above limits, appropriate averaging periods may be applied provided that beneficial uses will be fully protected.

Exceptions to the above limits will be considered when a dredging operation can cause an increase in turbidity. In those cases, an allowable zone of dilution within which

turbidity in excess of the limits may be tolerated will be defined for the operation and prescribed in a discharge permit.

For Folsom Lake (50) and American River (Folsom Dam to Sacramento River) (51), except for periods of storm runoff, the turbidity shall be less than or equal 10 NTUs. To the extent of any conflict with the general turbidity objective, the more stringent applies.

For Delta waters, the general objectives for turbidity apply subject to the following: except for periods of storm runoff, the turbidity of Delta waters shall not exceed 50 NTUs in the waters of the Central Delta and 150 NTUs in other Delta waters. Exceptions to the Delta specific objectives will be considered when a dredging operation can cause an increase in turbidity. In this case, an allowable zone of dilution within which turbidity in excess of limits can be tolerated will be defined for the operation and prescribed in a discharge permit.

For Deer Creek, source to Cosumnes River:

- When the dilution ratio for discharges is less than 20:1 and where natural turbidity is less than 1 Nephelometric Turbidity Unit (NTU), discharges shall not cause the receiving water daily average turbidity to exceed 2 NTUs or daily maximum turbidity to exceed 5 NTUs. Where natural turbidity is between 1 and 5 NTUs, dischargers shall not cause receiving water daily average turbidity to increase more than 1 NTU or daily maximum turbidity to exceed 5 NTUs
- Where discharge dilution ratio is 20:1 or greater, or where natural turbidity is greater than 5 NTUs, the general turbidity objectives shall apply.

TULARE LAKE BASIN PLAN OBJECTIVES FOR SPECIFIED CONSTITUENTS:

Oil and Grease

Waters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.

Pesticides

Waters shall not contain pesticides in concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses. (For the purposes of this objective, the term pesticide is defined as any substance or mixture of substances used to control objectionable insects, weeds, rodents, fungi, or other forms of plant or animal life.) The Regional Water Board will consider all material and relevant information submitted by

the discharger and other interested parties and numerical criteria and guidelines for detrimental levels of chemical constituents developed by the State Water Board, the California Office of Environmental Health Hazard Assessment, the State Water Board Division of Drinking Water Programs, the U.S. Food and Drug Administration, the National Academy of Sciences, the U. S. Environmental Protection Agency, and other appropriate organizations to evaluate compliance with this objective.

At a minimum, waters designated MUN shall not contain concentrations of pesticide constituents in excess of the maximum contaminant levels (MCLs) specified in Table 64444-A (Organic Chemicals) of Section 64444 of Title 22 of the California Code of Regulations, which is incorporated by reference into this plan. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect. The Regional Water Board acknowledges that specific treatment requirements are imposed by state and federal drinking water regulations on the consumption of surface waters under specific circumstances. To ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses, the Regional Water Board may apply limits more stringent than MCLs.

In waters designated COLD, total identifiable chlorinated hydrocarbon pesticides shall not be present at concentrations detectable within the accuracy of analytical methods prescribed in *Standard Methods for the Examination of Water and Wastewater, 18th Edition*, or other equivalent methods approved by the Executive Officer.

Sediment

The suspended sediment load and suspended sediment discharge rate of waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

Settleable Material

Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses.

Suspended Material

Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.

Toxicity

All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This objective applies regardless of whether the toxicity is caused by a single substance or

the interactive effect of multiple substances. Compliance with this objective will be determined by analyses of indicator organisms, species diversity, population density, growth anomalies, biotoxicity tests of appropriate duration, or other methods as specified by the Regional Water Board. The Regional Water Board will also consider all material and relevant information submitted by the discharger and other interested parties and numerical criteria and guidelines for toxic substances developed by the State Water Board, the California Office of Environmental Health Hazard Assessment, the State Water Board Division of Drinking Water Programs the U.S. Food and Drug Administration, the National Academy of Sciences, the U. S. Environmental Protection Agency, and other appropriate organizations to evaluate compliance with this objective.

The survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality factors shall not be less than that for the same water body in areas unaffected by the waste discharge, or, when necessary, for other control water that is consistent with the requirements for "dilution water" as described in Standard Methods for the Examination of Water and Wastewater, 18th Edition. As a minimum, compliance shall be evaluated with a 96-hour bioassay.

In addition, effluent limits based upon acute biotoxicity tests of effluents will be prescribed where appropriate; additional numerical receiving water quality objectives for specific toxicants will be established as sufficient data become available; and source control of toxic substances will be encouraged.

Temperature

Natural temperatures of waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses.

Temperature objectives for COLD interstate waters, WARM interstate waters, and Enclosed Bays and Estuaries are as specified in the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California, including any revisions. (See Appendix 10.)

Elevated temperature wastes shall not cause the temperature of waters designated COLD or WARM to increase by more than 5°F above natural receiving water temperature.

In determining compliance with the above limits, the Regional Water Board may prescribe appropriate averaging periods provided that beneficial uses will be fully protected.

Turbidity

Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in turbidity attributable to controllable water quality factors shall not exceed the following limits:

- Where natural turbidity is between 0 and 5 Nephelometric Turbidity Units (NTUs), increases shall not exceed 1 NTU.
- Where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent.
- Where natural turbidity is equal to or between 50 and 100 NTUs, increases shall not exceed 10 NTUs.
- Where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.

In determining compliance with the above limits, the Regional Water Board may prescribe appropriate averaging periods provided that beneficial uses will be fully protected.

**ATTACHMENT E
FACT SHEET
FOR
ORDER NO. R5-2024-XXXX**

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I. PERMITTING SCOPE

This Fact Sheet sets forth regulatory considerations and rationale used in the development of requirements for Waste Discharge Requirements Order for Nonpoint Source Discharges Related to Certain Activities Conducted by the United States Forest Service and the Bureau of Land Management Order No. R5-2024-XXXX (hereinafter “Order”) within the Central Valley Region.

The United States Forest Service (USFS) Pacific Southwest Region administers and manages approximately 14,500 square miles (9.3 million acres), or approximately twenty-four percent (24%) of the lands within the Central Valley Region. USFS managed lands within the Central Valley Region includes portions of the Modoc, Shasta-Trinity, Mendocino, Lassen, Plumas, Tahoe, Eldorado, Stanislaus, Sierra, Sequoia, Inyo, and Los Padres National Forests.

The Bureau of Land Management (BLM) administers and manages approximately 2,500 square miles (1.6 million acres) within two districts, accounting for approximately four percent (4%) of the lands within the Central Valley Region. The BLM’s Northern California District includes the Applegate, Eagle Lake, and Redding Field Offices and the Central California District includes the Bakersfield, Central Coast, Ukiah, and Mother Lode Field Offices. USFS and BLM lands within the Central Valley Region are shown on Figure 1.

The following land management activities occur on USFS and BLM lands, have the potential to cause or contribute to nonpoint source discharges of waste, and are subject to Order requirements:

Vegetation Management. Actions taken to manage vegetation to restore and maintain the health, resiliency, and productivity across federal lands including, but not limited to; commercial and non-commercial timber harvest (including non-emergency post-wildfire operations), thinning operations, prescribed burning, mastication of fuels, pesticide use, or other means to meet vegetation management objectives.

Transportation Management. Actions taken to manage motorized and non-motorized road and trail networks serving multiple uses across federal lands including, but not limited to; construction, reconstruction, maintenance, or decommissioning of roads or trails, and associated watercourse crossings.

Recreation Facilities Management. Actions taken to meet multiple-use objectives such as providing recreational opportunities for the public including, but not limited to; construction, maintenance, and management of recreation facilities such as campgrounds, staging areas or parking lots, and managed recreation sites.

