

# ATTACHMENT 1

## FINDINGS AND INFORMATION TO SUPPORT THE ADOPTION OF

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Conditional Waiver of Waste Discharge Requirements from Waste Discharges Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region

“2024 Timber Waiver”

WHEREAS the California Regional Water Quality Control Board, Lahontan Region (Water Board) finds:

### **Scope of Coverage, Structure, and Use of the 2024 Timber Waiver**

- 1) California Water Code (Water Code) section 13260, subdivision (a) requires that any person (hereby referred to as “Discharger”) discharging waste or proposing to discharge waste as defined by Water Code section 13050 (including but not limited to waste earthen and organic materials) that could affect the quality of the waters of the state, other than into a community sewer system, shall file with the appropriate Water Board a report of waste discharge containing information that may be required by the Water Board.
- 2) Only persons proposing Timber Harvest and Vegetation Management Activities (“Activities”) (as defined in Attachment A) in the Lahontan Region that will or may potentially result in a discharge of waste that could affect the quality of waters of the state are subject to coverage under this waiver of waste discharge requirements (and waiver of the requirement to file a report of waste discharge) or file a report of waste discharge pursuant to Water Code section 13260.’
- 3) The Water Board has identified discharges of waste associated with Activities as having a potential effect on water quality. These Activities have the potential to affect water quality by causing soil, nutrients, ash, petroleum byproducts, temperature, and earthen materials to discharge to a waterbody.
- 4) Categories in the 2024 Timber Waiver are defined by the scope of Activity and physical setting and are organized by increasing threat to water quality from low to high. The Water Board categorized Activities by scope and physical setting to scale requirements, as contained in category-specific conditions, with potential water quality impacts presented by an Activity. Requirements are specific to the potential adverse effects to the quality of waters of the state inherently presented by range of Activities eligible for coverage under this 2024 Timber Waiver. As the potential of Activities to adversely affect the quality of waters of the state increases, so do category-specific conditions that require submittal of complete applications and monitoring and reporting results. This organizational structure ensures that Activities contain adequate conditions to prevent adverse impacts to the quality of waters of the state.

Activities that present a lower threat to water quality may qualify for coverage under Category 1 or 2, which do not require an application. Activities that present a higher threat to water quality result from implementation of specific Activities included in Category 4 and Category 6 Eligibility Criteria. The respective applications for Categories 4 and 6 require submittal of Activity information which summarizes the

specific water quality protection measures planned with respect to higher threat activities; requirements for specific water quality protection measures within the Category 6 application require more details relative to a Category 4 application due the nature of Activities eligible under Category 6. Monitoring and Reporting requirements specific to Categories 4, 5 and 6 are designed to address threats to water quality by increasing required Monitoring and Reporting with each respective category.

- 5) Certain terms used in this 2024 Timber Waiver have a specific regulatory definition. The definition of these terms as listed in Attachment A may differ from common dictionary definitions or definitions used by agencies conducting Activities. All other terms not defined in this Timber Waiver shall have the same definitions as prescribed by the California Forest Practice Rules (FPRs) (CCR, title 14, section 895.1 et seq.), California Public Resources Code (PRC) section 4528, subdivision (f), and the Porter-Cologne Water Quality Control Act (Water Code section 13000 et seq.).

#### **Regulatory Considerations and Reasons for Issuing the 2024 Timber Waiver**

- 6) The provisions of Water Code section 13260, subdivisions (a) and (c); section 13263, subdivision (a); or section 13264 subdivision (a) may be waived by the Water Board pursuant to Water Code section 13269 for a specific type of discharge if the Water Board determines, after any necessary meeting, that the waiver is consistent with the *Water Quality Control Plan for the Lahontan Region* (Basin Plan) and is in the public interest.
- 7) Water Code section 13269 includes the following provisions:
  - a. The waiver may not exceed five years in duration, but may be renewed by the Water Board at any time,
  - b. The waiver shall be conditional and may be terminated at any time by the Water Board,
  - c. The conditions of the waiver shall include the performance of agency, individual, group, or watershed-based monitoring, unless waived because the Water Board determines that the discharges do not pose a significant threat to water quality,
  - d. Monitoring requirements shall be designed to support the development and implementation of the waiver program, including, but not limited to, verifying the adequacy and effectiveness of the waiver's conditions,
  - e. In establishing monitoring requirements, the Water Board may consider the volume, duration, frequency, and constituents of the discharge; the extent and type of existing monitoring activities, including, but not limited to, existing watershed-based compliance and effectiveness monitoring efforts; the size of the project area; and other relevant factors,
  - f. Monitoring results shall be made available to the public, and
  - g. The Water Board may include as a condition of a waiver the payment of an annual fee established by the California State Water Resources Control

Board (State Water Board). At the time of adoption of this Timber Waiver, CA Assembly Bill 1492 precludes the charging of fees for permits necessary to conduct Timber Operations, as defined by California Code of Regulations, title 14, section 895.1 et seq.

