

California Environmental Quality Act
(CEQA)

INITIAL STUDY

Supporting the Preparation of a Mitigated Negative Declaration

for

Revision of Conditional Waiver of Waste Discharge Requirements for Timber
Harvest and Vegetation Management Activities in the Lahontan Region

April 2009

(revised from the January 2009 Initial Study)

California Regional Water Quality Control Board, Lahontan Region
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Attachments

1. Comparison of the Notification, Monitoring, and Reporting Conditions between the 2007 Timber Waiver and the proposed Timber Waiver
2. Response to comments including copies of all comment letters received during the January 2009 public comment period
3. Proposed Timber Waiver

PROJECT DESCRIPTION

This project involves revising the *Conditional Waiver of Waste Discharge Requirements for Timber Harvest Activities in the Lahontan Region* (R6T-2007-0008 [2007 Timber Waiver]), by adopting and implementing the proposed Timber Waiver (proposed Timber Waiver). The 2007 Timber Waiver will remain in effect for activities previously enrolled under the 2007 Timber Waiver.

The California Regional Water Quality Control Board, Lahontan Region (Water Board) is proposing to waive the need to submit Reports of Waste Discharge and obtain Waste Discharge Requirements for discharges, or threatened discharges, of wastes including but not limited to earthen materials (i.e., soil, silt, sand, clay, and rock), organic materials (i.e., slash, sawdust, and bark), and silvicultural herbicides, resulting from timber harvest and vegetation management activities in the Lahontan Region which meet the eligibility criteria and comply with the conditions and general provisions set forth in the proposed Timber Waiver. The proposed Timber Waiver identifies six categories of activities described by eligibility criteria for each category. To be eligible for the proposed Timber Waiver, persons must comply with specific criteria and conditions set forth to ensure that impacts to water quality remain at less than significant levels.

In January 2009, the Water Board released a tentative revised Timber Waiver and Initial Study for a thirty day public review. Twelve comment letters were received. The Water Board staff met with persons submitting comments and made a number of revisions to the Timber Waiver, mostly clarifications. This Initial Study updates the January 2009 Initial Study to address the substantive changes.

The definition of **timber harvest and vegetation management activities ("activities")** for the purpose of this project is:

all activities related to the management of vegetation for the purposes of fuel reduction; forest thinning; establishment of shaded fuel break; and/or environmental improvement (such as forest enhancement, riparian enhancement, and aspen stand enhancement); prescribed burning; cutting or removal of trees and vegetation, together with all the work incidental thereto, including, but not limited to, construction, reconstruction, maintenance, and decommissioning of roads, fuel breaks, stream crossings, landings, skid trails, or beds for the falling of trees; burned area rehabilitation; hazard tree removal; site preparation that involves disturbance of soil, burning of vegetation, or herbicide/pesticide application. Vegetation management activities do not include aquatic vegetation management, preparatory tree marking, surveying, or road flagging.

The proposed Timber Waiver will apply to these activities throughout the Lahontan region. For activities located in the area of mutual jurisdiction of the Water Board and the Tahoe Regional Planning Agency (TRPA) in the Lake Tahoe Region, the TRPA is the lead agency for permitting and review of timber harvest and vegetation

management activities under the terms of a 2008 Memorandum of Understanding (MOU). Project proponents are not required to apply to the Water Board for coverage under the Timber Waiver if their project is regulated by the TRPA and in accordance with the agreements of the MOU and the Waiver of Report of Waste Discharge adopted by the Water Board (Resolution R6T-2008-0038).

SPECIFICS OF THE PROPOSED PROJECT

Proposed revisions to the 2007 Timber Waiver include minor changes (i.e., grammar and document organization) and substantial changes (i.e., revising the categorization scheme, eligibility criteria, conditions, and application and monitoring requirements). Changes made between the January 2009 tentative Timber Waiver and the proposed Timber Waiver include, but are not limited to (1) addition of projects under CALFIRE approved Dead, Dying, Diseased Exemptions with restrictions to Category 1, (2) addition of projects to Category 1 undertaken to remove hazard trees in response to an imminent threat to life or property, (3) allowing limited prescribed fire to Categories 2 and 4, (4) findings and conditions recognizing specific pollutants of concern and waste discharge prohibitions for Lake Tahoe and Truckee River Hydrologic Units. The scope of the environmental analysis within this Initial Study is limited to the proposed changes between the 2007 Timber Waiver and the proposed Timber Waiver.

The proposed Timber Waiver is attached to this Initial Study.

PURPOSE OF AND NEED FOR PROJECT

The purpose of the project is to protect water quality, further expedite fuels reduction efforts in the Lahontan Region, clarify Timber Waiver requirements, and facilitate compliance with waiver conditions. These proposed revisions are being made in response to requests made by the Lahontan Water Board, the regulated public and agencies, and the California-Nevada Tahoe Basin Fire Commission.

The need for the project was identified in the *California-Nevada Tahoe Basin Fire Commission Report* (May 2008). This document was developed following the June - July 2007 Angora fire in South Lake Tahoe, which damaged or destroyed hundreds of structures and utilities and burned over 3,000 acres of forested land within the Lake Tahoe Basin.

In May 2008, following review of the *California-Nevada Tahoe Basin Fire Commission Report* (Fire Commission report), Governor Arnold Schwarzenegger issued a Proclamation regarding current forest fuels and regulatory conditions in the Lake Tahoe Region following the Angora fire. The Proclamation found that a state of emergency exists within the Tahoe Basin counties of Placer and El Dorado relative to wildfire risk, and certain actions should be implemented to improve fire suppression, fuels management, planning, and regulatory streamlining. The Governor's Proclamation found the current regulatory environment within the Tahoe Basin for fuels treatment activities:

" . . . confusing, overly complex and often incompatible with the immediate need to mitigate the threat of catastrophic wildfire, and that such regulation and procedures require the immediate attention of agencies and authorities having jurisdiction over the health and conditions of the forests in the Basin, including but not limited to the TRPA, in order to eliminate or otherwise reduce the adverse effects of confusing, overlapping, or unnecessarily restrictive regulations and regulatory procedures"

Although the Governor's Proclamation was specific to the Lake Tahoe Basin, the Water Board recognizes the need to clarify and revise the 2007 Timber Waiver to facilitate fuels treatments for public health and safety, and increase understanding of the Timber Waiver's conditions and requirements region-wide. Therefore, Water Board staff is proposing these revisions to the 2007 Timber Waiver to fulfill the purpose and need for the project, as outlined above.

The scope of this proposed action is limited to revisions that can be made without requiring an amendment to the *Water Quality Control Plan for the Lahontan Region* (Basin Plan). Amending the Basin Plan would require additional environmental and scientific peer review. Because of the length of time involved in completing Basin Plan amendments, the Water Board may consider changes to the Basin Plan in a separate action at a later date.

CONSISTENCY WITH PLANS AND POLICIES FOR WATER QUALITY PROTECTION

Between 1988 and 2003, the Lahontan Water Board waived waste discharge requirements for timber harvest activities operating under approved California Department of Forestry and Fire Protection (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 January 2003, after legislative imposed expiration of Resolution No. 6-88-18, the Lahontan Water Board adopted Resolution No. R6T-2003-0001, *Conditional Waiver of Waste Discharge Requirements for Discharges Related to Timber Harvest Activities in the Lahontan Region* (2003 Timber Waiver). The 2003 Timber Waiver conditionally waived waste requirements for timber harvest activities on lands throughout the Lahontan Region, including both nonfederal lands (i.e., lands owned and managed by private landowners, local governments, public utility districts, etc.) and federal lands managed by the U.S. Forest Service. Environmental impacts of the 2003 Timber Waiver were analyzed under a Negative Declaration, certified by the Water Board on January 8, 2003.

In February 2007, the 2003 Timber Waiver was rescinded with the adoption of a renewed Timber Waiver, Resolution No. R6T-2007-0008 (2007 Timber Waiver). The 2007 Timber Waiver covered the same types of activities as the 2003 Timber Waiver; however, unlike the previous waivers, the 2007 Timber Waiver included monitoring and reporting requirements for timber harvest and vegetation management activities determined by the Lahontan Water Board to pose a threat to water quality, pursuant to California Water Code (Water Code) section 13269 (as amended January 1, 2005). Environmental impacts of the 2007 Timber Waiver were determined to remain within

the project scope of the Initial Study and Negative Declaration certified for the 2003 Timber Waiver, and no additional analysis was conducted pursuant to the California Environmental Quality Act.

Under this proposed Timber Waiver, the Water Board will continue to waive waste discharge requirements for specified discharges associated with timber harvest and vegetation activities within the Lahontan Region. Similar to the 2007 Timber Waiver, the revised Timber Waiver will be conditional and may be terminated at any time by the Lahontan Water Board pursuant to Water Code section 13269, subdivision (a)(2). To ensure that the proposed Timber Waiver is in the public interest and consistent with the Basin Plan, conditions of eligibility are proposed, consistent with the Water Code section 13269, subdivision (a)(1).

These conditions are proposed for each Timber Waiver category to ensure that activities carried out under the Timber Waiver will not adversely impact water quality. Notification and application requirements provide a mechanism for Water Board staff to provide feedback on vegetation management proposals to avoid water quality problems, and ensure eligibility and compliance with Timber Waiver conditions and ensure management measures are implemented and effective. Monitoring requirements are intended to further ensure compliance with waiver conditions and eligibility criteria, and to verify the adequacy and effectiveness of the Timber Waiver's conditions.

The proposed Timber Waiver does not limit or change the existing authorities or responsibilities of other agencies. For example, on private timberlands, CAL FIRE is the lead agency for conducting CEQA analysis and issuing permits to timberland owners and operators performing timber harvest and vegetation management activities within the project area. On lands managed by the U.S. Forest Service or the U.S. Bureau of Land Management, approval to conduct timber harvest and vegetation management activities is only granted after the federal agency has prepared environmental documents to comply with the National Environmental Policy Act (NEPA). On lands owned and/or managed by the State of California (i.e., California Department of Parks and Recreation, California Tahoe Conservancy, and the California Department of Transportation), approval to conduct timber harvest and vegetation management activities is granted only after environmental analysis in compliance with CEQA is completed.

Within the Lake Tahoe region, the TRPA regulates vegetation management activities through a tree removal permitting system and memoranda of understanding with land management agencies and fire districts. The Water Board and the TRPA are currently implementing a cooperative approach to regulating vegetation management activities in the Lake Tahoe Region, through an MOU for vegetation management activities. Under the Vegetation Management MOU, the TRPA is responsible for reviewing proposed activities, issuing permits, conducting inspections and taking enforcement action as necessary to ensure compliance with permits and applicable regulations, including its Code of Ordinances and Water Quality Management Plan for the Lake Tahoe Region ("208 Plan") for activities in the Lake Tahoe Region. The provisions and prohibitions of

the Water Quality Control Plan of the Lahontan Region (Basin Plan) are similar to those contained in the TRPA ordinances and plans. The Water Board found it to be in the public interest and in compliance with the Basin Plan to waive the requirement for persons to file a report of waste discharge with the Water Board for these activities in the Lake Tahoe Region when TRPA is regulating the activity.