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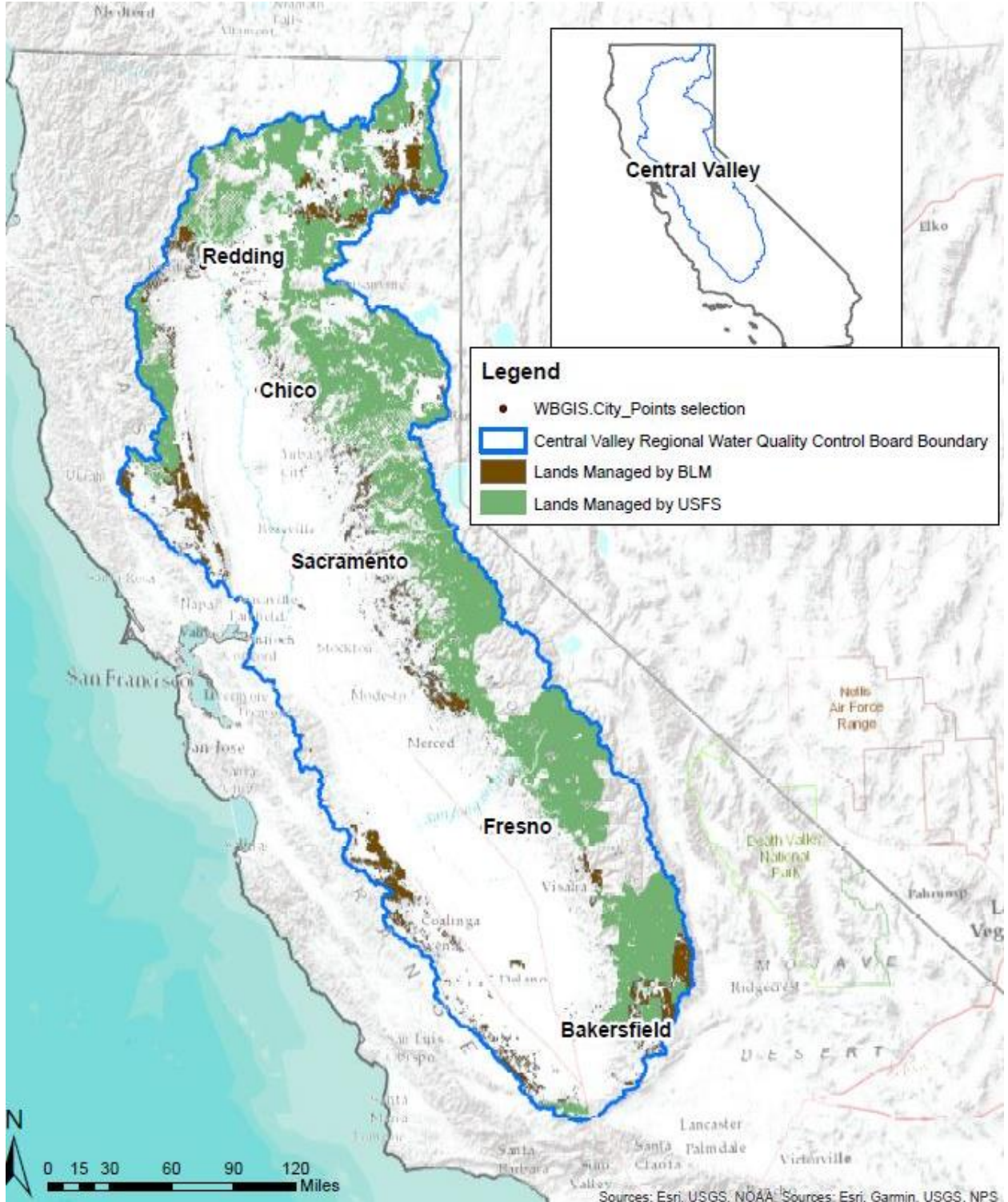
Post-Emergency Recovery Activities. Actions that may take place after an emergency, such as flooding, landslides, severe storm damage, wildfire, or other emergencies, have ceased and recovery activities begin AND where NEPA has been completed (including NEPA exemptions and Categorical Exclusions). Actions taken as part of post-emergency recovery activities may include, but are not limited to; implementation of erosion and sediment controls, temporary watercourse crossing installation and removal, permanent watercourse crossing repair or replacement, timber salvage, hazard tree removal, revegetation activities and associated pesticide application.

Restoration Activities. Actions taken to improve, enhance, or sustain ecological health on federal lands. These activities are restorative in nature and are often designed to improve habitat, prevent degradation, and reduce long-term erosion and sedimentation to surface waters. Restoration activities may include, but are not limited to; watercourse crossing removal, channel and bank stabilization, stream channel and floodplain habitat enhancement, and wetland restoration.

This Order does not authorize any ongoing discharges of waste not associated with the permitted land management activities. This Order does not apply to point source discharges of waste that are subject to the federal National Pollutant Discharge Elimination System (NPDES) permit program under the federal Clean Water Act or to discharges subject to water quality certification requirements under the Clean Water Act.

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Figure 1: USFS and BLM Managed Lands within the Central Valley Region



II. REGULATORY FRAMEWORK

Federal law requires states to identify areas with “substantial water quality control problems” and to designate a management agency to develop an area-wide plan for addressing water pollution (so-called “208 Plans”). (See 33 U.S.C. § 1288.) It is pursuant to this authority that USFS and the State Water Resources Control Board (State Water Board) entered into the 1981 Management Agency Agreement (MAA). That MAA specified how the USFS would use its existing authorities to address water quality pollution on USFS lands using the BMPs identified in the Water Quality Management for National Forest Lands in California (i.e. Forest Service 208 Report.) The MAA between the State Water Board and the USFS also contemplated that the State and Regional Water Quality Control Boards (Water Boards) would waive issuance of waste discharge requirements for USFS timber harvest activities that may result in nonpoint source discharges of waste, provided that the USFS designed and implemented its projects to fully comply with state water quality standards. The MAA also expressly states that nothing in it “will be construed in any way as limiting the authority of the State Board, or the Regional Boards in carrying out their legal responsibilities for management, or regulation of water quality.”

The BLM and the State Water Board entered into a Memorandum of Understanding (MOU) in 1992. Similar to the USFS MAA, the MOU formalized a process for addressing nonpoint source pollution. Through the MOU, the State Water Board and BLM mutually agreed to encourage participation from other agencies (state and federal) in the control of nonpoint source pollution, develop a process for the selection and application of BMPs, develop implementation priorities and policies for activities that generate nonpoint source pollution, develop a Water Quality Management Plan and Management Agency Agreement, and encourage the development of comprehensive management plans covering entire watersheds or significant portions of watersheds.

Federal law requires the states to develop and implement plans for dealing with non-point source pollution. (33 U.S.C. § 1329.) Pursuant to this federal mandate, the State Water Board adopted its Non-Point Source Policy (NPS Policy). The NPS Policy requires the State Water Board and regional water boards to regulate non-point source pollution by using either (1) Waste Discharge Requirements (WDRs) (CA Water Code § 13260); (2) a Waiver of Waste Discharge Requirements (CA Water Code § 13269); or (3) a Prohibition (CA Water Code § 13243), which are the regulatory tools under California’s water pollution control statute (the Porter-Cologne Act). Pursuant to 33 U.S.C. § 1329 and other provisions in the Clean Water Act, as well as the Porter-Cologne Act, California has an overriding obligation to manage non-point source pollution in a way that protects water quality in waters of the United States, whichever option the regional board chooses.

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Continuing to rely solely on the MAA and MOU frameworks to regulate nonpoint source pollution has been ineffective in adequately addressing nonpoint source pollution and does not comport with the NPS Policy. Accordingly, the Central Valley Water Board has developed this Order which leverages, to the extent possible, existing USFS and BLM mandates, systems and workflow by (1) requiring the effective design and implementation of BMPs anytime the agencies are conducting projects that may cause or contribute to nonpoint source pollution, (2) requiring the agencies to continuously identify and inventory controllable sediment discharge sources (CSDS), and (3) requiring the development of plans to treat CSDS both at the project and landscape scale.

Clean Water Act Section 313

Pursuant to federal Clean Water Act section 313, “each department, agency, or instrumentality of the executive, legislative, and judicial branches of the Federal Government (1) having jurisdiction over any property or facility, or (2) engaged in any activity resulting, or which may result, in the discharge or runoff of pollutants, and each officer, agent, or employee thereof in the performance of his official duties, shall be subject to, and comply with, all Federal, State, interstate, and local requirements, administrative authority, and process and sanctions respecting the control and abatement of water pollution in the same manner, and to the same extent as any nongovernmental entity including the payment of reasonable service charges.” (33 U.S.C. § 1323, subd. (a).) “[F]ederal agencies managing federal lands generally must comply with the water pollution laws and regulations of the relevant State, including the State's laws concerning discharges from nonpoint sources.” (*Central Sierra Environmental Resource Center v. Stanislaus National Forest* (9th Cir. 2022) 30 F.4th 929.)

Federal agencies are responsible for ensuring sufficient funds for compliance with applicable pollution control standards are requested in agency budget. (Executive Order No. 12088 (43 FR 47707,47708) (Oct. 13, 1978), Section 1-5 (Funding) [Executive Order 13148 (Apr. 21, 2000) (65 Fed. Reg. 24595) revoked section 1-4 (Pollution control plan) of Executive Order 12088].) Clean Water Act section 313 addresses potential appropriation limitations. In particular, section 313(a) discusses the process for exempting projects from the requirements of section 313. Under this section, no such exemptions shall be granted due to lack of appropriation unless the appropriation was specifically requested as part of the budgetary process and Congress failed to make available such requested appropriation.

Porter-Cologne Water Quality Control Act

Pursuant to the Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code, or Water Code), a regional water quality control board has legal authority

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and responsibility to regulate discharges of waste that could affect the quality of waters of the state.

Water Code section 13050 defines “waste” as including sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

Wastes regulated under this Order include but are not limited to the following: earthen materials, including soil, sand, rock; organic materials, including woody debris and ash; anthropogenic materials, including petroleum products, pesticides and nutrients, that have the potential to cause or contribute to nonpoint source discharges of waste to waters of the state (Water Code sections 13050 and 13264).

Water Code section 13050 defines “pollution”, in part, as an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following:

- (A) The waters for beneficial uses, or
- (B) Facilities which serve these beneficial uses.