- 8) When issuing or reissuing regional waste discharge requirements or waivers of waste discharge requirements, Regional Boards shall make a concise, programmatic finding on potential environmental justice, tribal impacts, and racial equity considerations related to the issuance (Water Code § 13149.2, effective Jan. 1, 2023). This waiver of Waste Discharge Requirements regulates Activities that may impact disadvantaged and/or tribal communities. These impacts may result from Activities adjacent to waters of the state, or from Activities that result in waste discharges to waters of the state that may adversely impact recreation, fishing, cultural activities, and other uses of surface and groundwaters. The Water Board has satisfied the outreach requirements set forth in Water Code section 189.7 by conducting outreach in affected disadvantaged and tribal communities during all stages of the development of this 2024 Timber Waiver. The Water Board conducted the following outreach to disadvantaged and tribal communities providing opportunities for ongoing engagement:
- a. On May 10, 2023, and May 15, 2023, the Water Board provided written notification of opportunity to engage on the development of this 2024 Timber Waiver to disadvantaged and tribal communities, respectively.
  - b. On September 25, 2023, the Water Board provided written notification of opportunity to provide comments on an administrative draft of this 2024 Timber Waiver.
  - c. On January 4, 2024, The Water Board provided written notification of opportunity to provide comments on a tentative draft of this 2024 Timber Waiver.
  - d. On March 18, 2024, The Water Board provided written notification of opportunity to provide comments at the adoption hearing for the Water Board to consider in the adoption of this 2024 Timber Waiver.

Pursuant to Water Code section 13149.2, the Water Board reviewed readily available information concerning anticipated water quality impacts in disadvantaged or tribal communities resulting from adoption of this waiver. The Water Board considered environmental justice concerns within the Water Board's authority and any information raised by interested persons regarding environmental justice concerns.

The Water Board anticipates that the issuance of this 2024 Timber Waiver will not result in water quality impacts to tribal and/or disadvantaged communities within the scope of the Water Board's authority. The Water Board has identified the following measures available and within the scope of its authority to address and prevent water quality impacts in disadvantaged and/or tribal communities in the Lahontan Region where Activities may occur: this 2024 Timber Waiver contains conditions designed to prevent the discharge of waste that may affect the quality of waters of the state, assess compliance with all conditions through

monitoring and reporting, permit entry of Water Board staff onto properties where Activities occur to assess compliance, and contains conditions that require Dischargers to implement corrective actions to address instances of non-compliance with the conditions herein.

- 9) The Water Board adopted the Basin Plan that establishes beneficial uses, water quality objectives, waste discharge prohibitions, and implementation policies that apply to waters of the state and waste discharges to waters of the state within the Lahontan Region. Prohibitions, provisions, and conditions contained in this Timber Waiver implement applicable water quality standards. Compliance with the Timber Waiver will protect the waters for beneficial uses as identified in the Basin Plan.
- 10) The Basin Plan contains water quality standards and implementation measures for specific watersheds. Because of the high-quality waters found in the Lahontan Region, additional conditions beyond current state and federal forestry-related regulations are included in this waiver to ensure protection of water quality and compliance with the Basin Plan. In the Lake Tahoe, Little Truckee River, and Truckee River Hydrologic Units (HUs), the Water Board adopted waste discharge prohibitions to limit soil erosion and sediment delivery in and around surface waters and their associated floodplains and Lake Tahoe Stream Environment Zones (SEZs). The Water Board has identified fine sediment (less than 16 micrometers in size) to be the primary cause of clarity loss in Lake Tahoe. Additionally, the US EPA adopted a Total Maximum Daily Load (TMDL) for sediment and nutrient discharges to Lake Tahoe in August 2011. Prior to this, the US EPA adopted a TMDL for sediment discharge to the Truckee River in September 2009, bringing focus to the control of sediment from roads and land disturbances. Therefore, this 2024 Timber Waiver adds additional conditions and requirements within the Lake Tahoe, Little Truckee River, and Truckee River HUs to ensure compliance with the Basin Plan.
- 11) The 2024 Timber Waiver is consistent with the Basin Plan and applicable state plans and is in the public interest, pursuant to Water Code section 13269, as described below.
  - a. Compliance with the conditions of the Timber Waiver will result in protection of water quality.
  - b. Without the Timber Waiver, dischargers would be required to submit a report of waste discharge and wait for up to 140 days for the Water Board to prescribe individual waste discharge requirements. Due to limited staff resources, the Water Board would be unable to prescribe requirements in every case, allowing activities to move forward after a lengthy delay without a Water Board permit. The Timber Waiver is a regulatory option imposing enforceable conditions that can be used by the Water Board to address a greater percentage of Activity, while allowing limited resources to be directed to the activities with greatest water quality risk.
  - c. Forest fuel hazard reduction efforts have increased statewide to address the current and growing fire threat from decades of fire suppression. This revised Timber Waiver continues to respond to the need for expedited permitting for lower-impact fuels hazard reduction and forest enhancement activities and