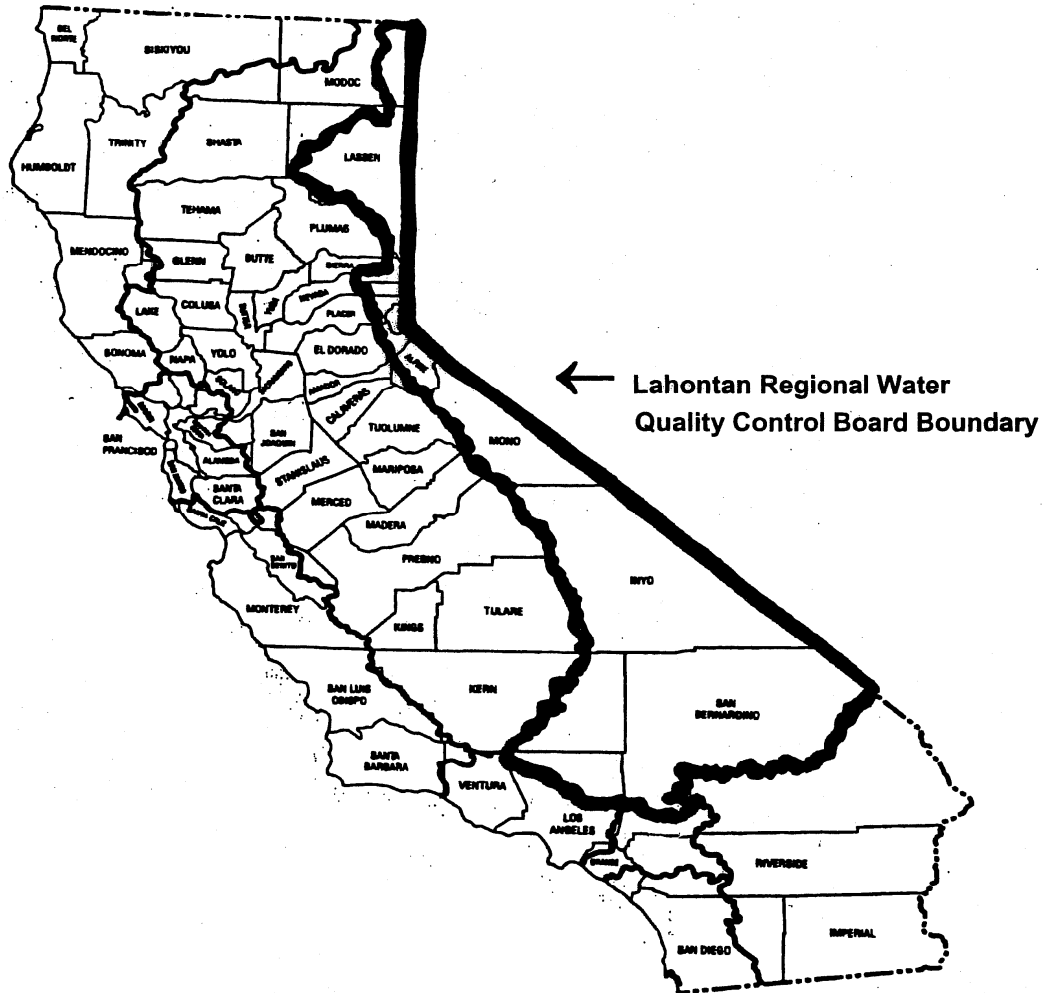
As described above, the proposed project is consistent with applicable plans and policies regarding water quality protection in the Lahontan Region. The Lahontan Water Board proposes to make a determination that the timber harvest and vegetation management activities conducted in compliance with the conditions described within the proposed Timber Waiver are consistent with the Water Quality Control Plan for the Lahontan Region (Basin Plan) and is in the public interest pursuant to Water Code section 13269, subdivision (a)(1).

ENVIRONMENTAL SETTING

The Lahontan Region (Figure 1) is comprised of about 33,131 square miles of land, a significant portion of which is forestland. The Region includes over 700 lakes, and over 3,000 miles of streams in eastern California, including the California portion of the Lake Tahoe Basin. The Lahontan Region includes the highest (Mount Whitney) and lowest (Death Valley) points in the contiguous United States, and the topography of the remainder of the Region is diverse. The Region includes the eastern slopes of the Warner, Sierra Nevada, San Bernardino, Tehachapi and San Gabriel Mountains, and all or part of other ranges including the White, Providence, and Granite Mountains. Topographic depressions include the Madeline Plains, Surprise, Honey Lake, Bridgeport, Owens, Antelope, and Victor Valleys.

Much of the Lahontan Region is in public ownership, with lands managed by agencies such as the U.S. Forest Service, National Park Service, and Bureau of Land Management, various branches of the military, the California State Department of Parks and Recreation, and the City of Los Angeles Department of Water and Power. Land uses include rangeland grazing, recreation, timber harvest, mining, irrigated agriculture, energy production, water supply transport and storage, and urban uses.

Figure 1: Project Area (Lahontan Region)



DISCUSSION OF POTENTIAL EFFECTS OF PROPOSED PROJECT

CEQA requires a Lead Agency to prepare an Initial Study to determine whether a project may have a significant effect on the environment (Cal. Code Regs., tit. 14, section 15063(a)). A "significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance (Cal. Code Regs., tit. 14, section 15382). If the Initial Study does not show that there is substantial evidence, in light of the whole record before the agency, that a project may have a significant effect on the environment, a Negative Declaration may be prepared. If the Initial Study identifies potentially significant effects, but identifies revisions or conditions to mitigate the effects

to a point where clearly no significant effects would occur, a Mitigated Negative Declaration may be prepared (Cal. Code Regs., tit. 14, section 15070).

The Lahontan Water Board has waived waste discharge requirements for timber harvest activities since 1988. However, this project (the revised Timber Waiver) does contain substantive changes over past Timber Waivers in several areas. These changes include:

- organizing Timber Waiver categories based on threat to water quality, and de-emphasizing land ownership as a basis for categorization
- expanding the types of activities that may proceed under the revised Timber Waiver without notification to Water Board staff
- expanding the types of activities that may proceed under the revised Timber Waiver without 30-day notification to Water Board staff (See Attachment 1- Comparison of the Notification, Monitoring, and Reporting Conditions between the 2007 Timber Waiver and the proposed Timber Waiver)
- revised Timber Waiver eligibility criteria, conditions, and definitions
- removing, reducing, and/or clarifying monitoring requirements for certain categories of activities
- providing expanded conditional opportunities for activities within sensitive lands¹
- explicit interpretation of prohibitions contained in the Water Quality Control Plan for the Lahontan Region (Basin Plan) against waste discharges to lands within the 100-year floodplains in the Little Truckee River, Truckee River, and Lake Tahoe hydrologic units (HUs), and prohibitions against “permanent disturbance” in Stream Environment Zones (SEZs) in the Lake Tahoe HU
- allowance for conditional operation of low ground pressure equipment to within 25 feet of a watercourse
- allowance for the deposition of limited chipped material within Waterbody Buffer Zones
- explicit conditions for prescribed fire

These substantive changes are proposed by Water Board staff for several reasons:

- to streamline implementation of a broader range of vegetation management activities to mitigate the threat of catastrophic wildfire, while ensuring less than significant impacts to water quality
- to facilitate compliance with Timber Waiver conditions, and assist applicants in identifying eligibility criteria, conditions, and monitoring requirements that apply to their proposed activities

¹ The term ‘sensitive lands’ used within this Initial Study and the Timber Waiver includes: aquatic and wetland habitat, soils with high or extreme erosion hazard rating, slopes greater than 40%, known slides and unstable areas (including unstable and erodible watercourse banks, migrating channels, overflow channels, watercourse channels with inadequate flow capacity, flood prone areas, riparian areas, 100-year floodplains within the Truckee River, Little Truckee River, and Lake Tahoe Hydrologic Units (HUs), slopes over 30% in the Lake Tahoe HU, and Stream Environment Zones within the Lake Tahoe HU.

- to allow Water Board staff to focus limited staff resources on timber harvest and vegetation management activities that pose greater threats to water quality.

Some of the proposed changes could have an effect on the environment in the project area over current conditions (i.e., regulation of timber harvest and vegetation management activities under the 2007 Timber Waiver). For each CEQA factor, Water Board staff evaluated potential environmental effects from proposed changes in regulation in the proposed Timber Waiver from the 2007 Timber Waiver. For example, providing expanded opportunities for fuels reduction activities on sensitive lands, or expanding the types of activities that may proceed without notification to Water Board staff may result in impacts to water quality, soils or biological resources. In developing the proposed Timber Waiver, Water Board staff included criteria, conditions, and monitoring requirements to ensure that the activities that proceed under the proposed Timber Waiver will not result in significant impacts. Criteria and conditions limit the scope, extent or nature of activities that are eligible for the proposed Timber Waiver, and monitoring requirements determine the efficacy of these stipulations in protecting water quality. For each CEQA factor in the following checklist, the criteria and conditions included in the proposed Timber Waiver to reduce potential impacts to less than significant levels are described.

Further, as noted above, the proposed Timber Waiver would not limit or change the existing requirements, authorities or responsibilities of the Water Board and other agencies, nor does it allow discharges which would result in Basin Plan violations, or the creation of a pollution or nuisance. Where applicable, the requirements and authorities of other agencies are described in the following checklist.

Therefore, activities that are designed and implemented to comply with the conditions and criteria of the revised Timber Waiver will have less than significant impacts on the environment. Activities that are not designed (or revised) to meet the conditions and criteria for this revised Timber Waiver must file a Report of Waste Discharge with the Water Board, containing specific information as required. The Water Board would then consider issuing individual Waste Discharge Requirements for that activity.

INITIAL STUDY/ENVIRONMENTAL CHECKLIST

1. **Project title:**
Conditional Waiver of Waste Discharge Requirements for Discharges Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region.
2. **Lead agency name and address:**
California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board)
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150
3. **Preparer and phone number:**
Andrea Stanley, (530) 542-5406
4. **Project location:** The Lahontan Water Board's jurisdiction, which encompasses all or parts of Modoc, Lassen, Plumas, Sierra, Nevada, Placer, El Dorado, Alpine, Mono, Inyo, San Bernardino, Kern, and Los Angeles counties.
5. **Project sponsor's name and address:**
Lahontan Water Board
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150
Attn: Andrea Stanley
8. **Brief Description of project:**
This project involves the revision of the existing Timber Waiver (Resolution No. R6T-2007-0008) by the adoption and implementation of a Board Order that will continue to conditionally waive waste discharge requirements for specified discharges associated with timber harvest activities within the Lahontan Region.
9. **Surrounding land uses and setting:**
Rangeland grazing, recreation, mining, timber harvest, irrigated agriculture, open space, and urban uses.
10. **Other public agencies whose approval is required** (e.g., permits, financing approval, or participation agreement.)
Approval by another public agency is not required. This project may be superseded by the adoption by the State Water Board of specific waste discharge requirements or general waste discharge requirements for types of discharges covered by this project.

This project does not preclude the need for persons conducting timber harvest and vegetation management activities to obtain permits which may be required by other local and governmental agencies.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors marked below would be potentially affected by this project, as indicated by the checklist on the following pages.

	Aesthetics		Agriculture Resources		Air Quality
X	Biological Resources		Cultural Resources	X	Geology Soils
	Hazards & Hazardous Materials	X	Hydrology/Water Quality		Land Use / Planning
	Mineral Resources		Noise		Population/Housing
	Public Services		Recreation		Transportation/Traffic
	Utilities/Service Systems	X	Mandatory Findings of Significance		

EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The

lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. (California Code of Regulations, title 14 Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:
- a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				X
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				X

a-c) Timber harvesting activities could have aesthetic impacts; however, the revised Timber Waiver would not alter or weaken the need to comply with existing regulations regarding aesthetic values that currently apply to activities regulated under the 2007 Timber Waiver. Therefore, it is not anticipated that the adoption and implementation of the proposed Timber Waiver would affect the nature or extent of any aesthetic impact over current conditions (i.e., regulation of timber harvest and vegetation management activities under the 2007 Timber Waiver).

Therefore, because the proposed Timber Waiver would not alter or weaken the need to comply with existing regulations regarding aesthetic values that currently apply under the 2007 Timber Waiver the appropriate finding is **no impact**.

d) The proposed project would not create a new source of substantial light or glare, which would adversely affect day or nighttime views; therefore, the appropriate finding is **no impact**.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X

a-c) The proposed project would not involve converting or re-zoning agricultural land to non-agricultural use. There will be no change to agricultural resources in the project area over existing conditions due to the proposed Timber Waiver; therefore, the appropriate finding is **no impact**.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				X
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				X
d) Expose sensitive receptors to substantial pollutant concentrations?				X
e) Create objectionable odors affecting a substantial number of people?				X

a-e) Timber harvesting activities may generate dust emissions as the result of road and trail construction and use, and the construction of landings and pads. Nitrogen and sulfur oxides may be emitted during timber harvesting activities, including from use of heavy equipment engines. Smoke will be emitted during use of prescribed fire. However, it is not anticipated that the proposed Timber Waiver will result in an increase in these emissions over current conditions (i.e., regulation of timber harvest and vegetation management activities under the 2007 Timber Waiver).

