

Development of Permits for Nonpoint Source (NPS) Discharges Related to Certain Activities Conducted by the Bureau of Land Management and United States Forest Service on Federal Lands

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The California Central Valley Water Quality Control Board (Central Valley Water Board) is developing a permit to ensure regulatory compliance and water quality protection for projects undertaken by the United States Forest Service (USFS) and the Bureau of Land Management (BLM) on federal lands. Staff will present a proposed permit to the Central Valley Water Board for consideration of adoption in 2023.

The State Water Resources Control Board and the 9 Regional Water Quality Control Boards (collectively Water Boards) are responsible for implementing and ensuring compliance with both the federal and state clean water laws across the state. This ensures pollutants from activities that result in direct discharges to water (surface and ground water) as well as those from more diffuse sources like roads and broader land disturbing activities are minimized to protect water quality. These more diffused pollutant sources are referred to as "nonpoint sources" (NPS) of pollution.

The land management activities conducted by the USFS and BLM that may be regulated under the proposed permit include:

- vegetation management (including timber harvesting and fuels management),
- recreational facilities management (including motorized and non-motorized recreation management),
- restoration activities (including watercourse crossing replacements and upgrades),
- wildfire management and recovery (primarily post-fire activities such as suppression repair, hazard tree removal, revegetation and other recovery activities), and
- transportation system management (including road and trail construction, reconstruction and maintenance).

Further information regarding permit development and a link to sign up for an email list for the project are provided at: <u>www.waterboards.ca.gov/federalNPSpermit</u>

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1. Which Regional Water Quality Control Board is pursuing a permit for the USFS and BLM?

Until August 2021, the Lahontan Regional Water Quality Control Board was involved in the permit development project in coordination with the Central Valley Regional Water Quality Control Board. However, competing priorities compelled the Lahontan Water Board to withdraw from the project. Central Valley Water Board staff will continue with permit development and plans to present the proposed permit for board consideration in 2023.

2. What is nonpoint source (NPS) pollution?

Unlike direct discharges of waste/contaminants/pollution from point sources¹ (e.g., a municipal wastewater treatment plant), NPS pollution may originate from multiple diffuse sources — such as roads, agricultural areas and other managed lands, including forests — and is typically transported by rainfall, snowmelt, and irrigation water to ground or surface waters.

Common sources and contaminants associated with NPS pollution may include, but are not limited to: pathogens (including bacteria and viruses), pesticides or excess nutrients related to agricultural activities, cattle grazing, or dairies; lawn fertilizers, metals, and petroleum products in storm water runoff; and soil erosion and sediment discharges from land disturbing activities like timber harvesting, vegetation management, construction sites, and unpaved roads. As runoff or snowmelt moves over and through the ground, it can mobilize both natural and human-made pollutants, depositing them into streams, lakes, rivers, wetlands, coastal waters and ground water. Table 1 lists common NPS pollutants, common sources, and some of the potential adverse effects of each.

¹ The Clean Water Act (CWA) distinguishes between point and nonpoint sources of pollution. Under the CWA, a point source is identified as a discernible, confined, and discrete conveyance, such as a pipe, ditch, or channel. (33 U.S. Code § 1362). Irrigated agricultural return flows and agricultural storm water runoff are excluded. Nonpoint pollution sources generally are sources of water pollution that do not meet the definition of a point source as defined by the CWA (source: CA NPS Policy, pg. 7) i.e., everything else. In California's Porter-Cologne Water Quality Control Act, the term "discharge of waste" includes all discharges, from point and nonpoint sources, including wastewater treatment plant outflow, agricultural return flows and storm water discharges.



Table 1: Common NPS Pollutants, Sources, and Potential Adverse Effects

Common NPS pollutants	Contaminants	Common Sources	Potential Adverse Effects
Nutrients	Nitrogen, Phosphorus, Total Dissolved Solids	Agricultural activities, livestock grazing, dairies, urban lawns and golf courses, septic tanks, pet wastes, atmospheric inputs, cannabis cultivation	Eutrophication, hypoxia or reduced dissolved oxygen, increases in cyanobacteria and other algae; ground water contamination
Pathogens	E. Coli, giardia	Livestock grazing, dairies, wildlife, recreation (human and pet waste), septic systems	Human health risk
Sediment	Turbidity, suspended sediment	Agricultural activities, construction sites, unpaved roads and watercourse crossings, timber harvesting, post-wildfire runoff	Increase filtration costs, aquatic species habitat degradation, reduced reservoir capacity, elevated temperature
Temperature	Increased water temperature	Removal of streamside vegetation related to timber harvesting or agricultural activities, urbanization, climate change	Aquatic species habitat degradation, reduced dissolved oxygen, eutrophication, harmful algal blooms
Pesticides	Herbicides, fungicides, rodenticides	Agricultural activities, timber harvesting, urban runoff (lawns or golf courses), cannabis cultivation	Human health risk, toxicity to aquatic life, aquatic species habitat degradation
Hydrocarbons	Petroleum products (oil, gas); Polychlorinated biphenyls	Urban runoff, timber harvesting, recreational vehicles, illegal dumping	Human health risk, toxicity to aquatic life, aquatic habitat degradation
Metals	Aluminum, Arsenic, Copper, Iron, Lead, Mercury, Nickel, Zinc	Abandoned mines, urban runoff, illegal dumping	Human health risk, toxicity to aquatic life, aquatic species habitat degradation