- emergency post-fire timber harvest, while still maintaining water quality protection through conditions and a monitoring program (under certain circumstances) described in the attachments. This approach balances the need to reduce fire risk quickly while ensuring appropriate management practices and mitigation for water quality impacts are still implemented.
- d. The Timber Waiver contains conditions requiring compliance with monitoring and reporting programs for some categories of activities based on the level of potential threat to water quality pursuant to Water Code section 13267, subdivision (b)(1). The required monitoring will assist in the protection of water quality and in the verification of the adequacy and effectiveness of Timber Waiver conditions pursuant to Water Code section 13269, subdivision (a)(3).
  - e. The Timber Waiver contains conditions that require compliance with the Basin Plan.
  - f. The Timber Waiver prohibits the creation of pollution, contamination or nuisance as defined in Water Code section 13050.
  - g. Violations of Timber Waiver conditions are subject to enforcement remedies including, but not limited to those described in Water Code section 13350 in the same manner as enforcement of waste discharge requirements.
  - h. Water Board staff will continue to participate in the pre-harvest review of proposed timber activities under the FPRs. This provides a process for the incorporation of water quality protection measures into Timber Harvest Plans beyond those required by the FPRs.
- 12) Activities can adversely impact water quality and impair beneficial uses by discharging sediment, nutrients, ash, temperature, and petroleum byproducts to surface and/or ground water. These nonpoint source discharges from Activities within the Lahontan Region are considered discharges of waste that could affect the quality of waters of the state. The State Water Resources Control Board, May 20, 2004, Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy) requires that all sources of nonpoint source pollution be regulated through Waste Discharge Requirements (WDRs), Waivers of WDRs, or prohibitions, or through a combination of these administrative tools. The NPS Policy requires that a Regional Water Quality Control Board, the State Water Resources Control Board, and individual discharger, or a coalition of dischargers in cooperation with a third-party representative, organization, or government agency prepare and execute a nonpoint source pollution control implementation program that does the following:
- a. States the purpose of the program. Implementation programs must address nonpoint source pollution in a manner that achieves and maintains water quality objectives and beneficial uses, including any applicable antidegradation requirements.
  - b. Includes a description of the Management Practices (MPs) and other program elements that are expected to be implemented to ensure attainment of the

nonpoint source pollution control 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 implementation of MPs.

- c. Where a Water Board determines it is necessary to achieve water quality requirements, the implementation program shall include a time schedule and corresponding quantifiable milestones designed to measure progress toward reaching the specified requirements. CWC Sections 13242 (b) and 13263 (c) and the NPS Policy recognize that there are instances where it will take time to achieve water quality requirements. The effort may involve all or some of various processes, including identification of measurable long-term and interim water quality goals; a timeline for achieving these goals; identification and implementation of pollution control MPs; provision(s) for maintenance of the implementation actions; provision(s) for additional actions if initial actions are inadequate; and, in the case of third-party organizations, identification of a responsible third party to lead the efforts.
- d. The program shall include sufficient feedback mechanisms so that the 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.

Consistent with the NPS Policy, this 2024 Timber Waiver adopted by the Water Board represents a nonpoint source pollution implementation program in the form of prescribed management practices and conditions. The Monitoring and Reporting Program provides sufficient feedback mechanism to determine whether water quality is being protected.

- 13) State Water Board Resolution 68-16 ("Statement of Policy with Respect to Maintenance of High-Quality Waters in California") finds: "Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with the maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies. Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high-quality waters 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."