The proposed Timber Waiver does clarify allowable activities regarding prescribed fire. Revised waiver categories 4 and 6 clarify that prescribed fire, including both pile burning and broadcast burning, can *conditionally* occur in Waterbody Buffer Zones. The 2007 Timber Waiver did not prohibit this activity for similar waiver categories, but did not specify conditions to protect water and soils resources. As such, the change between the 2007 waiver and the proposed waiver represents a clarification only, which will not

result in an increase in smoke emissions over current conditions. Further, the proposed Timber Waiver would not alter or weaken the need to comply with existing regulations regarding air quality that currently apply. The adoption and implementation of this project does not change the regulatory requirements, statutory authorities, or enforcement abilities of any other agency which may have jurisdiction over air quality issues related to vegetation management (e.g., requirements for smoke management or dust abatement by state, local or federal agencies, or county air districts). Therefore, the adoption and implementation of the proposed Timber Waiver would not affect the nature or extent of any impact to air quality over current conditions.

Therefore, because the proposed Timber Waiver would not alter or weaken the need to comply with existing regulations regarding air quality that currently applies under the 2007 Timber Waiver and the proposed Timber Waiver provides clarification regarding the conditions under which prescribed fire may occur in certain locations, the appropriate finding is **no impact**.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?		X		
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		X		
d) Interfere substantially with the movement of any native resident or		X		

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

a-d) The proposed Timber Waiver contains both general and category-specific conditions and criteria to ensure that activities that proceed under the proposed Timber Waiver will have less than significant impacts to biological resources, including candidate, sensitive or special status species or their habitat (including wetlands, riparian areas and/or nursery sites).

General Conditions 1 and 6 require compliance with the Basin Plan, and prohibit the creation of a pollution, contamination, or nuisance, as defined by the California Water Code section 13050. Compliance with the Basin Plan requires that water quality standards and waste discharge prohibitions must not be violated by activities that proceed under the proposed Timber Waiver. The Basin Plan specifies region-wide and location-specific water quality objectives for waste discharges subject to the proposed Timber Waiver. These objectives set narrative or numeric limits for constituents that may be associated with timber harvest and vegetation management activities such as biostimulatory substances, dissolved oxygen, floating materials, pH, sediment, settleable and suspended materials, temperature, toxicity, nondegradation of aquatic communities and populations, and pesticides.

These water quality objectives are established to protect beneficial uses of the region's waters. The water quality objectives in conjunction with the identification of water body-specific beneficial uses constitute the water quality standards. Beneficial use designations in the Lahontan Region incorporate protection of biological habitats and sensitive species, including 8 separate designations for biological resources (Warm Freshwater Habitat; Cold Freshwater Habitat; Inland Saline Water Habitat; Wildlife Habitat; Preservation of Areas of Special Biological Significance; Rare, Threatened, or Endangered Species; Migration of Aquatic Organisms; Spawning, Reproduction, and Development). Since the proposed Timber Waiver requires compliance with the Basin Plan, all of these beneficial uses are protected from adverse impacts of timber harvest

activities. Additionally, the Timber Waiver contains specific conditions related to preventing sediment transport to water bodies, protection or enhancement of fish passage and protection of riparian vegetation. Therefore, activities that proceed in compliance with the Timber Waiver must be designed and implemented to ensure biological resources are protected, and any impacts will be reduced to less than significant levels.

The categorical treatment of timber harvest activities further ensures that biological impacts will be less than significant. Activities eligible for the proposed categories vary in scope from those conducted around existing structures to comply with defensible space mandates (Category 1, very low or no threat to water quality, including biological resources dependent on water quality), to commercial timber harvest activities on sensitive lands (Category 5, potentially significant threat to water quality, including biological resources dependent on water quality). Category-specific criteria and conditions, including mitigation and monitoring requirements, are scaled to the potential threat to water quality posed by the eligible activities.

Revised Timber Waiver Category 1 covers only activities:

- conducted near structures, or areas zoned as residential, commercial, or industrial.
- involving removal of trees posing an imminent threat to life or property.
- conducted under a Forest Fire Prevention Exemption or Dead, Dying, Diseased Exemption issued by the California Department of Forestry and Fire Protection (CAL FIRE) pursuant to California Code of Regulations (CCR), title 14, section 1038, subdivisions (b) and (i) with no exceptions to condition nos. 6 and 9, prohibiting equipment operations within waterbody buffer zones except on existing roads.

Activities conducted under a Forest Fire Prevention Exemption are subject to:

- CCR, title 14, section 1038, subdivision (i)(6), which requires the Registered Professional Forester submitting the Notice of Exemption to CAL FIRE to “provide the selection criteria for the trees to be removed or the trees to be retained. In the development of these criteria, and the fuel reduction prescriptions, the RPF should consider retaining habitat elements, where feasible, including, but not limited to, ground level cover necessary for long-term management of local wildlife populations.”
- CCR, title 14, section 1038, subdivision (i)(14), which requires CAL FIRE staff to conduct at least one inspection at the completion of operations.

Activities conducted under a Forest Fire Prevention Exemption or the Dead, Dying, Diseased Exemption are subject to:

- CCR, title 14, section 1038, subdivision (b)(3), which limits activities within key habitat areas of federal or state designated threatened, rare, or endangered species.

- CCR, title 14, section 1038, subdivision (b)(6), which prohibits heavy equipment operations near waterbodies (except for the maintenance of roads and drainage facilities or structures).
- CCR, title 14, section 1038, subdivision (b)(7), which prohibits the disturbance, threat, or damage or known sites of rare, threatened, or endangered plants or animals.
- CCR, title 14, section 1038, subdivision (b)(8), which prohibits activities within the buffer zone of sensitive species.

Category 1 contains additional conditions to ensure water quality and biological resources are protected, including conditions requiring the stabilization and minimization of areas disturbed by vegetation management activities, and conditions prohibiting crossing waterbodies (including dry ephemeral streams) with equipment. The criteria and conditions of Category 1 limit eligible activities such that their impacts will be less than significant.

Revised Timber Waiver Category 2 covers only those activities that are conducted by hand crews and low impact (ground pressure less than 10 pounds per square inch) equipment to assist hand crews in processing materials cut by hand crews such as chippers and brush mowers. Category 2 contains criteria and conditions to ensure that hand crew work does not impact water quality or biological resources, including conditions which prohibit activities that erode soil, destabilize streambanks, increase surface water temperatures, disturb non-target vegetation, or concentrate surface runoff. Additional conditions to mitigate impacts to biological resources stipulate that prescribed burning is not permitted within Waterbody Buffer Zones. Category 2 criteria specify that equipment may not be used on saturated soils, and must be limited to existing roads (except for low-ground-pressure chippers and brush mowers), and that no new landings may be constructed. These criteria and conditions ensure that hand crew work will result in less than significant impacts to water quality and biological resources, including habitat.

Revised Timber Waiver Category 3 applies only to those activities conducted for post-fire rehabilitation, and covers activities to minimize threats to life, property, water quality, and natural and cultural resources. These activities are in direct response to a wildfire and wildfire suppression activities. Activities associated with erosion control and natural resource rehabilitation will decrease impacts to water quality and biological resources. General conditions of the waiver require that activities are conducted in compliance with the Basin Plan (its water quality standards and waste discharge prohibitions) to ensure impacts to aquatic biological resources are less than significant.

Revised Timber Waiver Category 4 applies only to activities relying on existing roads with limited winter-period operations and limited operations within waterbody buffer zones. Category 4 contains criteria and monitoring requirements to ensure impacts to biological resources are less than significant.

Criteria and conditions prohibit: (1) road or water crossing construction or repair beyond the existing prism except for over-snow skid trail watercourse crossings; (2) use of equipment with ground pressure exceeding 13 pounds per square inch (psi) within Waterbody Buffer Zones except on existing roads or over snow; (3) equipment operation on saturated soils; and (4) mechanical site preparation. The criteria also contain limits for equipment use on steep slopes, slides, unstable areas, or erodible soils, and limits on skid trail and landing construction, to avoid potential impacts to biological resources due to sediment delivery from these areas. Conditions to protect biological resources include those prohibiting activities that prevent fish passage, erode soil, destabilize streambanks, increase surface water temperatures, disturb non-target vegetation, or concentrate surface runoff, as well as conditions to ensure that any prescribed fire results in less than significant impacts to biological resources. All activities conducted under Category 4 must comply with applicable plans, including environmental documents, timber harvest plans, and the Basin Plan.

Criteria and conditions to protect biological resources during winter operations include those prohibiting: (1) the diversion or obstruction of water flow due to over-snow water crossings; (2) exposure of soils, damage to road surfaces, concentrated flows of runoff or storm water. All waterbodies, stream crossings, and culverts must be clearly marked for equipment operators to ensure sensitive areas are protected.

These criteria and conditions ensure that activities conducted under Category 4 will result in less than significant impacts to water quality and biological resources, including habitat.

Monitoring requirements will verify the implementation and adequacy of these conditions and eligibility criteria to ensure that impacts to biological resources are less than significant.

Revised Timber Waiver Category 5 applies only to CAL FIRE-approved timber harvest plans (THPs, NTMP, PTHP, and amendments). CAL FIRE reviews and approves Plans in accordance with the Forest Practice Act of 1973 (FPA) and the California Environmental Quality Act of 1970 (CEQA). CAL FIRE's Plan review process (described below) substitutes for the EIR process under CEQA because the timber harvesting regulatory program has been certified pursuant to Public Resources Code Section 21080.5.

The timber harvest review team is composed of representatives of CAL FIRE, the California Department of Fish and Game (DFG), California Geological Survey (CGS) and the Water Board. Other agencies may participate in the review team, including the California Department of Parks and Recreation, Tahoe Regional Planning Agency, USDI National Park Service, and county planning departments. CAL FIRE chairs the review team and makes the final decisions on the logging procedures included in the Plans. As set forth in the FPRs, California Code of Regulations, title 14, section 1037.5 et seq, the function of the review team is "to assist the [CDF]

Director in determining if plans [Plans] are in conformance with [BOF] rules and to evaluate the potential environmental impacts of timber operations.”

In reviewing individual Plans, CAL FIRE complies with the FPA, the FPRs, and CEQA through its certified functional equivalent program. Under the FPA, a Plan must be prepared and signed by a Registered Professional Forester (RPF) and submitted to CAL FIRE for review and approval for each timber harvest. CAL FIRE foresters examine each Plan and determine whether the plan may have a significant impact on the environment and whether it is in compliance with the FPA, CEQA, and other state and federal laws. Taken together, CEQA and the FPRs require that CAL FIRE not approve a plan as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen or avoid the significant environmental impacts of the plan, including those impacts to biological resources, pursuant to California Code of Regulations, title 14, section 896.

Water Board staff, as part of the review process, review individual plans for potential impacts to water quality and beneficial uses of waters of the State (including biological resources). Water Board staff prioritize plan review and inspection based on the proximity of proposed activities to waters of the State. When potential impacts are identified, Water Board staff makes recommendations to reduce those impacts to less than significant. For a plan to be eligible for coverage under the Timber Waiver Category 5, all such recommendations must be incorporated into the Plan or the Timber Waiver application.

Timber harvest and vegetation management activities that proceed under Category 5 must install and maintain all watercourse crossings to allow for unrestricted passage of fish during all life stages.

Revised Timber Waiver Category 6 applies to activities that do not meet one or more eligibility criteria or conditions of Categories 1 – 5.

Persons seeking coverage under Category 6 of the revised Timber Waiver must submit a complete Category 6 Application Form to Water Board staff. Within this form or in project plans or environmental documents, persons must disclose and discuss potential impacts and identify appropriate mitigation/protection measures for the following:

- (1) the location of:
 - a. proposed operations,
 - b. all roads, landings, and crossings to be used during the activities,
 - c. all waterbodies within the area, including wetlands, spring or wet areas,
 - d. all steep slopes, slides, unstable areas, or erodible soils
- (2) the purpose of the proposed activities and/or silvicultural prescription
- (3) the type of yarding systems and equipment proposed for use
- (4) any proposed landing or skid trail construction or reconstruction within Waterbody Buffer Zones
- (5) if any of the existing roads proposed for use exhibit signs of erosion and delivery to a waterbody

- (6) if there are any other signs of sediment erosion and delivery to waterbodies within or adjacent to the area of the proposed activity

Timber harvest and vegetation management activities that proceed under Category 6 must install and maintain all watercourse crossings to allow for unrestricted passage of fish during all life stages.