Water Code section 13260, subdivision (a) requires that any person discharging waste or proposing to discharge waste as defined by Water Code section 13050 that could affect the quality of the waters of the state, other than into a community sewer system, shall file with the appropriate regional board a report of waste discharge containing information that may be required by the regional board. A regional water board may prescribe requirements although no discharge report has been filed (Water Code section 13263, subdivision (d)).

This Order is issued in part pursuant to Water Code section 13263, subdivision (a), which provides, in part:

The regional board, after any necessary hearing, shall prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge, with relation to the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed. The requirements shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241.

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Consistent with Water Code section 13263, the Central Valley Water Board, in establishing the requirements contained within the Order, has considered the applicable Basin Plan requirements, including the beneficial uses to be protected and the water quality objectives reasonably required for that purpose, and considered the factors in Water Code section 13241, including the following:

- a. Past, present, and probable future beneficial uses of water.
- b. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
- c. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
- d. Economic considerations.
- e. The need for developing housing within the region.
- f. The need to develop and use recycled water.

This Order and its Monitoring and Reporting Program (MRP) are issued in part pursuant to Water Code section 13267, subdivision (b)(1), which provides as follows:

[T]he regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste . . . shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

This Order is also issued in part pursuant to Water Code section 13304, subdivision (a), which provides in pertinent part as follows:

A person . . . who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall, upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts.

Water Quality Control Plans

Pursuant to Water Code section 13240, the Central Valley Water Board has adopted two Water Quality Control Plans, one for the Sacramento River and the San Joaquin River Basins and one for the Tulare Lake Basin (hereinafter Basin Plans). The Basin Plans are the Central Valley Water Board's master water quality control planning documents. The Basin Plans designate beneficial uses, establish water quality objectives, contain implementation programs and policies to achieve those objectives, and satisfy requirements under the federal Clean Water Act for the State to adopt and maintain water quality management planning programs. (33 U.S.C. § 1313; 40 C.F.R. Parts 130 and 131.) The Basin Plans describe beneficial uses and the criteria to protect those uses consistent with the federal Clean Water Act section 303 and 40 C.F.R. Part 131. Requirements in this Order implement the Basin Plans and select objectives applicable to this Order are excerpted from the Basin Plans and included as Attachment D.

Nonpoint Source Policy

The Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (Nonpoint Source Policy), adopted in accordance with Water Code section 13369, sets forth “five key elements” to ensure nonpoint source control programs are effective in controlling nonpoint source pollution. (Cal. Code Regs., tit. 23, § 2915.)

The following provides an overview of the five key elements of the Nonpoint Source Policy and details how Order requirements satisfy those elements.

Key Element 1: A NPS control implementation program’s ultimate purpose shall be explicitly stated. Implementation programs must, at a minimum, address NPS pollution in a manner that achieves and maintains water quality objectives and beneficial uses, including any applicable antidegradation requirements.

The purpose of this Order is to ensure protection of the beneficial uses of water quality from certain land management activities conducted by, or on behalf of, the USFS and BLM. Water quality protection is achieved by addressing actual and threatened nonpoint source discharges of waste at the project and landscape levels.

Key Element 2: A NPS control implementation program shall include a description of the management practices (MPs) and other program elements that are expected to be implemented to ensure attainment of the implementation program’s stated purpose(s), the process to be used to select or develop MPs, and the process to be used to ensure and verify proper MP implementation.

This Order requires the Permittee to properly design and implement BMPs compliance with the Permittee's approved best management practices (BMPs), as well as the development and implementation of site-specific prescriptions (collectively referred to as management measures, or water quality protection measures) to further describe and refine broad or generalized BMPs.

This Order also requires Permittee staff responsible for activities permitted under this Order to complete a training program and maintain current certification. The training will provide federal agency staff with an accessible training platform to guide project planning and decisions in the field that will ensure consideration of water quality protection. Among other topics, at the completion of the training, federal agency staff should have practical knowledge of the State Water Board's Nonpoint Source Policy, identification of sources and evidence of nonpoint source pollution, common BMPs used in the field for the protection of water quality, identification of a discharge incident, including reporting responsibilities, and the identification and tracking of controllable sediment discharge sources. Federal agency staff will have continued access to all training modules including those explaining Order requirements.

Corrective actions and adaptive management are expected to occur when management measures necessary for the protection of water quality are found to be ineffective, improperly installed, or not installed at all. Management measures will be monitored and adjusted or updated as needed to ensure compliance with the requirements of this Order.

Key Element 3: Where a Regional Water Quality Control Board (RWQCB) determines it is necessary to allow time to achieve water quality requirements, the NPS control implementation program shall include a specific time schedule, and corresponding quantifiable milestones designed to measure progress toward reaching the specified requirements.

This Order requires compliance with the Permittee's best management practices to ensure all water quality objectives are met during implementation of project activities, and upon adoption of this Order are immediately enforceable.

This Order also specifies an assessment, prioritization, and treatment system for the implementation of a Controllable Sediment Source Reduction Program (CSSRP). The CSSRP requires assessment and prioritization at a specified geographic scale using readily available information, considers multiple parameters affecting water quality and is implemented through Watershed Treatment Plans on a seven-year cycle beginning 24 months from Order adoption and extending until the Permittee can effectively demonstrate that all controllable sediment sources have been addressed across their ownership within the Central Valley region. The Permittee must regularly report on implementation progress through Program implementation.

Key Element 4: A NPS control implementation program shall include sufficient feedback mechanisms so that the RWQCB [Central Valley Water Board], dischargers, and the public can determine whether the program is achieving its stated purpose(s), or whether additional or different MPs or other actions are required.

This Order requires the Permittees to prepare and submit monitoring results on an annual basis. Monitoring includes any agency monitoring related to water quality, as well as required monitoring under this Order, including Discharge Incident Monitoring and Reporting, CSDS Monitoring, and implementation and effectiveness monitoring. Other feedback mechanisms include project field inspections, and an auditing component conducted by Central Valley Water Board staff which will serve as a detailed project evaluation to assess Order compliance and the effectiveness of implemented water quality protection measures within covered projects.

Key Element 5: Each RWQCB shall make clear, in advance, the potential consequences for failure to achieve an NPS control implementation program's stated purpose.

Central Valley Water Board staff shall perform detailed reviews as it pertains to Order compliance, including but not limited to field inspections, audits, reviewing and analyzing monitoring results and evaluating compliance with reporting requirements. Findings from Central Valley Water Board staff review form the basis for assessing compliance and determining potential enforcement actions. See section on Potential Enforcement for Noncompliance with Order Requirements below for additional details regarding compliance and potential enforcement.

Antidegradation Policies

Federal regulation 40 C.F.R. section 131.12 (Federal Antidegradation Policy) requires that the state water quality standards include an antidegradation policy consistent with the federal antidegradation policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16 ("Statement of Policy with Respect to Maintaining High Quality of Waters in California") (State Antidegradation Policy). The State Antidegradation Policy is deemed to incorporate the Federal Antidegradation Policy where the federal policy applies under federal law. (State Water Board Order WQ 86-17.) The Central Valley Water Board's Basin Plans implement, and incorporate by reference, both the State and Federal Antidegradation Policies.

The State Antidegradation Policy requires that existing quality of waters be maintained unless degradation is justified based on specific findings. Additionally, any activity which discharges or proposes to discharge will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the

highest water quality consistent with maximum benefit to the people of the State will be maintained.

Implementation of the Antidegradation Policy to prevent or minimize degradation is a high priority for the Board. In nearly all cases, preventing pollution before it happens is much more cost-effective than cleaning up pollution after it has occurred. Once degraded, surface water is often difficult to clean up when the pollutant has passed downstream. The prevention of degradation is, therefore, an important strategy to meet the policy's objectives.

Given the geographic scope of this Order and the significant variation in surface water conditions throughout the Central Valley Region, application of the antidegradation requirements must account for the fact that at least some of the water into which nonpoint source discharges will occur are high quality waters for some constituents. This Order is consistent with the State Antidegradation Policy because it requires compliance with applicable water quality control plans and sets forth conditions that require the Permittees to implement management practices to ensure protection of beneficial uses of waters of the state and maintain the highest water quality consistent with maximum benefit to the people of the state. Additionally, this Order contains monitoring and reporting requirements that will assist in the protection of water quality through assessment and verification of the adequacy and effectiveness of Order requirements. Finally, this Order requires the identification, assessment, and treatment of controllable sediment discharge sources through the implementation of project activities, routine maintenance, storm-proofing, and through this Order's Controllable Sediment Source Reduction Program. Compliance with the requirements of this Order will result in the consistent application of the most current best management practices and standards approved for use by the USFS and BLM, to ensure the protection of the beneficial uses of waters of the state, and overall will result in a net benefit to water quality.