Constituents of concern associated with discharges resulting from Activities include sediment, nutrients, pesticides, temperature, ash, and petroleum byproducts. This 2024 Waiver addresses a discharge that was regulated under prior versions of the waiver and an antidegradation analysis was conducted by the Regional Board at those times. This 2024 Timber Waiver involves minimum change in use beyond that previously existing or covered by prior versions of the waiver. Compliance with the

terms of this 2024 Timber Waiver should result in an improvement in water quality for the constituents of concern. Any degradation to water quality as a result of the renewal is not anticipated. If degradation of high-quality waters was to occur, this 2024 Timber Waiver is consistent with Resolution 68-16 because it requires implementation of conditions to arrive at the best practicable treatment or control of the discharge, to protect beneficial uses, and to attain the highest water quality possible. The Timber waiver requires the implementation of management practices in addition to those required in the FPRs [CCR, title 14, section 895.1 et seq] and U.S. Forest Service Best Management Practices guidance manuals. The harvesting of timber and management of vegetation can improve forest health, decreases the risk of vulnerability to environmental stressors, minimize impacts of wildfires on communities, provide economic opportunity to rural communities, yield sustainable construction materials, and is consistent with the maximum benefit to the people of the state. This 2024 Timber Waiver requires Dischargers to implement conditions to assure 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. Monitoring and Reporting ensures that best management treatment or control is effective, water quality objectives will not be exceeded, and confirms that water quality will be maintained at a level that is protective of beneficial uses.

- 14) In 1981, pursuant to section 208 of the federal Clean Water Act, the State Water Board certified a plan entitled “Water Quality Management for National Forest System Lands in California” that was developed and submitted by the U.S. Department of Agriculture, U.S. Forest Service; designated the U.S. Forest Service as the Water Quality Management Agency for specified activities on National Forest System lands in California that may result in nonpoint source discharges, including timber management, vegetative manipulation, fuels management, road construction and watershed management; and executed a Management Agency Agreement (MAA) with the U.S. Forest Service for the purpose of implementing the certified plan and WQMA designation. The U.S. EPA approved the State Water Board certification of the U.S. Forest Service water quality management plan, and the management practices therein as “best management practices” (BMPs). The 1981 MAA between the State Water Board and the U.S. Forest Service contemplates that the Water Boards will waive issuance of waste discharge requirements for U.S. Forest Service timber harvest activities that may result in nonpoint source discharges, provided that the U.S. Forest Service designs and implements its projects to fully comply with state water quality standards. The Water Board’s experience and monitoring have demonstrated that relying solely on the MAA framework to regulate nonpoint source activities on lands managed by the U.S. Forest Service does not result in compliance with water quality standards, and thus does not comport with the State Water Board’s Nonpoint Source Policy (see Finding 9) or State Water Board Resolution 68-16 (Antidegradation Policy).
- 15) Other regional water quality control boards have existing, or are currently developing, similar regulatory programs for federal land management activities. The Water Board commits to ongoing coordination with the State Water Resources Control Board, other regional water quality control boards, and the Federal Agencies to assess whether there could be improvements in efficiency and consistency by

developing statewide standards for regulation of discharges from activities on federal lands, while recognizing regional differences.

- 16) Between 1988 and 2003, the Water Board waived waste discharge requirements for timber harvest activities operating under approved CAL FIRE Timber Harvesting Plans or federal timber sales, according to Resolution No. 6-88-18, *Waiver for Waste Discharge Requirements for Specific Types of Discharges*. In 2003, after a legislatively-imposed expiration of Resolution No. 6-88-18, the Water Board adopted the initial Timber Waiver. Subsequent Timber Waivers were adopted in accordance with the requirements of Water Code section 13269, which stipulated waivers be limited to five years in duration. Those waivers were adopted in 2007, 2009, and 2014. Following the 2007 Angora fire in South Lake Tahoe, the Water Board adopted Resolution R6T-2009-0029 (the 2009 Timber Waiver), revising R6T-2007-0008 (the 2007 Timber Waiver). This early revision was done in response to the May 2008 Proclamation by the Governor of California encouraging the Water Board to consider recommendations made by the California-Nevada Tahoe Basin Fire Commission to implement actions to improve planning and streamline regulatory processes for fuel reduction activities. This revised 2024 Timber Waiver provides consistency in approach with the findings and commitments in the Joint Proclamation issued by California Governor Jerry Brown and Nevada Governor Brian Sandoval August 19, 2013, supporting continued strong bi-state, multi-agency cooperation and a strong wildfire protection, preparedness, and response capability within the Tahoe Basin.