Upon receipt of the waiver application, Water Board staff has 30 days to review the proposal to determine application completeness. Application review will include an assessment (which may include an inspection of the area of the proposed activity) of the application to ensure all potential impacts are disclosed and that mitigation measures, design features or other measures are proposed to ensure impacts are avoided or mitigated to a level of less than significant. Water Board staff may request additional information including additional mitigation measures. The Waiver requires that approved plans, including all mitigation measures and design features be implemented. If impacts are not fully disclosed or mitigated to less than significant, Water Board staff will inform the applicant of ineligibility for coverage under the Timber Waiver, and will request a Report of Waste Discharge pursuant to Water Code section 13260. As stated in General Provision 3, the Water Board does not waive the filing of a report of waste discharge or waive waste discharge requirements for persons proposing or conducting timber harvest and vegetation management activities with impacts that are not mitigated to less than significant levels.

The proposed Timber Waiver does not alter or weaken requirements for project proponents to comply with existing regulations regarding any species identified as a candidate, sensitive, or special status species that currently apply under the 2007 Timber Waiver. Specifically, General Condition 8 states that the revised Timber Waiver "does not permit any illegal activity, and does not preclude the need for permits which may be required by other local or governmental agencies." Timber harvest activities are subject to environmental impact evaluation and mitigation by the established processes used in planning those activities by the State of California and the Federal government. The California Endangered Species Act also requires measures to minimize and fully mitigate the impacts on endangered species, as do other requirements of the California Department of Fish and Game (CDFG). For example, CDFG Code section 1603 generally prohibits persons from substantially diverting or obstructing the natural flow or substantially changing the bed, channel, or bank of any river, stream, or lake designated by CDFG, or from using any material from the streambeds, unless they have first notified CDFG of the activity. All rivers, streams, and lakes in California have been designated by CDFG, pursuant to California Code of Regulations, title 14, section 720. In addition, Section 1603 generally prohibits persons from commencing any activity affected by Section 1603 until CDFG has found that the activity will not substantially adversely affect an existing fish or wildlife resource, or until CDFG proposals, or the decisions of a panel of arbitrators assembled pursuant to procedures set forth in Section 1603, have been incorporated into the activity. CDFG enters into lake or streambed alteration agreements ("1603 Agreements") with those persons who notify CDFG of their proposed activities pursuant to Section 1603 in cases

where CDFG determines the activities may substantially adversely affect an existing fish or wildlife resource.

The Timber Waiver does not alter or weaken the requirements of Clean Water Act (CWA) section 404. Unless exempted, anyone, proposing to conduct activities which may result in a discharge to surface waters and require a federal permit (e.g., activities involving any discharge of dredged or fill material to waters of the United States, subject to U.S. Army Corps of Engineers permitting requirements under Clean Water Act section 404), must obtain from the Water Board a Clean Water Act section 401 Water Quality Certification.

A Clean Water Act section 401 Water Quality Certification is an order issued by the Water Quality Control Board determining that the proposed activity will not violate water quality standards and will protect the water for beneficial uses. At a minimum, any loss of wetlands must be replaced by a wetland of at least equal function, value and area. General Condition⁸ of the proposed Timber Waiver stipulates that any activity authorized to proceed under the Timber Waiver must obtain such certification from the Water Board if required. These requirements ensure that impacts to wetlands will remain at less than significant levels if an activity is subject to regulation under a Clean Water Act section 404 permit.

For activities on federal lands, the USFS Pacific Southwest Region (USFS-PSR) has been designated as a Water Quality Management Agency (WQMA) by the State Water Board for Forest System lands in California. This designation, pursuant to Section 208 of the Clean Water Act, was executed through a formal Management Agency Agreement (MAA) between the State Water Board and the USFS-PSR in 1981. To meet its obligations as a WQMA, the USFS has developed a BMP guidance document to describe each BMP used for water quality management and watershed protection on National Forest System lands in California.

This guidance document, *Water Quality Management for Forest System Lands in California* (USFS-PSR, 2000) represents a portion of the State of California's Nonpoint Source Management Plan, and complies with the provisions and requirements of Sections 208 and 319 of the CWA. The goals of the BMP guidance document are to establish a uniform process of BMP implementation that will meet Federal and State water quality laws and will incorporate water quality protection and improvement into site-specific project plans. Twenty-five different BMPs are described for Timber Management, including BMPs to avoid, reduce or mitigate impacts to soils, vegetation, biological and hydrological resources. Examples of specific BMPs to avoid or minimize impacts to biological resources include, but are not limited to: designating Streamside Management Zones (Practice 1-8); Meadow Protection during Timber Harvest (Practice 1-18); and Streamcourse and Aquatic Protection (Practice 1-19). The USFS uses an Interdisciplinary Team approach to select those BMPs necessary to protect or improve water quality and biological resources for specific sites, and incorporates them into the environmental document for the project.

Therefore, any impacts to biological resources in the project area are mitigated by the criteria and conditions contained in the Timber Waiver, and by existing laws and regulations regarding protection of biological resources (equivalent to those that currently exist under the 2007 Timber Waiver). The appropriate finding is **less than significant with mitigation incorporation**.

e-f) The proposed Timber Waiver does not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. As stated in General Condition 8, the revised Timber Waiver does not preclude the need for permits which may be required by other local or governmental agencies, nor does it allow any illegal activity. The requirements of any habitat conservation plan are not superseded by the Timber Waiver. Therefore, the appropriate finding is **no impact**.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?				X
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
d) Disturb any human remains, including those interred outside of formal cemeteries?				X

a-d) The proposed Timber Waiver will not alter the need to comply with CEQA, NEPA, and other State and federal laws that require analysis, disclosure, and mitigation of potential impacts to cultural resources to less than significant levels.

The adoption and implementation of this project does not change the regulatory requirements, statutory authorities, or enforcement abilities of any other agency which may have jurisdiction over cultural resources related to vegetation management. Therefore, any impacts to the cultural resources of the project area will not be changed over existing conditions by the adoption and implementation of the proposed Timber Waiver, and the appropriate finding is **no impact**.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?				X
iii) Seismic-related ground failure, including liquefaction?				X
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?		X		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		X		
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X

a i-iii) The Timber Waiver does not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known

earthquake fault, strong seismic ground shaking, or seismic-related ground failure, including liquefaction. Because the project does not involve these factors, the appropriate finding is **no impact**.

a iv) The Timber Waiver does not change the exposure of people or structures to potential substantial adverse effects involving landslides due to timber harvest and vegetation management activities over current conditions. The proposed Timber Waiver contains criteria and conditions related to activities on steep slopes, slides, and unstable areas similar to those specified in the 2007 Timber Waiver. Because no change in the risk of landslide due to timber harvest and vegetation management activities is foreseeable, the appropriate finding is **no impact**.

b-c) The proposed Timber Waiver contains both general conditions and category-specific conditions and criteria to ensure that activities that proceed under the waiver will have less than significant impacts to soil and geological resources, including mitigation measures to prevent substantial soil erosion, loss of topsoil or risks due to unstable soils.

General Conditions 1, 2, 3 and 6 require compliance with the Basin Plan, and prohibit the creation of a pollution, contamination, or nuisance, as defined by the California Water Code section 13050. Compliance with the Basin Plan means that water quality objectives and waste discharge prohibitions must not be violated by activities that proceed under the revised Timber Waiver. Region-wide waste discharge prohibitions relevant to soil erosion include those that prohibit discharges of waste (including but not limited to waste earthen material such as soil, silt, sand, clay, rock, or other organic material) which violate any numeric or narrative water quality objective, including the Nondegradation Objective. Region-wide water quality objectives (either narrative or numeric) establish standards for constituents that may result from erosion due to timber harvest and vegetation management activities such as sediment, settleable and suspended materials, nondegradation of aquatic communities and populations, and pesticides. Because the proposed Timber Waiver prohibits violations of these objectives, any impacts from soil erosion due to activities that proceed under the waiver will be less than significant.

The categorical treatment of timber harvest activities further ensures that impacts from soil erosion will be less than significant. Activities eligible for the proposed categories vary in scope from those conducted around existing structures to comply with defensible space mandates (Category 1, very low or no threat to water quality, including degradation due to soil erosion), to commercial timber harvest activities on sensitive lands (Category 5, potentially significant threat to water quality, including degradation due to soil erosion). Category-specific criteria and conditions, including mitigation and monitoring requirements, are scaled to the potential threat to water quality posed by the eligible activities.

Revised Timber Waiver Category 1 covers only activities:

- conducted near structures, or areas zoned as residential, commercial, or industrial
- removal of trees posing an imminent threat to life or property
- conducted under a Forest Fire Prevention Exemption or Dead, Dying, Diseased Exemption issued by the California Department of Forestry and Fire Protection (CAL FIRE) pursuant to California Code of Regulations (CCR), title 14, section 1038, subdivisions (b) and (i) with no exceptions to condition nos. 6 and 9, prohibiting equipment operations within waterbody buffer zones except on existing roads.

Activities conducted under a Forest Fire Prevention Exemption or the Dead, Dying, Diseased Exemption are subject (but not limited) to:

- CCR, title 14, section 1038, subdivision (b)(1), which prohibits tractor or heavy equipment operations on slopes greater than 50%.
- CCR, title 14, section 1038, subdivision (b)(2), which prohibits the construction of new skid trails on slopes greater than 40%.
- CCR, title 14, section 1038, subdivision (b)(4), which prohibits tractor or heavy equipment operations on known slides or unstable areas.

Category 1 contains additional conditions to ensure soils resources and unstable areas are protected, including conditions requiring the stabilization and minimization of areas disturbed by timber harvest and vegetation management activities. The criteria and conditions of Category 1 limit eligible activities such that their impacts will be less than significant.

Revised Timber Waiver Category 2 covers only those activities that are conducted by hand crews and low impact (ground pressure less than 10 pounds per square inch) equipment to assist hand crews in processing materials cut by hand crews such as chippers and brush mowers. Category 2 contains criteria and conditions to ensure that hand crew work does not impact soil resources, including conditions prohibiting activities that would erode soil, destabilize streambanks, disturb non-target vegetation, or concentrate surface runoff. Additional conditions related to prescribed fire are included to protect soil resources. These conditions specify that prescribed fire may occur under conditions limiting the impact based on area impacted by fire, size of piles, and proximity to watercourses. Criteria and conditions to avoid impacts to soils (such as compaction) specify that equipment may not be used on saturated soils, and must be limited to existing roads (except for low-ground-pressure chippers and mowers on dry soils), and that no new landings may be constructed. If chippers are used off-road, they must be low impact (ground pressure of less than 10 pounds per square inch) equipment to protect soil resources. These criteria and conditions ensure that hand crew work will be self-limiting and will result in less than significant impacts to soil resources, including from erosion, instability, or loss of topsoil (Lake Valley Fire District, 2008).

Revised Timber Waiver Category 3 applies only to those activities conducted for post-fire rehabilitation, and covers activities to minimize threats to life, property, water

quality, and natural and cultural resources. These activities are in direct response to a wildfire and wildfire suppression activities. Activities associated with erosion control and natural resource rehabilitation will decrease impacts to soil resources and unstable areas, resulting in less than significant impacts.

Revised Timber Waiver Category 4 applies only to activities that use existing roads, restrictions on off road equipment operations and limited winter-period operations. Category 4 contains criteria to ensure impacts to soil resources are less than significant, including those prohibiting: (1) road or water crossing construction or repair beyond the existing road prism except for over-snow watercourse crossings; (2) equipment operation on saturated soils; and (3) mechanical site preparation. Use of low ground pressure equipment (less than 13 pounds per square inch) is only allowed within Waterbody Buffer Zones on dry soils, hard frozen ground or over snow to ensure impacts are less than significant to soils and water resources (USFS-LTBMU 2008a, 2008b;USFS Tahoe NF, 2009). The criteria also contain the following restrictions to limit impacts to soil resources:

- No timber harvest or vegetation management activities on slopes greater than 60%.
- No tractor, vehicle, or equipment operations on slopes greater than 50%.
- No construction of new skid trails on slopes greater than 40%.
- No construction of landings on slopes greater than 20%.
- No tractor, vehicle, or equipment operations on known slides or unstable areas.
- No tractor, vehicle, or equipment operations on soils with high or extreme erosion hazard rating.