To the extent there is limited degradation despite implementation of these requirements which constitute best practicable treatment or control, the limited degradation is consistent with the maximum benefit to the people. The land management activities regulated by this Order provide economic, recreational, and environmental benefits. For instance, good timber management provides lumber products, improves carbon sequestration, and provides local employment, particularly in areas of the State with chronic underemployment. Vegetation manipulation improves forest health and biodiversity, reduces risk of catastrophic wildfire, improves public safety, and provides biomass for energy production. Watershed restoration improves the ability of damaged watersheds to provide high-quality water as well as improving riparian and aquatic habitats. Forest recreation enhances physical, emotional, and mental well-being. Fire suppression minimizes the human, water quality, and environmental damage caused by wildfire, and post-fire recovery further minimizes such damage. Road management

provides safe access for all of the foregoing activities, while minimizing the overall impact on water quality and the forest environment. For these and other reasons, any degradation of water quality that may occur as a result of the NPS activities regulated under this Order is consistent with maximum benefit to the people of the State.

State Water Board Resolution 92-49

State Water Board Resolution 92-49 sets forth the policies and procedures to be used for investigation and cleanup and abatement activities subject to Water Code section 13304. Resolution 92-49, among other provisions, requires that cleanup and abatement be consistent with the State Antidegradation Policy and that dischargers clean up and abate the effects of discharges in a manner that promotes attainment of background water quality or the best water quality that is reasonable if background levels of water quality cannot be restored. To the extent practical and unless regional board oversight is unnecessary, Resolution 92-49 directs regional board review of the adequacy of work plans for each investigation and cleanup and abatement phase and appropriate reporting on each phase.

The CSSRP requires the Permittees to prepare and submit a field assessment work plan containing a time schedule for CSDS field assessment and inventory activities for the Board's approval. Following this assessment and inventory, each Permittee must prepare and submit a Watershed Treatment Plan documenting proposed actions for remedying CSDS within a targeted watershed(s) for Board approval. The Permittees must regularly report on WTP implementation progress throughout the Program. This Program is then repeated for successor watersheds on a 7-year cycle. Implementation of these activities will advance the systematic treatment of CSDS across federal lands overtime, promoting attainment of water quality standards and protection of beneficial uses. Accordingly, the CSSRP is consistent with Resolution 92-49.

California Environmental Quality Act

For the purposes of adoption of this Order, the Central Valley Water Board is the lead agency pursuant to the California Environmental Quality Act (CEQA) (Public Resources Code, section 21000 et seq.). The Central Valley Water Board has prepared and circulated an Environmental Impact Report (EIR) that analyzes the potential environmental impacts of this Order. The Central Valley Water Board certified the EIR pursuant to CEQA on (DATE) when it issued Resolution R5-2024-XXXX. This Order relies on the environmental impact analysis contained in the EIR to satisfy the requirements of CEQA.

The EIR identified potential significant impacts that may result from the implementation of this Order. Mitigation measures to address the potential significant impacts are identified in the mitigation monitoring and reporting program (MMRP) (Attachment C).

This Order requires the Permittee to implement the identified mitigation measures and monitor and report on the implementation of the mitigation measure(s) in accordance with CEQA.

National Environmental Policy Act

When a federal agency develops a proposal to take a major federal action, they must begin an environmental review process under the direction of the National Environmental Policy Act (NEPA). The environmental review conducted under NEPA may include three different levels of analysis such as: 1) Categorical Exclusion; 2) Environmental Analysis; and 3) Environmental Impact Statement. Categorical Exclusions (CE or CX or CATEX) are applied when a proposed action by the federal government normally does not have a significant effect on the environment. This action is therefore categorically excluded from an in-depth, detailed environmental analysis.

Once the NEPA analysis is complete and a formal decision has been made, the federal agency may implement the action as proposed. The proposed action, usually referred to as a "Project", may involve several different land management activities that generally fall under one geographical area where the environmental analysis took place. This area is often referred to as the Project area (or NEPA planning area).

A single project may include various land management activities such as vegetation management activities coupled with restoration activities, or any number of differing land management activity types. Land management activities implemented under a project will have varying potential to impact water quality as it relates to the magnitude of ground disturbing operations, the proximity to surface waters, and the potential for hydrologic connection.

Federal Agency Best Management Practices Guidance

A Best Management Practice is defined under 40 CFR 130.2(m) as "Methods, measures or practices selected by an agency to meet its nonpoint source control needs. BMPs include but are not limited to structural and nonstructural controls and operations and maintenance procedures. BMPs can be applied before, during and after pollution-producing activities to reduce or eliminate the introduction of pollutants into receiving waters". The Order implements requirements of the federal Clean Water Act and state Porter Cologne Water Quality Control Act as well as existing USFS and BLM mandates that require proper BMP design and implementation to control nonpoint source pollution.

Both the USFS and BLM manage their lands through a series of hierarchical policies and guidance documents that ultimately rely on proper BMP design and implementation to control nonpoint source pollution. The USFS organizes these policies and guidance

through Forest Service Manuals (FSM) and Forest Service Handbooks (FSH), with watershed management being contained in FSM 2500. From there, the USFS has developed the National Core BMP Program to ensure management activities do not cause deleterious impacts to water quality. The BLM provides high level directives and guidance stemming from the Federal Land Policy and Management Act (FLPMA) which requires actions to be completed per direction contained in Resource Management Plans (RMPs).

The policies and directives enacted by the USFS and BLM for water quality protection and prevention of nonpoint source pollution similarly stem from the need to ensure compliance with Clean Water Act compliance, including the Porter-Cologne Water Quality Control Act. BMP implementation is the key “on the ground” measure that is relied upon to meet these goals.

A. USFS

The USFS National Core BMP Program was developed to improve agency performance and accountability in managing water quality consistent with the Federal Clean Water Act and State water quality programs. Current USFS policy directs compliance with required CWA permits and State regulations and requires the use of BMPs to control nonpoint source pollution to applicable water quality standards and other CWA requirements¹. The National Core BMP Program consists of four main components: 1) The National Core BMP Technical Guide (Volume 1, FS-990a, April 2012), 2) The National Core BMP Monitoring Technical Guide (Volume 2, FS-990b, release date to be determined), 3) Revised National Direction, and 4) A national data management and reporting system.

The USFS noticed proposed amendments to its internal agency guidance, called ‘directives’, to establish policy and responsibility for implementing the national system of BMPs and associated monitoring protocols. The directives consisted of a draft revised Water Quality Management Manual and a new National BMP Program Handbook. Once amended, the directives would require the use of BMPs on National Forests and Grasslands to meet existing mandates under the Federal Clean Water Act and corresponding State laws to protect water quality from land and resource management activities. The revised directives were published in the Federal Register on 6 May 2014. The [Draft Water Quality Management Manual](https://www.fs.usda.gov/naturalresources/watershed/pubs/Draft_FSM_2532.pdf) (FSM25-32-Water Quality management)(https://www.fs.usda.gov/naturalresources/watershed/pubs/Draft_FSM_2532.pdf)and [Draft National BMP Program Handbook](#) (FSH 2509.19)

¹ [BPR Staff Program - Best Management Practices \(BMP\)](https://www.fs.usda.gov/naturalresources/watershed/bmp.shtml#TechGuideV1)
(<https://www.fs.usda.gov/naturalresources/watershed/bmp.shtml#TechGuideV1>)

(https://www.fs.usda.gov/naturalresources/watershed/pubs/Draft_FSH_2509_19.pdf) can be found here.

Intentionally general in nature, the National Core BMPs provide the following regarding the potential need for state-specific BMPs:

“The National Core BMPs in this technical guide are deliberately general and nonprescriptive. Because this document is national in scope, it cannot address all possible practices or practices specific to local or regional soils, climate, vegetation types, or State-specific requirements. The National Core BMPs require the development of site-specific BMP prescriptions based on local site conditions and requirements to achieve compliance with established State, tribal, or national water quality goals. It is expected that State requirements and BMP programs, Forest Service regional guidance, and the land management plan will provide the criteria for site-specific BMP prescriptions. The National Core BMPs provide direction on “what to do” and the local direction will provide direction on “how to do it.””

“After BMPs have been approved by a State, the BMPs may become the primary mechanism for meeting water quality standards from nonpoint source pollution sources in that State. Proper installation, operation, and maintenance of State approved BMPs are presumed to meet a landowner or manager’s obligation for compliance with applicable water quality standards. If subsequent evaluation indicates that approved and properly installed BMPs are not achieving water quality standards, the State should take steps to revise the BMPs, evaluate and, if appropriate, revise water quality standards (designated uses and water quality criteria), or both. Through the iterative process of monitoring and adjusting BMPs and water quality standards, it is anticipated and expected that BMPs will lead to attainment of water quality standards (EPA 1987).”

The Central Valley Water Board, in developing this Order, worked with the USFS to prepare a draft of California-specific BMPs to control nonpoint source pollution. While it was intended that the USFS would finalize those BMPs prior to the adoption of this Order, that has not yet occurred. The Central Valley Water Board will continue to work with the USFS on finalizing USFS’s California-specific BMPs or, as necessary, develop its own region-specific BMPs for USFS to implement when conducting projects that have the potential to create nonpoint source pollution within the Central Valley region.

B. BLM

BLM’s land use planning process originates from the Federal Land Policy and Management Act (FLPMA) which requires BLM management actions to be

completed under the direction of an approved Resource Management Plan (RMP). RMPs set resource management goals and objectives, identify measures necessary to achieve goals and objectives, and establish parameters for using BLM managed lands. Decisions derived from RMPs guide later site-specific project implementation.