The Water Board is considering a revised Timber Waiver at this time to address:

- a. The five-year term limit imposed by Water Code section 13269,
  - b. Sections of the R6T-2014-0030 that have been identified by Water Board staff as vague, duplicative, unnecessarily burdensome to staff or operators, or outdated due to recent scientific research, and
  - c. Specific requests made by the Water Board and regulated public and agencies concerning the increase in pace and scale of forest management projects, landscape-scale projects, post-fire emergency timber harvesting, and the Monitoring and Reporting Program.
- 17) Timber Operations on non-federal lands in California are regulated in accordance with the Z'berg-Nejedly Forest Practice Act (FPA) (Public Resources Code § 4511 et seq.) and the California Forest Practice Rules (FPR) (California Code of Regulations, title 14, § 895 et seq.). The BOF is responsible for promulgation of the FPR in accordance with the FPA while CAL FIRE is the state agency responsible for overseeing implementation and enforcement of the FPR for timber harvest activities on non-federal lands. Non-federal landowners proposing to harvest timber for commercial purposes are required to have an approved Plan, prepared by a Registered Professional Forester (RPF), prior to starting timberland management activities. Pursuant to the FPR, the applicable Regional Water Board, California Department of Fish and Wildlife, California Geological Survey, and other responsible and local agencies participate in the review of Plans and provide recommendations



to the CAL FIRE Director as part of an interdisciplinary “Review Team.” As a member of the Review Team, Water Board staff review proposed Plans and is provided the opportunity to participate in preharvest inspections (inspections conducted prior to Plan approval). CAL FIRE’s Plan approval process is the functional equivalent to the California Environmental Quality Act Environmental Impact Report process (Public Resources Code § 21080.5; see also California Code of Regulations, title 14, § 896).

Section 208 of the federal Clean Water Act (33 U.S.C. § 1288) requires states to identify areas with “substantial water quality problems” and to designate a Water Quality Management Agency (WQMA) to develop an area-wide plan for addressing water pollution. In 1988, the State Water Board (a) conditionally certified the “Water Quality Management Plan for Timber Operations on Nonfederal Lands” which included those FPR selected as best management practices and the process by which those rules are administered; (b) designated CAL FIRE and the BOF as joint Water Quality Management Agencies; and (c) executed a Management Agency Agreement (MAA) with CAL FIRE and BOF for the purpose of implementing the certified plan and WQMA designations.

The MAA required U.S. Environmental Protection Agency (U.S. EPA) approval of the State Water Board’s certification of the FPR and administering processes for regulation of timberland management activities on non-federal lands in California. That approval had not occurred by the time State Board adopted the 2004 Nonpoint Source Policy. Thus, U.S. EPA approval of the State Board’s certification of the FPR would not negate the legal requirement for Regional Boards to address nonpoint source pollution using one or more of the three regulatory options provided under the Nonpoint Source Policy.

- 18) On May 14, 2009, the Water Board adopted a mitigated negative declaration in conjunction with the adoption of the 2009 Timber Waiver, in accordance with section 15072 of the CEQA Guidelines (CCR, title 14, section 15000 et seq.), determining there will be no significant adverse impacts to the environment from waiving waste discharge requirements for the categories of activities specified within the 2009 Timber Waiver (“2009 Mitigated Negative Declaration,” SCH No. 2009012005). The Water Board reviewed that 2009 Mitigated Negative Declaration and determined, in light of recent research and proposed updates to the 2024 Timber Waiver, that none of the conditions set forth in section 15162 of the CEQA Guidelines calling for the preparation of a supplement EIR or negative declaration have occurred. These findings are supported in addendums prepared by the Water Board in 2014 and in 2024. The 2009 Mitigated Negative Declaration, the 2014 addendum, and 2024 addendum reflect the Water Board’s independent judgment and analysis, which concludes that with the implementation of mitigation measures, which have been incorporated into the requirements of this Timber Waiver, no significant adverse impacts will occur from the adoption of this Timber Waiver. The Water Board will file a Notice of Determination within five days from the issuance of this order.

### Findings to Support Monitoring and Reporting Requirements

- 19) Water Code section 13267(b)(1) states that: *“In conducting an investigation specified in subdivision (a), the 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 within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region 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. (2) When requested by the person furnishing a report, the portions of a report that might disclose trade secrets or secret processes may not be made available for inspection by the public but shall be made available to governmental agencies for use in making studies. However, these portions of a report shall be available for use by the state or any state agency in judicial review or enforcement proceedings involving the person furnishing the report.”*

Technical reports are necessary to evaluate Discharger compliance with the terms and conditions of this 2024 Timber Waiver and to ensure that applicable water quality objectives are in fact being met. Consistent with Water Code section 13267, this Order requires the implementation of a monitoring and reporting program (MRP) that is designed to determine the effects of a Discharger’s nonpoint source activity on water quality, to verify the effectiveness of management practices designed to comply with applicable water quality objectives, to verify the adequacy and effectiveness of the Order’s conditions, and to evaluate Discharger compliance with the terms and conditions of the Order. Additional information regarding the justification for monitoring and technical reports under this Order is included in Attachment 1: Findings.