Conditions to protect soil resources during winter operations include those prohibiting: (1) the diversion or obstruction of water flow due to over-snow water crossings; (2) soil compaction, erosion, destabilization of streambanks, temperature increases, disturbance to non-target riparian vegetation, or creation of concentrated surface runoff; (3) exposure of soils, damage to road surfaces, concentrated flows of runoff or storm water. All waterbodies, stream crossings, and culverts must be clearly marked for equipment operators to ensure these sensitive areas are avoided.

Category-specific conditions to protect soils resources include those prohibiting activities which would erode soil , destabilize streambanks, increase surface water temperatures, disturb non-target riparian vegetation, or concentrate surface runoff, as well as conditions to ensure that any prescribed burning results in less than significant impacts to soils resources. All activities conducted under Category 4 must comply with applicable plans, including environmental documents, timber harvest plans, and the Basin Plan. For activities on federal lands, please refer to the Category 6 discussion in this section regarding the USFS's role as a Water Quality Management Agency. These criteria and conditions ensure that activities conducted under Category 4 will result in less than significant impacts to soil resources.

Monitoring requirements will verify the implementation and adequacy of these conditions and eligibility criteria to ensure that impacts to soils resources are less than significant.

Revised Timber Waiver Category 5 applies only to CAL FIRE-approved timber harvest plans (THPs, NTMP, PTHP, and amendments). CAL FIRE reviews and approves Plans in accordance with the Forest Practice Act of 1973 (FPA) and the California Environmental Quality Act of 1970 (CEQA). CAL FIRE's Plan review process (described below) substitutes for the EIR process under CEQA because the timber harvesting regulatory program has been certified pursuant to PRC Section 21080.5.

The timber harvest review team is composed of representatives of CAL FIRE, the California Department of Fish and Game (DFG), California Geological Survey (CGS) and the Water Board. Other agencies may participate in the review team, including the California Department of Parks and Recreation, Tahoe Regional Planning Agency, USDI National Park Service, and county planning departments. CAL FIRE chairs the review team and makes the final decisions on the logging procedures included in the Plans. As set forth in the FPRs (CCR, title 14, section 1037.5), the function of the review team is “to assist the [CDF] Director in determining if plans [Plans] are in conformance with [BOF] rules and to evaluate the potential environmental impacts of timber operations.”

In reviewing individual Plans, CAL FIRE complies with the FPA, the FPRs, and CEQA through its certified functional equivalent program. Under the FPA, a Plan must be prepared and signed by a Registered Professional Forester (RPF) and submitted to CAL FIRE for review and approval for each timber harvest. CAL FIRE foresters examine each Plan and determine whether the plan may have a significant impact on the environment and whether it is in compliance with the FPA, CEQA, and other state and federal laws. Taken together, CEQA and the FPRs require that CAL FIRE not approve a plan as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen or avoid the significant environmental impacts of the plan, including those impacts to soil and geological resources, pursuant to CCR, title 14, section 896.

Water Board staff, as part of the review process, review individual plans for potential impacts to water quality that may result from soil erosion or destabilization. When potential impacts are identified, Water Board staff makes recommendations to reduce those impacts to less than significant. For a plan to be eligible for coverage under the revised Timber Waiver all such recommendations must be incorporated into the Plan or the Timber Waiver application.

Revised Timber Waiver Category 6 applies to timber harvest and vegetation management activities that do not meet one or more eligibility criteria or conditions of Categories 1 – 5.

Persons seeking coverage under Category 6 of the revised Timber Waiver must submit a complete Category 6 Application Form to Water Board staff. Within this

form or in project plans or environmental documents, persons must disclose and discuss potential impacts and identify appropriate mitigation measures for the following:

- (1) the location of:
 - a. proposed operations,
 - b. all roads, landings, and crossings to be used during the proposed activities,
 - c. all waterbodies within the area,
 - d. all steep slopes, slides, unstable areas, or erodible soils
- (2) the purpose of the proposed activities and/or silvicultural prescription
- (3) the type of yarding systems and equipment proposed for use
- (4) any proposed landing or skid trail construction or reconstruction on slopes over 40%, or within Waterbody Buffer Zones,
- (5) if any of the existing roads proposed for use exhibit signs of erosion and delivery to a waterbody
- (6) if there are any other signs of sediment erosion and delivery to waterbodies within or adjacent to the area of the proposed activity

Attachment N of the proposed Timber Waiver identifies activities which may proceed under the Basin Plan and do not violate Basin Plan prohibitions for Lake Tahoe, Truckee River or Little Truckee River HUs. Cut-to-length equipment (with less than 13 psi ground pressure) operated on dry soils over slash mats have less than significant impacts on soil resources (USFS-LTBMU, 2008a, 2008b; Han, 2006). For equipment operations (other than 13 psi cut-to-length equipment on dry granitic soils) within 100 year floodplains of the Truckee River, Little Truckee River or Lake Tahoe HUs, or Lake Tahoe HU SEZs, the Water Board Executive Officer will consider granting Basin Plan prohibition exemptions where Basin Plan criteria can be met to either mitigate impacts to less than significant or prevent impacts from occurring by setting project thresholds or triggers to discontinue operations if impacts do not remain at less than significant levels. Poff (2006) recognizes short term impacts including soil compaction from equipment use in SEZs and recommends a number of mitigation measures to avoid the impacts. Each activity is unique and will employ different equipment and techniques. As part of considering a prohibition exemption, the Water Board Executive Officer will evaluate individual project proposals on ability to limit these impacts to a level of less than significant.

Applicants proposing prescribed fire within Waterbody Buffer Zones are required to protect soil resources and water quality by preventing erosion and transport of material to waterbodies. Specific conditions of Category 6 pertaining to the prevention of erosion and transport include the requirement that effective waterbreaks must be constructed along firebreaks, pile size be limited, areas to be burned be limited, and incorporation of other design features that consider slope, proximity to waterbodies, and remaining vegetative cover.

Applicants proposing to place or burn slash piles within Waterbody Buffer Zones must submit the following information regarding areas proposed for burn pile placement:

- (1) soil types
- (2) vegetative cover
- (3) minimum distances from waterbodies
- (4) topography
- (5) percent of area to be burned within the Waterbody Buffer Zone
- (6) explanation why burning piles within the Waterbody Buffer Zone is proposed
- (7) mitigation measures or project features to be implemented to ensure no significant environmental effects will occur (Attachment Q provide example design features to be incorporated into specific burn plans)

Upon receipt of the waiver application, Water Board staff has 30 days to review the proposal to determine application completeness. Application review will include an assessment (which may include an inspection of the area of the proposed activity) of the application to ensure all potential impacts are disclosed and that measures are included to avoid or mitigate potential impacts to less than significant, such as use of mulch or chips, tilling, buffer zones. Water Board staff may request additional information including additional mitigation measures. If impacts are not fully disclosed or mitigated to less than significant, Water Board staff will inform the applicant of ineligibility for coverage under the Timber Waiver, and will request a Report of Waste Discharge pursuant to Water Code section 13260. As stated in General Provision 3, the Water Board does not waive the filing of a report of waste discharge or waive waste discharge requirements for persons proposing or conducting timber harvest and vegetation management activities with impacts that are not mitigated to less than significant levels.

The revised Timber Waiver does not alter or weaken the requirement for project proponents to comply with existing regulations regarding soils resources. Specifically, General Condition 6 states that the revised Timber Waiver "does not permit any illegal activity, and does not preclude the need for permits which may be required by other local or governmental agencies."

The adoption and implementation of this project does not change the regulatory requirements, statutory authorities, or enforcement abilities of any other agency which may have jurisdiction over soils resources related to vegetation management (e.g., requirements for erosion control or grading ordinances by state, local or federal agencies, or county air districts).

For activities on federal lands, the USFS Pacific Southwest Region (USFS-PSR) has been designated as a Water Quality Management Agency (WQMA) by the State Water Board for Forest System lands in California. This designation, pursuant to Section 208 of the Clean Water Act, was executed through a formal Management Agency Agreement (MAA) between the State Water Board and the USFS-PSR in 1981. To meet its obligations as a WQMA, the USFS has developed a BMP guidance document

to describe each BMP used for water quality management and watershed protection on National Forest System lands in California.

This guidance document, *Water Quality Management for Forest System Lands in California* (USFS-PSR, 2000) represents a portion of the State of California's Nonpoint Source Management Plan, and complies with the provisions and requirements of Sections 208 and 319 of the CWA. The goals of the BMP guidance document are to establish a uniform process of BMP implementation that will meet Federal and State water quality laws and will incorporate water quality protection and improvement into site-specific project plans. Twenty-five different BMPs are described for Timber Management, including BMPs to avoid, reduce or mitigate impacts to soils, vegetation, biological and hydrological resources. Examples of specific BMPs to avoid or minimize impacts to soils resources include, but are not limited to: Determination of Surface Erosion Hazard (Practice 1-3); Protection of Unstable Lands (Practice 1-6); Determining Tractor Loggable Ground and Tractor Skidding Design (Practices 1-9 and 1-10); and Erosion Prevention and Control Measures during Timber Sale Operations (Practice 1-13). The USFS uses an Interdisciplinary Team (IDT) approach to select those BMPs necessary to protect or improve water quality and soils resources for specific sites, and incorporates them into the environmental document for the project.

Therefore, any impacts to geology and soils in the project area are mitigated by the criteria and conditions contained in the revised Timber Waiver, and by regulations and policies governing soil erosion that currently exist under the 2007 Timber Waiver. The appropriate finding is **less than significant with mitigation incorporation**.

- d) The proposed project does not involve activities such as building construction that are subject to the Uniform Building Code. Because the project does not involve this element, the appropriate finding is **no impact**.
- e) The proposed project does not involve septic tanks or alternative wastewater disposal systems. Because the project does not involve these elements, the appropriate finding is **no impact**.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
b) Create a significant hazard to the public or the environment through				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

a-b) Activities under the Timber Waiver can involve the transport and use of materials that would qualify as hazardous pursuant to the Health and Safety Code section 25501 subdivision (o). These materials include gasoline and diesel to fuel equipment,

hydraulic fluid associated with equipment operations and machinery, and silvicultural herbicides.

The proposed Timber Waiver will not alter or weaken the need to comply with existing regulations regarding hazardous. The proposed Timber Waiver contains General Condition 7 which requires that all equipment used “be monitored for leaks, and removed from service if necessary to protect water quality.” General Condition 7 also requires an emergency spill kit be kept on site at all times of equipment use.

Silvicultural herbicides permitted under this revised Timber Waiver include the dry application of borax and sporax directly to tree stumps. The amounts needed to treat tree stumps are nominal, have limited mobility in the environment, and will not cause a significant hazard to the public or the environment.

As required under the 2007 Timber Waiver other applications of herbicides will not be permitted under the proposed Timber Waiver unless the type(s) of herbicide, method and area of application, and measures to assure compliance with the Basin Plan water quality objective (requires non-detectable levels in surface waters) are submitted to Water Board staff at least 30 days prior to the proposed date of application.

The proposed Timber Waiver does not alter or weaken the need to comply with existing regulations regarding hazardous materials. Additionally, General Condition 6 states that activities covered under the waiver “must not create a pollution, contamination, or nuisance, as defined by Water Code section 13050, subdivisions (k), (l), and (m).” Therefore, the appropriate finding is **no impact**.

c) The proposed project would not result in the emission or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Therefore, the appropriate finding is **no impact**.

d) The proposed project does not alter or weaken any requirements to identify risks due to hazardous materials sites pursuant to Government Code Section 65962.5. Therefore, the appropriate finding is **no impact**.

e-f) The proposed project would not result in a change over current conditions related to activities near an airport or airstrip that would result in a safety hazard. Therefore, the appropriate finding is **no impact**.

g) The proposed project would not interfere with an emergency evacuation or response plan; therefore, the appropriate finding is **no impact**.

h) The intent of the proposed Timber Waiver is to facilitate fuels reduction activities, and these activities should result in a decreased risk of exposure to wildland fires. The appropriate finding is **no impact**.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?		X		
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?		X		
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?		X		
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?		X		
f) Otherwise substantially degrade water quality?		X		
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?		X		
j) Inundation by seiche, tsunami, or mudflow?		X		

a, c, d, e, f, i, j) The proposed Timber Waiver contains both general conditions and category-specific conditions and criteria to ensure activities that proceed under the waiver will have less than significant impacts to hydrology and water quality, including to drainage patterns, excessive and/or polluted runoff, on- or off-site erosion or flooding. The Timber Waiver also prohibits the violation of any Basin Plan water quality standards.