BLM policy is further described in manuals, handbooks, and directives in the form of instruction memorandums and informational bulletins. [Manuals](https://www.blm.gov/policy/manuals) (https://www.blm.gov/policy/manuals) contain overarching program level policy and procedures as well as define the basic authority for performing tasks and the responsible party for ensuring that tasks are accomplished. [Handbooks](https://www.blm.gov/policy/handbooks) (https://www.blm.gov/policy/handbooks) provide detailed instructions, techniques, procedures, and processes for implementing the policy and direction described in BLM Manuals.

As a supplement to BLM Manuals and Handbooks which are infrequently updated, BLM issues Instruction Memorandums (IM) which provide new or revised policies or procedures. IMs are published with the intent of informing BLM employees quickly, providing interpretation of existing policies, or providing one-time guidance for incident-specific or evolving activities. For this reason, IMs are published as either permanent or temporary. Also, as a supplement to BLM Manuals, Information Bulletins (IBs) are temporary directives intended to disseminate information of interest to BLM employees. IBs do not contain new policy, procedures, or instructional material but may call attention to existing policies or procedures or transmit material such as publications and announcements.

In September 2022, and after consultation with the Central Valley Water Board, the California State BLM office released a permanent instruction memorandum for regional (state level) BMP guidance document titled [Best Management Practices](https://www.blm.gov/sites/default/files/docs/2023-10/CAIM2022-012_Attachment_1_508_0.pdf) for Water Quality Bureau of Land Management California for agency implementation to help aid in achieving compliance with federal and state non-point source pollution requirements throughout California. (https://www.blm.gov/sites/default/files/docs/2023-10/CAIM2022-012_Attachment_1_508_0.pdf)

BMP Assessment

In 2018 and 2019, Central Valley Water Board staff conducted a focused assessment of USFS and BLM BMPs, monitoring programs, and adaptive management practices (BMP evaluation). The BMP evaluation included field visits with federal agency staff to evaluate BMP application across a wide range of project types and land management activities that would qualify for coverage under Category A or B of this Order. These

assessments identified deficiencies in BMP selection, implementation, and effectiveness monitoring. A general description of each is included below.

A. BMP Selection/Design

Interdisciplinary teams are utilized by both USFS and BLM with many benefits but also challenges. Often BLM teams did not have hydrology or engineering staff participation when necessary. Those staff with concerns for water quality often did not feel empowered in the selection or implementation of BMPs. Improved communication throughout the project could be beneficial to the protection of water quality.

B. Implementation

Implementation of BMPs was not consistent across the management areas within each agency.

USFS

The National Best management Practices Summary report Program Phase-In Period FY 2013-2014 presents overall BMP implementation and effectiveness ratings across the nation. Approximately 61% of the BMP evaluations were rated as “Fully Implemented” or “Mostly Implemented” with 39% being rated as “Marginally Implemented”, “Not Implemented”, or “No BMPs”.

Of the 19 sites evaluated during the 2018-2019 field visits, 12 sites had problems with BMP implementation or effectiveness. Four of the 12 sites had evidence of direct discharges of sediments to watercourses and another four had the potential for sediment discharge during the next anticipated runoff event. Staff further identified that in some instances, the need for additional BMPs was not identified during planning and implementation documents led to poor implementation in the field.

BLM

The 2018-2019 evaluation occurred prior to the BLM producing the California-specific BMPs (2022). The evaluation found that BMP development and implementation varied greatly between Field Offices. Due to the lack of formalized BMPs for every evaluated activity type, staff were limited to focusing on observing whether land management activities included treatments to prevent impacts to water quality. The informal approach to BMPs made it difficult to assess the implementation and effectiveness of specific BMPs on BLM projects. However, roads (and other hardened surfaces) were the most notable category where observed practices on BLM lands were not meeting objectives for

protecting water quality. Staff found that where formalized BMPs applied (e.g., restoration projects and off-highway vehicle areas), implementation and effectiveness provided a good foundation for water quality protection on BLM projects.

C. Effectiveness Monitoring

Measuring BMP effectiveness is an integral part of the adaptive management process. In order to measure effectiveness, BMPs must be clearly documented, and sites need to be monitored. Neither of which need be time nor labor intensive. BMP checklists, which were observed to be used inconsistently by USFS and BLM staff, serve to document site specific BMPs designated for implementation. These can then be checked during critical times of the year for effectiveness. Without documentation, it is challenging to truly assess effectiveness of a practice, which is necessary to inform the adaptive management process and achieve improvements of the overall program.

The USFS and BLM have both formal and informal monitoring programs that vary in scope and intensity. The evaluation focused very closely on the USFS National Core BMP Monitoring Program which is a resource intensive exercise that typically focuses on a small area within each project.

Project level monitoring varies considerably between forests and project types. There are many types of inspections being performed in the field by staff other than hydrologists that this Order expects will be leveraged to meet requirements of water quality focused monitoring (e.g., a USFS timber sales administrator is present almost daily on site and drives roads on a routine basis).

D. Corrective Action

Central Valley Water Board staff found it difficult to identify where corrective actions and adaptive management consistently occur within federal processes. While adaptive management certainly can happen on a small scale, it is more likely to be seen over the course of consecutive similar projects or programs. This requires staff communication, continuity, and management support. Monitoring is a vital element in the adaptive management process.

Central Valley Water Board staff observed mixed responses regarding the identification and implementation of corrective actions. In several cases, federal agency staff noted feeling limited by budgets, contracting, and the NEPA process in implementing on-the-ground corrective actions. While few of the issues identified were of large scale, there were frequent and cumulative chronic issues observed across the road networks.

E. Conclusions

BMP field visits for both federal agencies across the region demonstrated water quality concerns related to road system management and current native surface road work not meeting modern water quality focused road design standards (such as within the California Forest Practice Rules or the Rural Roads Handbook). Federal agency staff often cited resource limitations, including declining operation and maintenance budgets, as the cause of these issues.

Central Valley Water Board staff also noted a lack of understanding and experience with native surface road design BMPs. Available staffing level and expertise does not always support monitoring and maintaining the entire road network with regard to water quality issues; public safety and access are the priorities.

Federal agency staff and contractors responsible for selecting and implementing water quality BMPs do not appear to have regular or comprehensive training. Many of the road maintenance activities staff have observed on federal lands are dependent upon operator experience and are not utilizing modern management practices to address road drainage in consideration of water quality impacts. Similarly, Central Valley Water Board staff also observed water crossing facilities that were recently installed without applying comprehensive protective BMPs.

Throughout the development of this Order, Central Valley Water Board staff along with staff from the USFS and BLM have worked in partnership to develop BMP guidance documents for use throughout the state of California. In 2021, the USFS drafted updates to their *Water Quality Management Handbook* that augments guidance for the protection and improvement of water quality on National Forest System lands in California; however, as of March 2024, those updates have not been formalized and implemented within the USFS. In 2022, the BLM released a new BMP guidance document titled *Best Management Practices for Water Quality Bureau of Land Management California November 2022* specifically for BLM lands managed in California.

This Order requires adherence to, and implementation of, BMP guidance documents developed by or for the USFS and BLM to ensure water quality protection in California. Implementation and compliance with this Order will ensure proper water quality protection measures are incorporated in USFS and BLM activities, and that the beneficial uses of waters of the state within the Central Valley Region are protected.

III. ORDER REQUIREMENTS

This Order serves as waste discharge requirements (WDRs), pursuant to Water Code section 13263, for nonpoint source discharges of waste related to five general types of land management activities conducted by, or on behalf of, the USFS and BLM on federal lands that could affect waters of the state within the Central Valley Region.

This Order does not authorize any ongoing discharges of waste not associated with the permitted land management activities. This Order does not apply to point source discharges of waste that are subject to the federal National Pollutant Discharge Elimination System (NPDES) permit program under the federal Clean Water Act or to discharges subject to water quality certification requirements under the Clean Water Act.

This Order contains three components: (1) waste discharge requirements for nonpoint source discharges related to certain land management activities, (2) a controllable sediment source reduction program, and (3) a monitoring and reporting program.

Categories of Permitted Activities

Permitted activities fall within three categories under the Order: (1) Category A (low threat), (2) Category B, and (3) Emergency Response Actions. This Order's programmatic approach creates efficiencies by leveraging existing BLM and USFS mandates and by reducing workload associated with a more traditional project by project permitting approach while requiring all qualifying projects to be conducted in compliance with permit conditions to ensure water quality protection.

Category A projects are those that typically include activities that result in no or minimal ground disturbance to areas that have the potential for hydrologic connection to surface waters and meet Category A eligibility criteria. Projects meeting these criteria are automatically enrolled in the Order and the Permittee must conduct required annual monitoring and reporting obligations.

Category B projects are those that typically include ground disturbing operations that may cause disruption to soils, road drainage, or riparian zones and/or WLPZ and are near or have the potential to be hydrologically connected to surface waters. Projects meeting Category B criteria are not automatically enrolled, but instead, the Permittee must submit a Notice of Planned Operations.