- 20) Pursuant to Water Code section 13269, subdivision (a)(3), the Water Board may waive monitoring requirements for discharges that it determines do not pose a significant threat to water quality.
- a. For projects conducted under the criteria and conditions of Category 1, which are set forth in Section D, the Water Board waives monitoring requirements. Category 1 covers only those activities:
    - i. Conducted near structures, or in or near areas zoned as residential, commercial or industrial. The Water Board finds that these activities do not pose a significant threat to water quality due to their limited scale and typical location and adherence to Category 1 eligibility criteria and conditions,
    - ii. Conducted under a CAL FIRE accepted Exemption pursuant to CCR, title 14, section 1038, without any exceptions to section 1038.1(c) conditions 5,

6, 7, 8, 9, and 12. The Water Board finds that these activities do not pose a significant threat to water quality because of the CAL FIRE requirements that limit the scale of these activities and adherence to Category 1 eligibility criteria and conditions which also limits these activities.

- b. For projects conducted under the criteria and conditions of Category 2, which are set forth in Section D, the Water Board waives monitoring requirements. Category 2 covers only those activities that are conducted by hand crews and low-ground-pressure chippers, brush mowers, or similar equipment. The Water Board finds Activities that comply with the criteria and conditions for Category 2 set forth in Section D do not pose a significant threat to water quality.
- c. For projects conducted under the criteria and conditions of Category 3, which are set forth in Section D, the Water Board waives standardized monitoring requirements for all projects seeking coverage under the category while retaining the authority in this waiver to request monitoring based on the extent and location of activities. Category 3 applies only to those activities conducted for post-wildfire rehabilitation, and covers activities to minimize threats to life, property, water quality, and natural and cultural resources. These activities are generally limited in scope or specifically intended to control erosion and sedimentation. The Water Board finds activities conducted under Category 3 do not pose a significant threat to water quality.

21) Water Code section 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.” It must also be noted that implementation monitoring is a requirement of the FPRs, as is forensic monitoring. The FPRs specify that the Regional Water Board’s monitoring and reporting requirements may be used in the evaluation of the road rule requirements. California Code of Regulations, title 14, section 943.7(k)(2) under Maintenance and Monitoring of Logging Roads and Landings specifies: “Inspections conducted pursuant to California Regional Water Quality Control Board requirements may be used to satisfy the inspection requirement of this section.” While the FPRs require visual implementation inspections prior to the winter period, and inspections during the winter period (essentially “forensic” monitoring), no formal reporting is required. So, even should the Water Board determine that no additional monitoring or reporting will be required of projects enrolled in the 2024 Timber Waiver, implementation and forensic inspections are still required by the FPRs, though no reporting occurs. Thus, requiring development of an inspection plan, effectiveness monitoring, Notice of Violation (NOV) reporting and annual reporting are additional costs to non-federal Dischargers not required by the Forest Practice Rules.

The Water Board concludes that the cost of monitoring and reporting required by the 2024 Timber Waiver represent a reasonable cost of conducting permitted operations that pose a threat to water quality. Benefits inherent in the proposed monitoring and reporting are many and include: increased awareness on the part of the landowner/land manager 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 available to aid in future risk analyses; lessons learned regarding specific threats and effective mitigations that can be presented to the BOF for consideration in developing rule revisions or used in the furtherance of best management practice development.

### **Reasons for Specific Requirements Within the 2024 Timber Waiver**

- 22) California's *Wildfire and Forest Resilience Action Plan* recognizes the environmental impacts from high severity fire and documents commitments from state and federal land management agencies to an increase in the pace and scale of forest health projects across the state. These commitments and subsequent legislative mandates to implement California's *Wildfire and Forest Resilience Action Plan* are the primary preventative measure to address future impacts from high severity wildfires. This Timber Waiver is intended to support the increase of the pace and scale of forest health projects including commercial timber harvest, forest health and community defense.
- 23) The Water Board recognizes the statewide need to address the current and growing threat of catastrophic wildfire and impacts from climate change. Efforts are underway on a statewide basis to study and address climate change and its effects on forest health. Decades of fire suppression have resulted in unhealthy forests with thick stands of trees and vegetation that require thinning, and in some cases, prescribed fire. Many of these activities need to occur in areas adjacent to waterbodies where there is a higher potential to adversely impact water quality than if the same activity was to occur away from a waterbody. The water quality effects from wildfire in these areas can be significant and, to some extent, may be estimated based on fire severity and predicted hydrology. Extensive research has been conducted that supports the efficacy of proactive fuel treatments in limiting the intensity and environmental impacts of wildfires.