General Conditions 1, 2 and 6 require compliance with the Basin Plan, and prohibit the creation of a pollution, contamination, or nuisance, as defined by the California Water Code section 13050. Compliance with Basin Plan means that water quality objectives and waste discharge prohibitions must not be violated by activities that proceed under the Timber Waiver. Region-wide waste discharge prohibitions to protect water quality include those that prohibit discharges of waste (including, but not limited to, waste earthen material such as soil, silt, sand, clay, rock, or other organic material) which violate any numeric or narrative water quality objective, including the Nondegradation Objective. Region-wide water quality objectives (either narrative or numeric) establish standards for constituents that may result from timber harvest and vegetation management activities such as sediment, settleable and suspended materials, nondegradation of aquatic communities and populations, and pesticides.

The categorical treatment of timber harvest activities further ensures that water quality and hydrology will not be significantly impacted. Activities eligible for the proposed categories vary in scope from those conducted around existing structures to comply with defensible space mandates (Category 1, very low or no threat to water quality), to commercial timber harvest activities on sensitive lands (Category 5, potentially significant threat to water quality requiring mitigation and monitoring). Category-specific criteria and conditions, including mitigation and monitoring, are scaled to the potential threat to water quality posed by the eligible activities.

Revised Timber Waiver Category 1 covers only activities:

- conducted near structures, or areas zoned as residential, commercial, or industrial
- removal of trees posing an imminent threat to life or property
- conducted under a Forest Fire Prevention Exemption or Dead, Dying, Diseased Exemption issued by the California Department of Forestry and Fire Protection (CAL FIRE) pursuant to California Code of Regulations (CCR), title 14, section 1038, subdivisions (b) and (i) with no exceptions to condition nos. 6 and 9, prohibiting equipment operations within waterbody buffer zones except on existing roads.

Activities conducted under a Forest Fire Prevention or Dead, Dying, Diseased Exemptions are subject to:

- CCR, title 14, section 1038, subdivision (b)(5), which prohibits new road construction or reconstruction.
- CCR, title 14, section 1038, subdivision (b)(6), which prohibits heavy equipment operations near waterbodies, except for the maintenance of roads and drainage facilities or structures.
- CCR, title 14, section 1038, subdivision (b)(9), which prohibits timber harvesting near waterbodies (except for limited sanitation-salvage harvesting), and requires that all trees to be harvested near waterbodies be marked by, or under the supervision of, a Registered Professional Forester prior to operations.

Category 1 contains additional conditions to ensure water quality is protected, including a condition that prohibits crossing waterbodies (including ephemeral streams) with equipment. To prevent the delivery of sediment to waters of the State, other conditions of Category 1 require the stabilization and minimization of areas disturbed by timber harvest and vegetation management activities. The criteria and conditions of Category 1 limit eligible activities such that their impacts will be less than significant.

Revised Timber Waiver Category 2 covers only those activities that are conducted by hand crews and low-ground-pressure chippers and brush mowers. Category 2 contains criteria and conditions to ensure that hand crew work does not impact water quality and hydrology, including conditions prohibiting activities that would erode soil, destabilize streambanks, increase surface water temperatures, disturb non-target riparian vegetation, or concentrate surface runoff. Any trees planned for removal within a Waterbody Buffer Zone must be marked or supervised by a Registered Professional Forester or federal forestry professional or be described in a written prescription. Additional conditions related to prescribed fire are included to protect water quality. These conditions limit prescribed fire within Waterbody Buffer Zones (e.g. pile size, proximity to watercourses, areal extent of piles). No pile burning within Lake Tahoe HU SEZs or within 100 year floodplains of the Truckee River or Little Truckee River HUs is allowed under this category (USFS-LTBMU 2008c).

Criteria to avoid impacts to water quality specify that equipment may not be used on saturated soils, and must be limited to existing roads (except for low-ground-pressure chippers and mowers), and that no new landings may be constructed. If chippers are used off-road, they must be "low-ground-pressure" equipment, with less than 10 pounds per square inch of ground pressure to protect soil resources, and any impacts to water quality due to soil compaction and excessive erosion (Lake Valley Fire Protection District, 2006). These criteria and conditions ensure that hand crew work will result in less than significant impacts to water quality and hydrology.

Revised Timber Waiver Category 3 applies only to those activities conducted for post-fire rehabilitation, and covers activities to minimize threats to life, property, water quality, and natural and cultural resources. These activities are in direct response to a wildfire and wildfire suppression activities. Activities associated with erosion control and natural resource rehabilitation will decrease impacts to water quality and hydrology, resulting in less than significant impacts. General conditions of the waiver require that activities are conducted in compliance with the Basin Plan (its water quality standards and waste discharge prohibitions) to ensure impacts to water quality are less than significant.

Revised Timber Waiver Category 4 applies only to activities that are limited to existing roads, limited operations within waterbody buffer zones and limited winter-period operations.

Category 4 contains criteria to ensure impacts to water quality and hydrology are less than significant, including those prohibiting: (1) road or water crossing construction or repair beyond the existing road prism except for over-snow watercourse crossings, (2) equipment operation on saturated soils, and (3) mechanical site preparation. Use of low ground pressure equipment (less than 13 pounds per square inch) is only allowed within Waterbody Buffer Zones on dry soils, hard frozen ground, or over snow to ensure impacts are less than significant to soils and water resources. In Lake Tahoe SEZs and 100 year floodplains in Truckee River or Little Truckee River HUs, only cut-to-length equipment on slash mats on dry granitic soils can be used under this category (USFS-LTBMU, 2008a, 2008b). Since the USFS Heavenly Valley Creek SEZ Demonstration Project found that less than significant impacts occurred to soils in the project (granitic soils, and one type of equipment tested), similar projects may proceed under Category 4 with implementation monitoring and verification of dry soil conditions. For other types of equipment or soil types, additional monitoring is needed and the Executive Officer will consider a Basin Plan prohibition exemption to allow other activities to occur in Truckee/Tahoe floodplains and Tahoe SEZs (See Category 6 discussion). Category 4 eligibility criteria also contain the following restrictions to reduce erosion and sediment transport to water bodies:

- No timber harvest or vegetation management activities on slopes greater than 60%.
- No tractor, vehicle, or equipment operations on slopes greater than 50%.

- No construction of new skid trails on slopes greater than 40%.
- No construction of landings on slopes greater than 20%.
- No tractor, vehicle, or equipment operations on known slides or unstable areas.
- No tractor, vehicle, or equipment operations on soils with high or extreme erosion hazard rating.

Conditions to protect water quality during winter operations include those prohibiting: (1) the diversion or obstruction of water flow due to over-snow water crossings; (2) exposure of soils, damage to road surfaces, concentrated flows of runoff or storm water. All waterbodies, stream crossings, and culverts must be clearly marked for equipment operators to ensure these sensitive areas are avoided.

Monitoring requirements will verify the implementation and adequacy of these conditions and eligibility criteria to ensure that impacts to water quality and hydrology are less than significant.

Category-specific conditions to protect water quality include those prohibiting activities which erode soil, destabilize streambanks, increase surface water temperatures, disturb non-target riparian vegetation, or concentrate surface runoff, as well as conditions to ensure that any prescribed burning results in less than significant impacts to soils resources. All activities conducted under Category 4 must comply with applicable plans, including environmental documents, timber harvest plans, and the Basin Plan. For activities on federal lands, please refer to the Category 6 discussion in this section regarding the USFS's role as a Water Quality Management Agency. Taken together, these criteria and conditions ensure that activities conducted under Category 4 will result in less than significant impacts to water quality and hydrology.

Revised Timber Waiver Category 5 applies only to CAL FIRE-approved timber harvest plans (THPs, NTMP, PTHP, and amendments). CAL FIRE reviews and approves Plans in accordance with the Forest Practice Act of 1973 (FPA) and the California Environmental Quality Act of 1970 (CEQA). CAL FIRE's Plan review process (described below) substitutes for the EIR process under CEQA because the timber harvesting regulatory program has been certified pursuant to PRC Section 21080.5.

The timber harvest review team is composed of representatives of CAL FIRE, the California Department of Fish and Game (DFG), California Geological Survey (CGS) and the Water Board. Other agencies may participate in the review team, including the California Department of Parks and Recreation, Tahoe Regional Planning Agency, USDI National Park Service, and county planning departments. CAL FIRE chairs the review team and makes the final decisions on the logging procedures included in the Plans. As set forth in the FPRs (CCR title 14, section 1037.5), the function of the review team is “to assist the [CDF] Director in determining if plans [Plans] are in conformance with [BOF] rules and to evaluate the potential environmental impacts of timber operations.”

In reviewing individual Plans, CAL FIRE complies with the FPA, the FPRs, and CEQA through its certified functional equivalent program. Under the FPA, a Plan must be prepared and signed by a Registered Professional Forester (RPF) and submitted to CAL FIRE for review and approval for each timber harvest. CAL FIRE foresters examine each Plan and determine whether the plan may have a significant impact on the environment and whether it is in compliance with the FPA, CEQA, and other state and federal laws. Taken together, CEQA and the FPRs require that CAL FIRE not approve a plan as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen or avoid the significant environmental impacts of the plan, including those impacts to water quality and hydrology, pursuant to California Code of Regulations, title 14, section 896.

Water Board staff, as part of the review process, review individual plans for potential impacts to water quality and hydrology. When potential impacts are identified, Water Board staff makes recommendations to reduce those impacts to less than significant. For a plan to be eligible for coverage under the revised Timber Waiver all such recommendations must be incorporated into the Plan or the Timber Waiver application.

Revised Timber Waiver Category 6 applies to timber harvest and vegetation management activities that do not meet one or more eligibility criteria or conditions of Categories 1 – 5.

Persons seeking coverage under Category 6 of the revised Timber Waiver must submit a complete Category 6 Application Form to Water Board staff. Within this form persons must disclose and discuss potential impacts and appropriate mitigation/protection measures for the following:

- (1) the location of:
 - a. proposed operations,
 - b. all roads, landings, and crossings to be used during the proposed activities,
 - c. all waterbodies within the area,
 - d. all marshes, meadows, spring, and other wet areas within the area, and
 - e. all steep slopes, slides, unstable areas, or erodible soils
- (2) the purpose of the proposed activities and/or silvicultural prescription
- (3) the type of yarding systems and equipment proposed for use
- (4) any proposed landing or skid trail construction or reconstruction within Waterbody Buffer Zones
- (5) if any of the existing roads proposed for use exhibit signs of erosion and delivery to a waterbody
- (6) if there are any other signs of sediment erosion and delivery to waterbodies within or adjacent to the area of the proposed activity

Attachment N of the proposed Timber Waiver identifies activities which may proceed under the Basin Plan and do not violate Basin Plan prohibitions for Lake Tahoe, Truckee River or Little Truckee River HUs. Cut-to-length equipment (with less than 13

psi ground pressure) operated on dry soils over slash mats have less than significant impacts on soil resources (USFS-LTBMU, 2008a, 2008b; Han, 2006). For equipment operations (other than 13 psi cut-to-length equipment on dry granitic soils) within 100 year floodplains of the Truckee River, Little Truckee River or Lake Tahoe HUs, or Lake Tahoe HU SEZs, the Water Board Executive Officer will consider granting Basin Plan prohibition exemptions where Basin Plan criteria can be met to either mitigate impacts to less than significant or prevent impacts from occurring by setting project thresholds or triggers to discontinue operations if impacts do not remain at less than significant levels. Poff (2006) recommends pilot studies, monitoring and evaluation until impacts are better understood from equipment operations within SEZs and Waterbody Buffer Zones.

Applicants proposing to prescribe burn within Waterbody Buffer Zones are required to (1) construct effective waterbreaks along firebreaks, and (2) leave the area in a condition such that ash, soils, and/or debris will not discharge to a waterbody. These conditions and additional restrictions will prevent significant impact to water quality and the drainage patterns of areas disturbed by the burning activities. In the Tahoe and Truckee HUs, the Water Board Executive Officer will consider granting exemptions to Basin Plan prohibitions against discharge of waste and/or permanent disturbance (See Attachment N).