Controllable Sediment Discharge Source Assessment and Treatment

This Order regulates nonpoint source discharges of waste from the covered land management activities described above, with a primary focus on sediment. Numerous studies and Central Valley Water Board staff have found that native surfaced roads are often the predominant anthropogenic sediment source in forested watersheds. Unpaved

roads can increase sediment production rates by more than an order of magnitude as a result of road surface erosion and combined with hydrologically connected roads and watercourses, and undersized/poorly performing watercourse crossings, prioritizing treatment of sediment discharge sources is necessary to protect water quality.

This Order requires the USFS and BLM to assess for controllable sediment discharge sources (CSDS) on all federally managed roads within a covered project area to ensure the most significant contributor of sediment, native surfaced roads, are prioritized and systematically addressed.

Attachment A (Definitions) of this Order defines a CSDS as a feature that has caused or threatens to cause discharge of sediment to receiving waters in a manner that negatively impacts water quality or its beneficial uses.

Addressing CSDS is necessary to both prevent further sediment pollution and ecosystem impairment and maintain high quality, unimpaired waterbodies. This Order requires the USFS and BLM to address CSDS through assessments, inventory, prioritizing, and treatment. The Permittees are required to conduct project specific CSDS assessments within all Category B Project areas. If CSDS are identified as part of those assessments, the Permittees are required to record (inventory), prioritize, monitor, and treat sites through the implementation of planned project activities or through this Order's Controllable Sediment Source Reduction Program as described below.

Category A Projects are exempt from the CSDS assessments, although if a Discharge Incident occurs within a Category A Project area that meets the definition of a CSDS, that site will be treated the same as in Category B and subject to Discharge Incident reporting requirements (MRP, Attachment B).

Pesticide Application Requirements

The USFS and BLM typically apply pesticides on a very limited basis and in most cases where pesticides are used on federal lands, the application is targeted and generally used to control invasive vegetation and to help re-establish desired plant species or used to prevent or control certain diseases.

A. Application Notification

This Order requires the Permittees to notify the Central Valley Water Board at least 15 days prior to the Broadcast, Aerial, or Soil application of pesticides within Category A and B Projects.

This notification is not required for direct individual treatment types of application including:

1. Basal and Foliar spot spraying;
2. Stem injection treatments (hack-and-squirt) where cut marks are made around the main stem of a tree and herbicide is injected directly into the inner layers below the bark;
3. Crack and crevice applications where pesticide is applied to small cracks or crevices such as along baseboards or around the outside of buildings; and
4. Cut stump/stem applications where a small amount of pesticide is applied to the portion of a freshly cut tree.

If applied correctly, these targeted hand application methods typically pose a low threat to water quality as the pesticides have little opportunity to bind with soil particles and become mobilized during precipitation events and subsequently delivered to water bodies as with aerial, broadcast, and soil applications might. Therefore, the USFS and BLM are not required to notify the Central Valley Water Board if applying pesticides as individual targeted hand applications.

B. Watercourse and Lake Protection Zone Buffers

This Order requires standardized watercourse and lake protection zone (WLPZ) buffers where broadcast or aerial pesticide applications are planned for covered Category A and B projects. The rationale for this requirement is supported by:

1. Extensive literature review indicates that ground cover and aquatic buffers can reduce pesticide discharge into streams by providing dissipation, filtration, chemical sequestration, chemical degradation/biodegradation (Davies and Nelson 1994, Sweeney and Newbold 2014, Wenger 1999)
2. Studies on herbicide fate and transport show that average buffer widths of 38 meters and 50 meters, in restored and managed riparian forests respectively, reduced herbicide concentrations to at or below detection limits (Lowrance et al. 1997, Vellidis et al. 2002).
3. A review of pesticide buffers found that cases of high pesticide concentrations only occurred when no buffer was used and that generally, buffer strips of 15 meters or larger are effective in minimizing pesticide contamination in streams (Neary et al. 1993).
4. Post-wildfire forested land pesticide sampling by the California Department of Fish and Wildlife in 2014 indicated that label instructions and applications were ineffective at preventing discharge of specific

chemicals (Hexazinone, 2, 4-D, Triclopyr, and Imazapyr) to surface waters.

The buffer requirements are taken from the existing buffer widths for watercourse and lake protection zones (WLPZ) as specified in the California Code of Regulations (CCR), title 14, section 936.5 for timber harvesting activities. Given that the activities covered under this Order are similar in nature to those that occur during timber harvesting activities, and that the CCR buffers have been rigorously evaluated since 1996 and been proven to be effective at reducing transport of waste to surface waters, the Central Valley Water Board has concluded that the buffers are necessary to protect water quality from pesticide application impacts.

Emergency Response Activities

The Central Valley Water Board recognizes that in the event of an emergency, such as wildfire and flooding, the Permittees may take immediate and necessary actions to protect human life and property on the lands they manage. Such actions may result in immediate or threatened discharges of waste to waterbodies, such as in the case of fire-fighting activities where heavy equipment is used to move soil into drainages to allow passage of fire-fighting equipment. While this Order does not specifically condition those activities, Permittees are required to annually summarize water quality impacts resulting from Emergency Response Activities (Monitoring and Reporting Program, Attachment B).

Post-Wildfire Management Ground Cover Requirements

Based on thorough research and review of dozens of peer reviewed studies, technical guidance documents, and handbooks on post-wildfire effects, and the mechanisms that drive both increased rates of erosion and sediment delivery on managed and unmanaged post-wildfire landscapes, the rationale for prohibiting pesticide applications on areas burned within the previous 3 years or on slopes greater than thirty percent (30%) unless fifty percent (50%) effective ground cover is present is based on several factors:

1. Studies show that the dominant factor for controlling soil erosion rates post-wildfire is ground cover.
2. Fifty percent (50%) effective ground cover is the value most often referred to in the reviewed literature (e.g., U.S. Forest Service 2012, Benavides-Solorio et al. 2001, 2005, Berg and Azuma 2010, Doerr et al. 2000, Goldman et al. 1986).

3. Pannkuk and Robichaud (2003) found that when fallen conifer needles (needle cast) covered fifty percent (50%) of the soil surface, soil erosion in rills was reduced by up to twenty percent (20%) and in interrills by up to eighty percent (80%).
4. Fifty percent (50%) effective ground cover is a value that is most easily assessed and verified from visual estimations.
5. Ground cover is shown to be the most feasible and cost-effective method to reduce erosion and sediment production.
6. Multiple studies indicate that most ecological succession rates on landscapes affected by wildfire naturally begin to reestablish vegetation within one to three years following the fire, depending on site characteristics (soil type, soil burn-severity, local climate, etc.).

Controllable Sediment Source Reduction Program

This Order recognizes that the USFS and BLM together manage a significant portion of lands within the Central Valley region (just under 11 million acres or 1/3 of the region), including areas encompassing California's source watersheds that support both the State Water Project and the Federal Central Valley Project (Water Code section 108.5), and that a lack of consistent funding and resources often impairs the Permittee's ability to effectively address CSDS and impacts to beneficial uses across their ownerships in a consistent and progressive manner. This Order considers the Permittee's limitations and the infeasibility of treating all CSDS and water quality impairments across their ownership within the Central Valley region at once and requires the Permittee to instead develop and implement a measured Controllable Sediment Source Reduction Program (CSSRP). This part of this Order is issued pursuant to Water Code sections 13267 and 13304, detailed above.

As mentioned above, numerous studies have found, and Central Valley Water Board staff experience supports the finding, that native surfaced roads are often the predominant anthropogenic sediment source in non-urban watersheds. Unpaved roads can increase sediment production rates by more than an order of magnitude as a result of road surface erosion and combined with hydrologically connected roads and watercourses, and undersized/poorly performing watercourse crossings, prioritizing treatment of sediment discharge sources is necessary to protect water quality. Addressing controllable sediment sources is necessary to prevent sediment pollution and other constituents transported via sediment movement that may impact water quality and beneficial uses for the purposes of maintaining and restoring high quality waters.

This Order requires each Permittee to select one or more HUC 12 watershed, using specified criteria in Order section II.G.3.a. As there are significant differences in the scale of ownership between the USFS and the BLM, and specifically within individual HUC 12 watersheds, this Order addresses that imbalance by including criteria for watershed selection based on ownership of 50% or more for USFS, and ownership of 30% or more for BLM. Following this watershed selection, each Permittee is required to assess and address controllable sediment sources at the HUC 12 watershed scale in a systematic manner over time through a Controllable Sediment Source Reduction Program and associated individual Field Assessment Work Plans and Watershed Treatment Plans (Order section II and MRP section III.E.) and report on implementation progress. This process of watershed selection, assessment and treatment of controllable sediment sources, and reporting on implementation continues on a 7-year cycle throughout the duration of the Order. (See CSSRP Schedule, Attachment B, Table 1.)

Compliance Audits

Given the scope of Order coverage within the Central Valley Region (just under 11 million acres or 1/3 of the region managed by the USFS and BLM combined), and the number of potential projects that may be covered under this Order at any one time, it is impractical for Central Valley Water Board staff to conduct a detailed project review for every single covered project. Issuance of individual WDRs for a single project can take more than 6 months and could cause significant delays in important project implementation for the federal agencies and the public.