3. How big of a problem is NPS pollution?

NPS pollution is a serious water quality concern. Discharges of polluted runoff from agriculture, urban development, forest management, recreational activities and hydromodification are the leading causes of water pollution in California. NPS pollution currently accounts for more than 75% of the water quality impairments to waterbodies listed pursuant to section 303(d) of the federal Clean Water Act across the nation. Federal and state laws require the Water Boards to address NPS discharges, however, protecting water resources from the impacts of NPS pollution is a complex challenge. NPS pollution can be difficult to control because it comes from multiple sources across the landscape and may vary over time in terms of specific contaminants and concentrations. Addressing NPS pollution generating activities is typically most successful when effective best management practices (BMPs) are implemented. BMPs can refer to either structural practices such as on-the-ground treatments to control erosion or sediment transport, or non-structural such as procedures like maintenance scheduling.

4. Why is the Central Valley Water Board developing an NPS permit for activities conducted by the USFS and BLM on federal lands?

Since NPS pollution accounts for more than 75% of the water quality impairments to waterbodies listed pursuant to section 303(d) of the federal Clean Water Act across the nation, federal and state laws require the Water Boards to regulate the discharge of NPS pollutants from lands within their jurisdiction. USFS and BLM managed lands comprise approximately 28% of the lands regulated by the Central Valley Water Board. Review of the effectiveness of best management practices deployed by the USFS and BLM on federal lands indicate water quality protection measures are necessary.

The following list includes pertinent sections of the federal Clean Water Act and California's Porter-Cologne Water Quality Control Act that explain these regulatory obligations:

- Section 313 of the federal Clean Water Act includes a 'waiver of sovereign immunity' for federal agencies, meaning that state and local water quality regulations apply to federal agencies and activities that occur on federal lands.
- Section 319 of the federal Clean Water Act requires states to develop plans to address existing and potential nonpoint sources of pollution.
- California's Porter-Cologne Water Quality Control Act requires the State Water Resources Control Board (State Water Board) to develop guidance to enforce the state's NPS pollution control program. The State Water Board met this requirement with its 2004 Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy).
- The NPS Policy requires the Water Boards to address nonpoint source pollution on lands within their jurisdiction through the use of Waste Discharge Requirements



(WDRs, referred to herein as a permit), conditional Waivers of WDRs (another type of permit), or through Basin Plan Prohibitions².

5. Why is the Central Valley Water Board choosing to develop a permit for NPS pollution on federal lands now?

Federal law requires states to develop and implement plans for addressing NPS pollution (33 U.S. Code Section 1329). The Central Valley Water Board's development and issuance of a permit for activities conducted by the USFS and BLM on federal lands is a necessary part of implementing California's 2004 NPS Policy under this federal provision.

The State Water Board and Regional Water Boards regulate nonpoint source pollution by issuing either: (1) Waste Discharge Requirements (WDRs or "permits"); (2) Waivers of Waste Discharge Requirements; or (3) Basin Plan Prohibition(s), which are the regulatory tools under California's water pollution control statute (the Porter-Cologne Act). To comply with federal regulations and the state's Porter-Cologne Act, the Water Boards have an overriding obligation to manage NPS pollution in a way that protects water quality in all waters within California.

The Central Valley Water Board currently regulates multiple activities on USFS and BLM lands through multiple permitting mechanisms. Coordinating the development of a single permit for multiple activities potentially conducted in the region by the USFS and BLM will ensure more comprehensive and consistent permitting for the federal agencies across the region.

6. Will the proposed federal NPS permit require members of the public to obtain additional permits for their activities on USFS and BLM managed lands?

No additional permits will be needed by members of the public as a requirement of the proposed permit. The proposed permit will apply solely to projects undertaken by the USFS and the BLM. Under the permitting approach being proposed by the Central Valley Water Board, the USFS and BLM would be provided permit coverage for projects complying with permit conditions once adopted. Members of the public, special use permit holders, or grazing permit or lease holders will not be required to enroll in this permit.

² Each of the 9 state Regional Water Quality Control Boards are required to establish a Basin Plan or Plans for their respective jurisdiction. Regional Basin Plans are developed through a public process to establish numeric objectives and qualitative objectives along with discharge prohibitions in order to achieve water quality protection.