Applicants proposing to place or burn slash piles within Waterbody Buffer Zones must submit the following information regarding areas proposed for burn pile placement:

- (1) soil types
- (2) vegetative cover
- (3) minimum distances from waterbodies
- (4) topography
- (5) percent of area to be burned within the Waterbody Buffer Zone
- (6) explanation why burning piles within the Waterbody Buffer Zone is proposed
- (7) mitigation measures or project features to be implemented to ensure no significant environmental effects will occur (Attachment Q provide example design features to be incorporated into specific burn plans)

Upon receipt of the waiver application, Water Board staff has 30 days to review the proposal to determine application completeness. Application review will include an assessment (which may include an inspection of the area of the proposed activity) of the application to ensure all potential impacts are disclosed and that measures are included to avoid or mitigate potential impacts to less than significant, such as use of mulch or chips, tilling, buffer zones. Water Board staff may request additional information including additional mitigation measures. If impacts are not fully disclosed and mitigated to less than significant levels, Water Board staff will inform the applicant of ineligibility for coverage under the Timber Waiver, and will request a Report of Waste Discharge pursuant to Water Code section 13260. As stated in General Provision 3, the Water Board does not waive the filing of report of waste discharge or waive waste discharge requirements for persons proposing or conducting timber harvest and vegetation management activities with impacts that are not mitigated to less than significant levels.

The Timber Waiver does not alter or weaken the requirement for project proponents to comply with existing regulations regarding water quality that currently apply under the 2007 Timber Waiver. Specifically, General Condition 8 states that the revised Timber Waiver "does not permit any illegal activity, and does not preclude the need for permits which may be required by other local or governmental agencies."

For activities on federal lands, the USFS Pacific Southwest Region (USFS-PSR) has been designated as a Water Quality Management Agency (WQMA) by the State Water Board for Forest System lands in California. This designation, pursuant to Section 208 of the Clean Water Act, was executed through a formal Management Agency Agreement (MAA) between the State Water Board and the USFS-PSR in 1981. To meet its obligations as a WQMA, the USFS has developed a BMP guidance document to describe each BMP used for water quality management and watershed protection on National Forest System lands in California.

This guidance document, *Water Quality Management for Forest System Lands in California* (USFS-PSR, 2000) represents a portion of the State of California's Nonpoint Source Management Plan, and complies with the provisions and requirements of Sections 208 and 319 of the CWA. The goals of the BMP guidance document are to establish a uniform process of BMP implementation that will meet Federal and State water quality laws and will incorporate water quality protection and improvement into site-specific project plans. Twenty-five different BMPs are described for Timber Management, including BMPs to avoid, reduce or mitigate impacts to hydrological resources and water quality. The USFS uses an Interdisciplinary Team approach to select those BMPs necessary to protect or improve water quality for specific sites, and incorporates them into the environmental document for the project.

Conditions that apply to all revised Timber Waiver categories prohibit adverse impacts to water quality resulting from discharges associated with timber harvest activities. The Timber Waiver will only apply to timber harvest activities that meet all applicable eligibility criteria and that follow the waiver conditions. The Water Board or its Executive Officer may terminate eligibility for coverage under the Timber Waiver at any time for a particular activity if the eligibility criteria are not met or the conditions not followed. The Water Board or its Executive Officer may also take enforcement actions in accordance with the California Water Code to ensure actions are taken to prevent or correct water quality impacts. Therefore, the appropriate finding is **less than significant with mitigation incorporation.**

b) The Timber Waiver does not involve activities that could substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. The appropriate finding is **less than significant impact.**

g, h) The Timber Waiver does not involve placing housing or structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. Because the project does not involve this element, the appropriate finding is **no impact**.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
IX. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

a-b) The proposed Timber Waiver does not divide an established community or involve land use planning or policy. Because the project does not involve these elements, the appropriate finding is **no impact**.

c) The proposed Timber Waiver does not change the regulatory requirements, statutory authorities, or enforcement abilities of the Water Board, nor does it alter or weaken the requirements of any applicable conservation plan that may apply to vegetation management activities. Therefore, existing conditions related to habitat or natural community conservation plans will not be changed by the proposed Timber Waiver, and the appropriate finding is **no impact**.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
X. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

a-b) The proposed Timber Waiver does not involve mineral resources; therefore, the appropriate finding is **no impact**.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XI. NOISE: Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				X
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				X
e) For a project located within an airport				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

a-f) The proposed Timber Waiver does not change the exposure of people to potential adverse effects involving noise due to vegetation management activities over current conditions. Noise levels due to vegetation removal activities in the project area will remain the same whether or not the Timber Waiver is adopted and implemented. Changes proposed in the Timber Waiver do not impact noise levels from timber harvest and vegetation management activities. Because no change is foreseeable, the appropriate finding is **no impact**.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

a-c) The proposed Timber Waiver does not involve construction of new homes, businesses, or infrastructure. The project would also not displace people or existing housing. Because the proposed project does not involve these elements, the appropriate finding is **no impact**.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?				X
Police protection?				X
Schools?				X
Parks?				X
Other public facilities?				X

a) The proposed Timber Waiver does not involve new or physically altered government facilities. Because the proposed project does not involve these elements, the appropriate finding is **no impact**.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XIV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

a-b) The proposed Timber Waiver does not involve increasing the use of recreational facilities, or require construction or expansion of recreational facilities. Because the proposed project does not involve these elements, the appropriate finding is **no impact**.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				X
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e) Result in inadequate emergency access?				X
f) Result in inadequate parking capacity?				X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X

a-b) The proposed Timber Waiver would not cause an increase in traffic or exceed a level of service due to vegetation management activities over current conditions. Traffic levels related to vegetation management activities in the project area will remain the same whether or not the proposed Timber Waiver is adopted and implemented. Because no change is foreseeable, the appropriate finding is **no impact**.

c) The proposed Timber Waiver does not involve air traffic. Because the proposed project does not involve this element, the appropriate finding is **no impact**.

d) The proposed Timber Waiver does not involve installation of hazardous design features. Because the proposed project does not involve this element, the appropriate finding is **no impact**.

e-f) The proposed Timber Waiver does not affect emergency access or parking capacity; therefore, the appropriate finding is **no impact**.

g) The proposed Timber Waiver does not involve alternative transportation. Because the proposed project does not involve this element, the appropriate finding is **no impact**.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XVI. UTILITIES AND SERVICE SYSTEMS Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?				X
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X

a-c) The proposed Timber Waiver does not involve the expansion or construction of wastewater or storm water treatment facilities. Because the proposed project does not involve these elements, the appropriate finding is **no impact**.

d) The proposed Timber Waiver does not change the need for water supplies due to vegetation management activities over current conditions. The need for water supplies

to serve vegetation removal activities (e.g., for dust abatement) in the project area will remain the same whether or not the revised Timber Waiver is adopted and implemented. Because no change is foreseeable, the appropriate finding is **no impact**.

e) The proposed Timber Waiver does not require service by wastewater treatment facilities. Because the proposed project does not involve this element, the appropriate finding is **no impact**.

f) The proposed Timber Waiver does not affect solid waste generation or landfill capacities over current conditions. Because no change is foreseeable, the appropriate finding is **no impact**.

g) The proposed Timber Waiver will not involve solid waste and is not subject to federal, state, and local statutes and regulations related to solid waste, therefore the appropriate finding is **no impact**.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XVII. MANDATORY FINDINGS OF SIGNIFICANCE --				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		X		
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

a) Timber harvest and vegetation management activities have the potential to degrade the quality of the environment; however, conditions and criteria that apply to all Timber Waiver categories mitigate significant adverse impacts from discharges of wastes associated with timber harvest activities to less than significant levels (see Biological Resources, Geology and Soils, and Hydrology and Water Quality sections). The revised Timber Waiver will only apply to timber harvest activities that meet all applicable eligibility criteria and that follow the waiver conditions.

General Provision 3 of the Timber Waiver states that the waiver of filing of a report of waste discharge and waiver of waste discharge requirements for persons proposing or conducting timber harvest and vegetation management activities with impacts that are not mitigated to less than significant levels is not granted. Therefore activities that involve potentially significant impacts that are not mitigated to less than significant levels are ineligible for coverage under the revised Timber Waiver and are not to be considered part of this project.

The Water Board determines that timber harvest activities conducted in compliance with the six categories of the Timber Waiver will not adversely affect the quality or the beneficial uses of the waters of the State, and will be in the public interest pursuant to California Water Code (Water Code) section 13269. In addition to the environmental protection afforded by the adoption of the proposed Timber Waiver, the Water Board will continue to rely on the environmental safeguards provided through the existing State and federal timber harvest activity review processes described in this Initial Study. Therefore, the appropriate finding is **less than significant with mitigation incorporation**.

b) Timber harvest activities could have impacts that are individually limited, but cumulatively considerable; however, conditions and criteria that apply to all revised Timber Waiver categories mitigate significant cumulative adverse impacts from discharges associated with timber harvest activities to less than significant levels (see discussion under Soils and Geology, and Hydrology and Water Quality). The revised Timber Waiver will only apply to timber harvest activities that meet all applicable eligibility criteria and that follow the waiver conditions. Therefore, activities conducted in compliance with the Timber Waiver conditions will not contribute to cumulative impacts.

The Water Board determines that timber harvest activities conducted in compliance with the six categories of the Timber Waiver will not adversely affect the quality or the beneficial uses of the waters of the State, and will be in the public interest pursuant to Water Code section 13269. In addition to the environmental protection afforded by the adoption of the proposed Timber Waiver, the Water Board will continue to rely on the environmental safeguards provided through the existing State and federal timber harvest activity review processes described in this Initial Study. Therefore, the appropriate finding is **less than significant with mitigation incorporation**.

c) It is unlikely that timber harvest activities could have environmental effects which may cause substantial adverse effects on human beings, either directly or indirectly.

However, conditions and criteria that apply to all Timber Waiver categories mitigate significant cumulative adverse impacts from discharges associated with timber harvest activities to less than significant levels. The Timber Waiver will only apply to timber harvest activities that meet all applicable eligibility criteria and that follow the waiver conditions.

The Water Board determines that timber harvest activities conducted in compliance with the six categories of the Timber Waiver will not adversely affect the quality or the beneficial uses of the waters of the State and is in the public interest pursuant to Water Code section 13269. Therefore, the appropriate finding is **less than significant**.

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial study:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

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-----, 2008b. *Heavenly Creek SEZ Demonstration Project 2008 BMPEP Monitoring Report*.

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Homyak, P.M., Yanai, R.D., Burns, D.A., Briggs, R.D., and Germain, R.H., Nitrogen immobilization by wood-chip application: Protecting water quality in a northern hardwood forest. *Forest Ecol. Manage.* (2008), doi: 10.2016/j.foreco.2008.01.018

Attachment 1 of Initial Study:

Comparison of the Notification, Monitoring, and Reporting Conditions between the 2007 Timber Waiver and the proposed Timber Waiver (proposed Waiver)

Category 1a activities of the 2007 Waiver: No notification, monitoring, or reporting required. No inspections or enforcement actions by Water Board staff have occurred for these activities since February 2007. No change to the notification, monitoring, and reporting conditions for these activities is proposed in the proposed Waiver.

Category 1b, 1c, and 1d activities of the 2007 Waiver: Dischargers proposing such activities are required to submit a Waiver Application and a Notice of Termination Form upon project completion.

Since February 2007 the Water Board has received 199 Waiver applications for Categories 1b, 1c, and 1d. These activities include “minor timber harvest or non-USFS fuels hazard reduction activities” that met 16 conditions (e.g., no activities in the winter period, on slopes greater than 60%, or within the standard width of a Watercourse and Lake Protection Zone). No violations of waiver conditions were reported.

Proposed under proposed Waiver:

The proposed Waiver eliminates the notification conditions for activities that meet the conditions of Category 1 of the proposed Waiver and are for the purpose of defensible space, fire prevention, dead-dying-diseased tree removal (with restrictions), and construction activities; or those that are conducted by hand crews.