Therefore, Central Valley Water Board staff will conduct audits to assess Order compliance and the effectiveness of water quality protection measures implemented on covered projects. Audits may include a review of project documents, field inspections, and water quality sampling to evaluate the effectiveness of management measures.

Audits require participation from Permittee and Central Valley Water Board staff. Recommendations resulting from audit findings will serve to focus federal agency and Central Valley Water Board staff efforts on Order compliance and work planning (i.e., identify areas for additional training, or projects that require more frequent inspections). In some cases, audit findings may result in enforcement actions (see Potential Enforcement for Noncompliance with Order Requirements section below).

Training and Certification Program

Central Valley Water Board staff experience and monitoring have demonstrated that relying solely on permit conditions and criteria to effectively regulate nonpoint source discharges of waste from certain land management activities conducted by, or on behalf of the USFS and BLM has not resulted in consistent compliance with water quality

objectives, and thus does not comply with the State Water Board's 2004 Nonpoint Source Policy. In addition, staff turnover within both federal agencies creates challenges in ensuring staff are appropriately trained in applicable federal and state water quality regulations.

It is critical that federal agency staff and key contractors have a comprehensive understanding of Order requirements, water quality concerns, and the best modern management practices necessary to address existing and potential impacts to water quality. BMP effectiveness is highly dependent on the knowledge and experience of the project staff selecting and implementing the BMPs, so appropriate resources and training to select and direct implementation of site-specific BMPs to address water quality concerns is necessary.

This Order requires the USFS and BLM to ensure all staff responsible for compliance with this Order, including the evaluation and assessment of water quality condition, selection of water quality protective BMPs, and design of site-specific measures to address water quality issues, have completed training provided by the Central Valley Water Board and maintain certification. Certification must be renewed on a biennial basis.

The purpose of the training and certification program is to provide federal agency staff with an accessible training platform to guide project planning and decisions in the field that will consider protection of water quality. Among other items, at the completion of the training, federal staff should have practical knowledge of the State Water Board's Nonpoint Source Policy, identification of sources and evidence of nonpoint source pollution, common BMPs used in the field for the protection of water quality, identification of discharge incidents, including reporting responsibilities, and the identification and tracking of controllable sediment discharge sources. Federal agency staff will have ongoing access to all training modules including those explaining Order requirements for ease of reference.

Monitoring and Reporting Requirements

Water Code § 13267(b)(1) states that "the burden, including costs, of these [required monitoring and] reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports". This Order applies to nonpoint source discharges of waste resulting from certain land management activities conducted by, or on behalf of, the USFS and BLM. The technical and monitoring program reports required by this Order and its Monitoring and Reporting Program (MRP) (Attachment B), will be used to determine the effects of each Permittee's nonpoint source activities on water quality, to verify the effectiveness of best management practices designed to ensure activities do not negatively impact water quality in a manner that exceeds water

quality objectives as defined in the applicable Basin Plan, and to evaluate each Permittee's compliance with the terms and conditions of this Order.

Benefits inherent in the monitoring and reporting are many and include: increased awareness on the part of the USFS and BLM of sensitive water quality resources; potential impacts and effectiveness of management measures; increased potential for identifying threats before they impact water quality and the beneficial uses; increased data availability to aid in the prioritization of projects for funding; lessons learned regarding specific threats and effective mitigations that can be used in the furtherance of best management practices development and watershed treatment. In developing the MRP, the Central Valley Water Board carefully considered USFS and BLM concerns regarding permit implementation and compliance burden, and where feasible leveraged existing federal requirements to reduce the cost of compliance. The Central Valley Water Board believes that the burden of the MRP bears a reasonable relationship to the need for the information and the expected benefits.

IV. POTENTIAL ENFORCEMENT FOR NONCOMPLIANCE WITH ORDER REQUIREMENTS

The Water Code grants the State and Regional Water Boards authority to implement and enforce water quality laws, regulations, policies, and plans to protect waters of the state. In doing so, the Water Code identifies several enforcement actions a regional board may take to bring a discharger into compliance with permit requirements; these include requests for technical and monitoring reports, cleanup and abatement orders, cease and desist orders, time schedule orders, and in some cases administrative civil liability.

The State Water Board has adopted a Water Quality Enforcement Policy² (Enforcement Policy) that describes procedures the Water Boards follow when considering and pursuing enforcement actions. . The Enforcement Policy endorses a progressive enforcement approach which includes an escalating series of actions from informal to formal enforcement. Informal enforcement actions, such as Notices of Violation, are any enforcement taken by staff that is not defined in statute or regulation, such as oral, written, or electronic communication concerning violations. The purpose of informal enforcement is to quickly bring an actual, threatened, or potential violation to the discharger's attention and to give the discharger an opportunity to return to compliance as soon as possible.

Formal enforcement includes statutorily based actions that may be taken in place of, or in addition to, informal enforcement. Formal enforcement is recommended as a first response to more significant violations, such as the highest priority violations, chronic

² State Water Resources Control Board. 2017. Water Quality Enforcement Policy

violations, and/or threatened violations. There are multiple options for formal enforcement, including Administrative Civil Liabilities (ACLs) imposed by a Regional Water Board or the State Water Board. A 30-day public comment period is required prior to the settlement or imposition of any ACL and prior to settlement of any judicial civil liabilities.

The Central Valley Water Board staff will routinely conduct inspections to verify project category coverage, appropriate and effective project BMP implementation and monitoring, and watershed treatment plan implementation.

The Board also intends to respond promptly to complaints and conduct field inspections on a routine basis to identify potential water quality violations. If the Central Valley Water Board determines that there is a threatened or continuing violation of this Order, it may issue a site-specific cleanup and abatement order, cease and desist order, additional monitoring and reporting, or an order pursuant to Water Code section 13308 establishing a time schedule and prescribing a civil penalty which shall become due if compliance is not achieved in accordance with that time schedule. Failure to comply with a time schedule order under Water Code section 13308 may result in the Board imposing an administrative civil liability pursuant to Water Code section 13323.

The Central Valley Water Board retains full enforcement authority and discretion to bring formal enforcement for all violations and threatened violations.

V. OUTREACH

Tribal Consultation and Community Outreach

The Central Valley Water Board engaged in consultations with requesting Native American tribes pursuant to Public Resources Code section 21080.3.1 and other tribes that have ancestral lands within the Central Valley Region pursuant to Executive Order B-10-11.

Water Code section 189.7 requires the Board to conduct equitable, culturally relevant outreach when considering proposed discharges of waste that may have disproportionate impacts on water quality in disadvantaged or tribal communities. Water Code section 13149.2 requires findings on the anticipated water quality impact(s) in disadvantaged or tribal communities as a result of the permitted activities, a description of environmental justice concerns within the scope of the regional board's authority raised during the public comment period, and identification of mitigation measures available and within the scope of the Central Valley Water Board's authority to address such impacts.

This Order regulates projects on federal lands within the Central Valley region. There may be disadvantaged or tribal communities directly bordering federal lands that may be impacted by the activities and projects permitted under this Order. Consistent with Water Code section 189.7, the Central Valley Water Board conducted outreach to potentially affected disadvantaged and tribal communities and other interested persons through public workshops, widespread circulation of this Order, and notice of the opportunity to submit written comments and participate at the adoption hearing. Specifically, Central Valley Water Board staff conducted three public workshops in 2017 in Susanville, Sacramento, and Fresno, held a CEQA scoping meeting in 2021, and broadly circulated the Order during a 45-day public comment period. Consistent with Water Code section 13149.2, the Central Valley Water Board reviewed readily available information and information raised to the Board by interested persons concerning anticipated water quality impacts in disadvantaged or tribal communities resulting from adoption of this Order and also considered environmental justice concerns within the Board's authority and raised by interested persons regarding those impacts. While activities regulated by this Order may result in discharges of waste, primarily sediment, this Order contains requirements to avoid or reduce water quality impacts from these activities, including implementation of best management practices and monitoring. While there may be disadvantaged or tribal communities directly bordering federal lands that may be impacted by the activities permitted under this Order, Central Valley Water Board staff do not anticipate that discharges of waste that are authorized through this Order will result in detrimental water quality impacts or have a disproportionate impact on water quality in disadvantaged or tribal communities.