The Water Board also recognizes the need to actively manage forests to protect and preserve forest health. Aspen is considered a keystone species in the montane zone of the Sierra Nevada Range, as aspen communities are critical for maintaining biodiversity in western landscapes. Concerns exist related to the observed decline in the health and distribution of aspen stands throughout this area. To prevent the replacement of aspens by conifers in the Sierra Nevada, active management will be required. Thinning conifers in riparian areas has been shown to stimulate aspen suckering, and it is hoped that this prescription will result in improved health and distribution of aspen stands within the Sierra Nevada region.

On May 14, 2009, the Water Board adopted the *Conditional Waiver of Waste Discharge Requirements for Waste Discharges Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region* (Resolution No. R6T-2009-0029; 2009 Timber Waiver), which allowed research and demonstration activities to be conducted in sensitive areas in order to find out more information on the impacts and appropriate management practices for the new and innovative vegetation management practices, in addition to other Activities. The Water Board acknowledges the need for innovative technologies that can advance technology

available for conducting forest treatments. The Water Board is allowing the following innovative Activities under this waiver:

- a. Over snow ground-based equipment operations under all 2024 Timber Waiver categories, as these operations have been demonstrated to minimize ground disturbance and associated quality impacts associated with ground-based equipment operation.
  - b. Ground-based equipment operations within Waterbody Buffer Zones (WBBZs) under the soil operability limitations detailed in Attachment A.
  - c. Allow expedited enrollment of emergency post-fire timber harvest and vegetation management activities.
  - d. Prescribed broadcast burning within WBBZs: Active ignition may be performed in areas outside of WBBZs and within WBBZ except for areas within 25 feet of any waterbody.
- 24) Soil compaction and deformation depends upon soil moisture content, soil characteristics, organic content within the soil, and compaction forces. Geotechnical Engineers, when striving to achieve compacted soils for construction purposes, have developed the term “optimum moisture content by weight” to describe the moisture level at which soils are most conducive to being compacted. Soil that lacks sufficient moisture, below the soil’s optimum moisture content by weight, is less susceptible to being compacted to that soil’s maximum dry density. Soils with a high organic content are less susceptible to compaction. Repeated heavy traffic produces additive forces that can compact soil. Soil that contains moisture at its optimum moisture content by weight is highly susceptible to compaction. Soils at or above optimum moisture content will commonly exhibit wheel or track ruts that are typically deeper than about two to three inches. Soil with high moisture content is highly susceptible to deformation; this can be observed when heavy equipment operates in those areas and either deep ruts (>3 inches) form, or the soils deflect under the weight and are observed to “pump”. The deflection or “pumping” is resultant from the excess water content in the soil. Optimum soil moisture is specific to each soil type and the moisture content within the soil depends on many factors, including precipitation, snowmelt, runoff, organic content, and groundwater levels. Operable soil conditions are defined in Attachment A, and ground-based equipment operation must be restricted to times when the soil lacks excessive moisture, below the soil’s optimum moisture content to protect water quality.

#### Reasons for Lake Tahoe Hydrologic Unit Specific Requirements Within the 2024 Timber Waiver

- 25) During the term of the 2009 Timber Waiver, the Water Board found that the results of the USFS-Lake Tahoe Basin Management Unit Heavenly Valley Creek Stream Environment Zone Demonstration Project (USFS-LTBMU, 2008) provided sufficient evidence that the operation in the SEZ of cut-to-length (CTL) equipment with ground pressures less than 13 pounds per square inch (psi) did not result in the permanent disturbance of soils; therefore, there was a low risk of the soils discharging to a waterbody via runoff, slumping, or wind erosion. These results are sufficient for allowing future activities using this equipment on similar soils to proceed without

requiring a Basin Plan prohibition exemption when monitoring to verify operable soil conditions occurs. Additionally, the results will be considered sufficient for use of the same or similar low ground pressure equipment under comparable conditions elsewhere in the Lahontan Region. As a result, the 2014 Timber Waiver modified the 2009 Timber Waiver to allow ground-based mechanical equipment operations within SEZ under a specific set of conditions (See Category 6, Conditions 9 and 10 (F.6.2.10 and F.6.2.11)). Likewise, this Activity is eligible for coverage under the 2024 Timber Waiver.