7. How will the proposed permit affect users of USFS and BLM managed lands?

The proposed permit is unlikely to directly affect most users of USFS- or BLM-managed lands within the Central Valley Water Board region. However, indirect effects may include:

- **General Recreation:** Treatment of potential erosion or sediment discharge site treatment activities may have a limited indirect effect on persons who use public lands for general recreational purposes -- e.g. camping, hiking, fishing.
- Off Highway Vehicle (OHV) Use: Certain OHV facilities, open areas, and routes may be upgraded to improve water quality over time as a result of the proposed permit.
- **Persons holding grazing permits and/or leases:** Livestock grazing operations on USFS and BLM managed lands within the Central Valley Water Board's jurisdiction are not proposed to be regulated under the proposed permit.
- **Special use permits:** Persons who are applying for one-time event or special use permits from the USFS or BLM will likely not be affected by the proposed permit. However, the federal agencies may need to implement BMPs and/or conduct monitoring in areas where special use permits for ongoing activities have the potential to impact water quality.
- **Contractors and Volunteers:** Contractors (including licensed timber operators) and volunteers that conduct work on behalf of the USFS and BLM may be required to follow project or site specific guidance (including BMPs) to ensure activities are protective of water quality.
- **Private Landowners:** Persons with private land within and/or directly adjacent to USFS and BLM managed lands may observe improvements or upgrades to federally managed road systems to improve water quality over time as a condition of the proposed permit.
- Local Governments/Utilities: Local government agencies (e.g. County Public Works) and utility companies that manage roadways/corridor rights of way within federally managed lands may be affected by erosion and sediment discharge site treatment activities required by the proposed permit.

8. How will the proposed permit result in water quality protection/improvements?

The USFS and BLM manage ~10.9 million acres of public land for multiple uses with limited resources in the Central Valley Water Board region. The proposed permit is expected to require implementation of effective best management practices (BMPs) to protect water quality. BMPs, in this case, are on-the-ground techniques that have been



determined by the best available science to either prevent or significantly reduce the discharge of nonpoint source pollution to surface waters and/or ground water.

The proposed permit will be implemented using an adaptive management framework that will focus on both short and long-term water quality goals, milestones for achieving those goals, and regular evaluation. The proposed permit will also require monitoring and reporting to assess progress toward milestones and the effectiveness of implemented BMPs. Adaptive management based on monitoring outcomes will allow for improvement to implementation strategies and BMPs.

9. What are the steps in the permit development process?

The permit development process thus far has included early stakeholder surveys and meetings during 2017 and 2018, evaluation of existing BMP implementation and federal agency processes in 2018 and 2019, initiating tribal outreach and consultation pursuant to the California Environmental Quality Act (CEQA) in 2020, and a public scoping meeting held in April 2021. The Central Valley Water Board will prepare a draft permit and draft Environmental Impact Report (EIR) that will be circulated for public comment (currently anticipated for release in late spring 2022). After public review of the draft documents, the final proposed permit and EIR will be presented to the Central Valley Water Board at a public meeting to be considered for adoption (currently anticipated to occur in spring 2023). The process will include collaboration and communication with the federal agencies and input from the public throughout the phases of permit development.

Notification of all public meetings and opportunities for public comment will be posted to the project webpage at: <u>www.waterboards.ca.gov/federalNPSpermit</u>. If you would like to receive periodic email updates and information related to permit development, please sign up for the email notification service set up for this project (accessible via the above link).

The *Citizens Guide to Working with California Water Boards* also provides a good overview of ways to get involved. This guide can be found at: https://www.waterboards.ca.gov/publications_forms/publications/general/docs/citizenguide.pdf

10. When will the proposed permit be adopted by the Central Valley Water Board?

Central Valley Water Board staff expects to present the proposed permit for Board consideration in spring 2023.

 Twelve (12) National Forests and eight (8) BLM Administrative Units are partly or completely within the Central Valley Water Board's jurisdiction. Combined, there are approximately 10.9 million acres of land that the BLM and USFS manage within the Central Valley region.



- The Central Valley Water Board will be collaborating with the USFS, BLM, and will consider input from stakeholders while developing the proposed permit to ensure protection of the beneficial uses of water quality in the region. This collaboration will help ensure provisions in the proposed permit are achievable and will result in the desired water quality protections.
- The proposed permit will include conditions and criteria for covered projects, objectives, milestones, deliverables, and a monitoring program to facilitate consistency in implementation and compliance.

11. Will the proposed permit be similar in scope to the North Coast Regional Water Quality Control Board's existing Federal NPS Waiver (permit)?

The federal land management activities proposed for coverage under the Central Valley Water Board's proposed permit will be similar to those covered in the North Coast Water Board's Federal NPS Waiver of WDRs with the exception of livestock grazing operations, and will specifically include activities conducted by the BLM.

- The North Coast Water Board's Federal NPS Waiver of WDRs regulates USFS activities on a project-by-project basis, requiring the USFS to enroll and obtain separate permit coverage for each project. The Central Valley Water Board proposes to streamline that requirement by using a programmatic framework to provide permit coverage. This would significantly reduce the workload for the USFS and BLM associated with obtaining individual permit coverage by establishing conditions and criteria for covered activities ahead of implementation.
- The North Coast Water Board's Federal NPS Waiver of WDRs was written specifically for the USFS, with an option for other federal land management agencies to enroll and obtain permit coverage. The Central Valley Water Board's proposed permit will include coverage for activities conducted by the BLM to ensure comprehensive and consistent permit coverage for the USFS and BLM lands across the region.