VI. REFERENCES

- Ahlgren, I.F., Ahlgren, C.E. (1960). Ecological effects of forest fires. *Botanical Review* 26:483-533
- Benavides-Solorio, J., MacDonald, L. H. (2001). Post-fire runoff and erosion from simulated rainfall on small plots, Colorado Front Range. [Hydrological Processes](https://doi.org/10.1002/hyp.383), 15(15), 2931–2952. (<http://doi.org/10.1002/hyp.383>)
- Benavides-Solorio, J., MacDonald, L. H. (2005). Measurement and prediction of post-fire erosion at the hillslope scale, Colorado Front Range. *International Journal of Wildland Fire*, 2005, 14, 1-18.
- Berg, N.H., Azuma, D. L. (2010). Bare soil and rill formation following wildfires, fuel reduction treatments, and pine plantations in the southern Sierra Nevada, California, USA. *International Journal of Wildland Fire*, 2010, 19(4): 478-489
- Bladon, K.D.; Emelko, M.B.; Silins, U.; Stone, M. (2014). Wildfire and the future of water supply. *Environmental Science & Technology*, 48(16), 8936–8943. <http://doi.org/10.1021/es500130g>
- Cannon, S.H.; Gartner, J.E.; Rupert, M.G.; Michael, J.A.; Rea, A.H.; Parrett, C. (2010). Predicting the probability and volume of post wildfire debris flows in the intermountain western United States. *Geol Soc Am Bull* 122 (1–2):127–144.
- Chappel, M. (2014). A review of local studies on fire-related sediment accumulation in large reservoirs of the Sierra Nevada. Report prepared for the Sierra Nevada Conservancy. 10 p.
- Cole, Ryan P.; Bladon, Kevin D.; Wagenbrenner, Joseph W.; Coe, Drew B.R. (2020). Hillslope sediment production after wildfire and post-fire forest management in northern California. *Hydrological Processes*. 34(26): 5242-5259. <https://doi.org/10.1002/hyp.13932>.
- Davies, P.E., Nelson, M. (1994). Relationships between Riparian Buffer Widths and the Effects of Logging on Stream Habitat, Invertebrate Community Composition and Fish Abundance. *Aust. J. Mar. Freshwater Res.*, 1994, 45, 1289-305
- Delwiche, J., (2009). Post-fire Soil Erosion and How to Manage It. JFSP Briefs. Paper 59. <http://digitalcommons.unl.edu/jfspbriefs/59>
- Doerr, S.H.; Shakesby, R.A.; Walsh, R.P.D. (2000). Soil water repellency: its cause, characteristics and hydro-geomorphological significance. *Earth-Science Reviews* 51: 33-65

Goldman, S.J.; Jackson, K.; Bursztynsky, T.A. (1986). *Erosion & Sediment Control Handbook*

Goode, J.R.; Luce, C.H.; Buffington, J. M. (2012). Enhanced sediment delivery in a changing climate in semi-arid mountain basins: Implications for water resource management and aquatic habitat in the northern Rocky Mountains. *Geomorphology* 2012, 139, 1–15

Heed, B.H.; Harvey, M.D.; Laird J.R. (1988). Sediment delivery linkages in a chaparral watershed following a wildfire. *Environmental Management* 12:349-358

Helvey, J.D. (1980). Effects of a north central Washington wildfire on runoff and sediment production. *Journal of the American Water Resources Association*, 16(4), 627– 634. <http://doi.org/10.1111/j.1752-1688.1980.tb02441.x>

Larsen, I.J.; MacDonald, L.H.; Brown, E.; Rough, D.; Welsh, M.J.; Pietraszek, J.H.; Libohova, Z.; Benavides-Solorio, J.; Schaffrath, K. (2009). Causes of post-fire runoff and erosion: water repellency, cover, or soil sealing? [Soil Science Society of America Journal](http://doi.org/10.2136/sssaj2007.0432), 73(4), 1393. (<http://doi.org/10.2136/sssaj2007.0432>)

Lowrance, R.; Vellidis, G.; Wauchope, R.D.; Gay, P.; and Bosch, D.D. (1997). Herbicide transport in a managed riparian forest buffer system. *Trans. ASAE* 40(4): 1047–1057.

MacDonald, L.H., Larsen, I.J. (2009). Runoff and erosion from wildfires and roads: Effects and mitigation. In *Land Restoration to Combat Desertification: Innovative Approaches, Quality Control, and Project Evaluation*

Martin, D.A., Moody, J.A. (2001). Comparison of soil infiltration rates in burned and unburned mountainous watersheds. *Hydrological Processes*, 15(15), 2893–2903. <http://doi.org/10.1002/hyp.380>

Moody, J.A.; Shakesby, R.A.; Robichaud, P.R.; Cannon, S.H.; Martin, D.A. (2013). Current research issues related to post-wildfire runoff and erosion processes. *EarthScience Reviews*, 122, 10–37. <http://doi.org/10.1016/j.earscirev.2013.03.004>

Neary, D.G.; Bush, P.B.; Michael, J.L. (1993). Fate, dissipation and environmental effects of pesticides in southern forests: A review of a decade of research progress. *Environmental Toxicology and Chemistry* 12: 411-428

Olsen, Will H.; Wagenbrenner, Joseph W.; Robichaud, Peter R. (2021). Factors affecting connectivity and sediment yields following wildfire and post-fire salvage logging in California's Sierra Nevada. [Hydrological Processes](https://doi.org/10.1002/hyp.13984). 35(1): e13984. (<https://doi.org/10.1002/hyp.13984>).

WASTE DISCHARGE REQUIREMENTS ORDER R5-2024-XXXX E.34
FOR NONPOINT SOURCE DISCHARGES RELATED TO CERTAIN ACTIVITIES
CONDUCTED BY THE UNITED STATES FOREST SERVICE AND THE BUREAU OF
LAND MANAGEMENT
ATTACHMENT E

Pannkuk, C.D. & Robichaud, P.R. (2003). Effectiveness of needle cast at reducing erosion after forest fires. [Water Resources Research](#), 2003. (<https://doi.org/10.1029/2003WR002318>)

Prats, S.A.; Malvar, M.C.; Coelho, C.O.A; Wagenbrenner, J.W. (2019). Hydrologic and erosion responses to compaction and added surface cover in post-fire logged areas: Isolating splash, interrill and rill erosion. [Journal of Hydrology](#). 575: 408-419. (<https://doi.org/10.1016/j.jhydrol.2019.05.038>).

Prats, Sergio A.; Malvar, Maruxa C.; Wagenbrenner, Joseph W. (2021). Compaction and cover effects on runoff and erosion in post-fire salvage logged areas in the Valley Fire, California. [Hydrological Processes](#). 35(1): e13997. (<https://doi.org/10.1002/hyp.13997>)

Robichaud, P.R. (2000). Fire effects on infiltration rates after prescribed fire in northern Rocky Mountain forests. [USA. Journal of Hydrology](#), 231-232, 220–229. ([http://doi.org/10.1016/S0022-1694\(00\)00196-7](http://doi.org/10.1016/S0022-1694(00)00196-7))

Robichaud, P.R.; Wagenbrenner, J.W.; Pierson, F.B.; Spaeth, K.E.; Ashmun, L.E.; Moffet, C.A. (2016). Infiltration and interrill erosion rates after a wildfire in western Montana, USA. [Catena](#), 142, 77–88. (<http://doi.org/10.1016/j.catena.2016.01.027>)

Robichaud, Peter R.; Lewis, Sarah A.; Wagenbrenner, Joseph W.; Brown, Robert E.; Pierson, Fredrick B. (2020). Quantifying long-term post-fire sediment delivery and erosion mitigation effectiveness. [Earth Surface Processes and Landforms](#). 45: 771-782. (<https://doi.org/10.1002/esp.4755>)

Sweeney, B.W., Newbold, J.D. (2014). Streamside Forest Buffer Width Needed To Protect Stream Water Quality, Habitat, And Organisms: A Literature Review. *Journal of the American Water Resources Association*, Vol. 50, No.3

U.S. Environmental Protection Agency (2011). A National Evaluation of the Clean Water Act Section 319 Program, November 2011.

U.S. Forest Service (2014). Bagley Fire Erosion and Sedimentation Investigation – Final Report, USDA Forest Service, July 30, 2014.

Vellidis, G.; Lowrance, R.; Gay, P.; Wauchope, R.D. (2002). Herbicide Transport in a Restored Riparian Forest Buffer System. *American Society of Agricultural Engineers*, Vol. 45(1): 89-97

Wagenbrenner, J. (2017). Draft study plan: assessing impact of site-preparation operations on post-fire sediment delivery and recovery. USFS Pacific Southwest Research Station, Arcata, CA. 6 p.

Wagenbrenner, Joseph W.; Ebel, Brian A.; Bladon, Kevin D.; Kinoshita, Alicia M. (2021). Post-wildfire hydrologic recovery in Mediterranean climates: A systematic review and case study to identify current knowledge and opportunities. [Journal of Hydrology. 602](https://doi.org/10.1016/j.jhydrol.2021.126772), (<https://doi.org/10.1016/j.jhydrol.2021.126772>).

Wagner, M.J.; Bladon, K.D.; Silins, U.; Williams, C.H.S.; Martens, A.M.; Boon, S.; MacDonald, R.J.; Stone, M.; Emelko, M.B.; Anderson, A. (2014). Catchment-scale stream temperature response to land disturbance by wildfire governed by surface–subsurface energy exchange and atmospheric controls. *J. Hydrol.* (2014). 517, 328–338

Wenger, S. (1999). A Review Of The Scientific Literature On Riparian Buffer Width, Extent And Vegetation

Wohlgemuth, P.M.; Beyers J.L.; Wakeman C.D.; Conard S.G. (1998). Effects of fire and grass seeding on soil erosion in southern California chaparral. P. 41-51 in S. Gray (chair) Proceedings of the 19th forest vegetation management conference, January 20-22, 1998, Redding, CA