- 26) Hand-thinning operations within SEZs and other sensitive areas result in a large volume of material (also referred to as slash), which poses a challenge for efficient removal in a manner that causes the least disturbance to the sensitive area. The practice of using hand crews to pile and burn slash can be an effective and efficient method for reducing the fuel load in those sensitive areas. Hand thinning crews are the least disruptive to the sensitive area soils as compared to operating mechanized equipment, which has the potential to disturb sensitive soils and vegetation and result in soil compaction. The 2009 Timber Waiver determined that creating certain-sized slash piles that cover no more than 30% acre in the SEZ, and that burning up to half of those piles (i.e., piles covering up to 15% of the SEZ area) in any given year, creates a less than significant impact to the resources. Building and burning small piles of this slash in situ within SEZs is an effective way to mitigate wildfire risk in these sensitive locations; however, this practice often leaves burn scars in which the unique soil functions may be lost and exposes the bare soil to re-colonization by invasive species and potential erosion problems. The 2009 Timber Waiver did not specify a performance standard for vegetative recovery of the burn scar in the SEZ; rather it specified that slash piles not exceed ten feet diameter by five feet high. Research has since shown that the size of the material in the burn pile has more influence on the intensity of the soil impacts than the size of the pile itself, so the pile size specification in the 2009 Timber Waiver was replaced with a requirement that burn scars show vegetative recovery within two growing seasons.

The 2014 Timber Waiver modified the 2009 Waiver by requiring project implementers to ensure that burn scars show vegetative recovery prior to allowing additional slash pile burning in that specific location of the SEZ. Pile burning appears to have a moderate (impacting water repellency and porosity) to severe (impacting infiltration and the native plant community) effect on the physical properties of soils. Research has also shown that soil bacteria and fungal mycelium, along with their nutrient-cycling processes, may be impacted at relatively low temperatures; additionally, carbon and nitrogen may be increased and liberated. Individually monitoring each pile, post-burn, to determine whether the specific soil functions unique to these environments have been impacted is impractical. Monitoring of vegetative recovery within these burn scars to ensure the soil functionality has not been impacted, and is being restored, is more practical. There currently exists little literature regarding what is an acceptable percentage of vegetation colonization in order for vegetative recovery to be considered successful.

This 2024 Timber Waiver further modifies requirements for Burn Scar recovery in SEZs to allow a combination of vegetative cover and soil surface cover to address

potential effects of pile burning on water quality. This modification is based on a review of scientific literature and monitoring reports submitted under the 2014 Timber Waiver in addition to modifications in Basin Plan Waste Discharge Prohibition for SEZs. Scientific literature and an internal review of submitted monitoring reports show that sediment and ash transport from pile burn scars is locally mitigated by adjacent undisturbed forest organic soil matter, that SEZ vegetation naturally recovers to pre-burn conditions without human interaction, and that soil surface cover has a high probability of natural reestablishment within two years of pile combustion. Modifications to the Basin Plan Waste Discharge Prohibition for SEZs also support this change: previous prohibition language was focused on “new development” whereas modified language is specific to waste discharges.

Vegetative recovery of burn pile scars can be sped up with actions either before or after the pile is burned. Research has shown that by raking off the organic duff (surface) layer from the area the pile is to be built upon, and raking this duff back post-burn restores resilience and increases recovery of soil functionality within a relatively short time frame. Raking duff into a pile along the downhill side of the burn pile may also act as a deterrent to any potential erosion. Raking the duff back into the area burned increases soil surface roughness, encouraging re-colonization and assisting infiltration. Raking native plant seeds into the burn scar soil can speed up the time to vegetative recovery.

- 27) This Timber Waiver allows pile burning within SEZs if the projects meet the requirements of Attachment Q, “Required Management Actions for Pile Burning within Stream Environment Zones Under Timber Waiver Category 6.” Dischargers under the 2009 Timber Waiver who proposed slash piling and burning within SEZs were required to provide Water Board staff with the information necessary to justify a Basin Plan prohibition exemption and wait for a 10-day public review and comment period prior to the Water Board’s Executive Officer granting an exemption to proceed. The granting of project level Basin Plan prohibition exemptions under this process was repeatedly done during the term of the 2009 Timber Waiver without public concern or significant environmental impact being identified. In the interest of streamlining the permitting process for hand-thinning activities within SEZs, and based on the information provided in Finding 25, herein, the 2024 Timber Waiver grants a Basin Plan Prohibition Exemption for slash piling and burning within SEZs of the Lake Tahoe HU as provided in Attachment N.

## Summary

- 28) These Findings provide information on the scope, structure and use of the 2024 Timber Waiver as well as the reasons for issuance and specific requirements. These Findings describe how the 2024 Timber Waiver aligns with applicable legislation, California state statutes, plans, commitments and guidance regarding environmental justice, climate change, forest health and water quality protection pertinent to Timber Harvest and Vegetation Management.

The Water Board held a public hearing on August 20, 2024, in South Lake Tahoe, California, and considered all evidence concerning this matter.