The proposed Waiver retains notification conditions, and increased monitoring and reporting conditions, for “minor timber harvest” activities that are not for the purposes described above or where conditions and eligibility criteria of Category 2 of the proposed Waiver cannot be met. These projects are now required to complete:

- fall implementation monitoring, and
- winter monitoring and reporting for winter operations.

Category 2 activities of the 2007 Waiver that are conducted under a Dead, Dying, Diseased Exemption issued by the California Department of Forestry and Fire Protection (CAL FIRE) pursuant to California Code of Regulations (CCR), title 14, section 1038, subdivision (b): Dischargers proposing such activities are required to submit a Waiver Application and a Notice of Termination Form upon project completion. Dischargers must also

comply with the monitoring and reporting program of the 2007 Waiver unless an alternate monitoring plan is approved.

Since February 2007 the Water Board has received 14 Waiver applications. The Executive Officer waived monitoring and reporting conditions for nine of the 14 projects because the projects did not pose a significant threat to water quality. No violations of waiver conditions were reported.

Proposed under proposed Waiver:

The proposed Waiver eliminates the notification conditions for activities that comply with CCR, title 14, section 1038 (b) without any exceptions to Section 1038(b) condition nos. 6 and 9 (i.e., no heavy equipment within the standard width of a watercourse or lake protection zone).

The proposed Waiver (Category 4 or 6) retains notification conditions and increased monitoring and reporting conditions for activities that comply with CCR, title 14, section 1038 (b) and do proceed with activities that are allowed under the exceptions to Section 1038(b) condition nos. 6 and 9.

Category 2 activities of the 2007 Waiver that are conducted under a Forest Fire Prevention Exemption issued by CAL FIRE pursuant to CCR, title 14, section 1038, subdivision (i):

Dischargers proposing such activities are required to submit a Waiver Application and a Notice of Termination Form upon project completion. Dischargers must also comply with the monitoring and reporting program of the 2007 Waiver unless an alternate monitoring plan is approved.

Since February 2007 the Water Board has received 1 Waiver application. No violations of waiver conditions were reported.

Proposed under proposed Waiver:

The proposed Waiver eliminates the notification conditions for activities that comply with CCR, title 14, section 1038 (i), to facilitate fire prevention activities because the conditions of section 1038(i) ensure no adverse effects will occur.

Category 2 activities of the 2007 Waiver that are conducted under a Less than 3 Acre Conversion Exemption issued CAL FIRE pursuant to CCR, title 14, section 1104.1, subdivision (a):

Dischargers proposing such activities are required to submit a Waiver Application and a Notice of Termination Form upon project completion. Dischargers must also comply with the monitoring and reporting program of the 2007 Waiver unless an alternate monitoring plan is approved.

Since February 2007 the Water Board has received 3 Waiver applications. No violations of waiver conditions were reported.

Proposed under proposed Waiver:

The proposed Waiver eliminates the notification conditions for timber activities on undeveloped lots up to three acres in size for the purpose of construction activities. These projects allow for single family residence construction and potential water quality impacts are limited.

Category 2 activities of the 2007 Waiver that are conducted under an

Emergency Exemption issued by CAL FIRE: Dischargers proposing such activities are required to submit a Waiver Application and a Notice of Termination Form upon project completion. Dischargers must also comply with the monitoring and reporting program of the 2007 Waiver unless an alternate monitoring plan is approved.

Since February 2007 the Water Board has received 4 Waiver applications. No violations of waiver conditions were reported.

Proposed under proposed Waiver:

The proposed Waiver retains implementation monitoring and removed forensic and effectiveness monitoring requirements for activities that meet the eligibility criteria and conditions of Category 4 of the proposed Waiver. If winter operations are included in the activities, dischargers are required to complete daily winter monitoring. Emergency Exemption activities must be completed within 120 days, thereby limiting the area of disturbance and length of operations.

The proposed Waiver retains notification requirements and implementation, forensic, and effectiveness monitoring and reporting conditions for activities that do not meet the eligibility criteria and conditions of Category 4 of the proposed Waiver but meet the eligibility criteria and conditions of Category 6 of the proposed Waiver. If winter operations are included in the activities, dischargers are required to conduct daily winter monitoring.

Category 2 activities of the 2007 Waiver that are not within the jurisdiction of CAL FIRE that do not qualify for the 2007 Waiver under Category 1:

Dischargers proposing such activities are required to submit a Waiver Application and a Notice of Termination Form upon project completion. Dischargers must also comply with the monitoring and reporting program of the 2007 Waiver unless an alternate monitoring plan is approved.

Since February 2007 the Water Board has received 8 Waiver applications. No violations of waiver conditions were reported.

Proposed under proposed Waiver:

The proposed Waiver eliminates forensic and effectiveness monitoring requirements for activities that meet the eligibility criteria and conditions of Category 4 of the proposed Waiver. If winter operations are included in the activities, dischargers are required to conduct daily winter monitoring.

The proposed Waiver retains notification requirements, implementation, forensic, and effectiveness monitoring and reporting conditions for activities that do not meet the eligibility criteria and conditions of Category 4 of the proposed Waiver but meet the eligibility criteria and conditions of Category 6 of the proposed Waiver. If winter operations are included in the activities, dischargers are required to conduct daily winter monitoring.

Category 3 timber harvest activities of the 2007 Waiver on non-federal lands that receive discretionary approval from CAL FIRE and for which Water Board staff has fully participated in the interdisciplinary review team process: Dischargers proposing such activities are required to submit a Waiver Application and a Notice of Termination Form upon project completion. Dischargers must also comply with the monitoring and reporting program of the 2007 Waiver unless an alternate monitoring plan is approved.

Since February 2007 the Water Board has received 17 Waiver applications. No violations of waiver conditions were reported.

Proposed under proposed Waiver:

The proposed Waiver retains notification requirements, and implementation, forensic, and effectiveness monitoring and reporting conditions.

Category 4 timber harvest activities on non-federal lands that receive discretionary approval from CAL FIRE for which Water Board staff has not fully participated in the interdisciplinary review team process and which are not eligible for a waiver under Category 1, and non-commercial fuel hazard reduction and forest enhancement projects conducted under by California entities that have met all requirements of the California Environmental Quality Act and which are not eligible for a waiver under Category 1 or 2 of the 2007 Waiver: Dischargers proposing such activities are required to submit a Waiver Application and a Notice of Termination Form upon project completion. Dischargers must also comply with the monitoring and reporting program of the 2007 Waiver unless an alternate monitoring plan is approved.

Since February 2007 the Water Board has received 15 Waiver applications. No violations of waiver conditions were reported.

Proposed under proposed Waiver:

The proposed Waiver retains notification requirements, and implementation, forensic, and effectiveness monitoring and reporting conditions.

Category 5 timber harvest activities on federal lands managed by the U.S.

Forest Service of the 2007 Waiver: Dischargers proposing such activities are required to submit a Waiver Application and a Notice of Termination Form upon project completion. Dischargers must also comply with the monitoring and reporting program of the 2007 Waiver unless an alternate monitoring plan is approved.

Since February 2007 the Water Board has received 28 Waiver applications. Water Board staff have initiated three enforcement actions since the 2007 Waiver was adopted. All were related to violations of 2007 Waiver conditions pertaining to winter operations. A minor discharge to a Class III watercourse and threatened discharges of waste to watercourses were reported or observed. None of these violations were within 300 feet of a subdivision boundary, parcel line, or structure (Category 1 activity in proposed Waiver).

Proposed under proposed Waiver:

The proposed Waiver eliminates the notification conditions for activities that meet the conditions of Category 1 of the proposed Waiver and are for the purpose of defensible space, fire prevention, dead-dying-diseased tree removal (with restrictions), or those that are conducted by hand crews.

The proposed Waiver retains notification, monitoring, and reporting conditions for all other U.S. Forest Service Projects. The proposed Waiver now articulates more specifically the monitoring and reporting requirements that are required of the U.S. Forest Service in Attachment O.

Category 6 post fire emergency rehabilitation activities of the 2007

Waiver: Dischargers are required to notify Water Board staff within 7 days of initiating these activities and are exempt from monitoring or reporting unless the Executive Officer imposes individual monitoring requirements. No monitoring or reporting has been required for these activities since the 2007 Waiver was adopted in February 2007. No violations of waiver conditions were reported. No change to the notification, monitoring, and reporting conditions for these activities is proposed in the proposed Waiver.

Response to Comments

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

Prepared by Lahontan Water Board Staff
April 6, 2009

Section 1. INTRODUCTION

The California Regional Water Quality Control Board, Lahontan Region (Water Board) is considering the adoption of a board order to adopt a Conditional Waiver of Waste Discharge Requirements for Waste Discharges Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region, "Timber Waiver."

This document summarizes public and agency comments received on this proposed project. The proposed revised Timber Waiver and associated environmental documents were circulated for a 30-day public review and comment period from January 9 through February 9, 2009, pursuant to California Code of Regulations, title 14, section 15072.

Twelve comment letters were received. Water Board staff reviewed each letter, and assigned a number to each substantive comment. Copies of each comment letter, with associated comment numbers are provided.

Section 2. COMMENT LETTERS AND AUTHORS

1. Andrew Breibart, Hydrologist, USFS-Lassen National Forest
2. Randy Moore, Regional Forester, USFS-Region 5
3. Crawford Tuttle, CAL FIRE-Chief Deputy Director
4. Brad Lutts, Unit Chief, CAL FIRE-Lassen Modoc Plumas Unit
5. Bill Holmes, Unit Chief, CAL FIRE-Amador El Dorado Unit
6. Tamara Sasaki, Senior Environmental Scientist, CA State Parks
7. Mark Shaffer, President and Registered Professional Forester (RPF), Evergreen Resource Management
8. Thomas Esgate, Managing Director, Lassen County Fire Safe Council, Inc.
9. Brad Henderson, Habitat Conservation Supervisor, California Department of Fish and Game
10. Jennifer Quashnick, Tahoe Area Sierra Club; Carl Young, League to Save Lake Tahoe; Michael Graf, Sierra Forest Legacy
11. Doug Praetzel, Forester & RPF, Sierra Pacific Industries
12. Brett Emery, Bridgeport, CA
13. Philip Nemir, RPF, Forestry & Appraisal Services

Letter Code: LASSEN NF

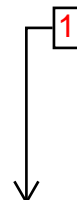
From: Andrew Breibart <abreibart@fs.fed.us>
To: <astanley@waterboards.ca.gov>
CC: Andrew Breibart <abreibart@fs.fed.us>
Date: 1/20/2009 2:41 PM
Subject: re: timber waiver

Andrea,

I have 2 comments regarding the waiver:

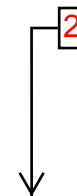
Page 12 under Category 2 bullet 2 under eligibility criteria:

It says chippers and brush mowers with a psi <10 lbs can be used, while ATV's or snow mobiles can used off designated roads. I consulted the engineers on the Forest and they said an ATV can have a psi of 36 lbs. The wording is inconsistent and doesn't make sense.



Page 13:

Category 3, Does this pertain to BAER (Burn Area Emergency Response) like what occurred on the Angora Fire, i.e. hydromulching the burn area or upgrading road/stream crossings for post-fire run-off? Does this pertain to the rehabilitation of fire lines from wildfires? Does it pertain to both?



Thanks,

Andrew Breibart

PS. Please say hi to Taylor.



United States
Department of
Agriculture

Forest
Service

Pacific
Southwest
Region

Regional Office, R5
1323 Club Drive
Vallejo, CA 94592
(707) 562-8737 Voice
(707) 562-9240 Text (TDD)

File Code: 2530-3/5150

Date: February 6, 2009

Letter Code: USFS Region 5

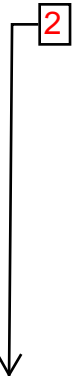
Andrea Stanley
Engineering Geologist
California Regional Water Quality Control Board,
Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

Dear Ms. Stanley:

The revised Lahontan Regional Water Quality Control Board (Regional Board) timber waiver, as proposed on January 7, 2009, will improve the ability of the USDA Forest Service to effectively manage timber and fuels, reduce the risks of wildfires, and protect water quality on National Forest System (NFS) lands. I encourage the Regional Board to adopt the proposed waiver at its March meeting.



Fuels management projects in the Lake Tahoe, Little Truckee, and Truckee River hydrologic units will continue to face stringent regulatory requirements resulting from basin plan prohibitions. However, the recent Regional Board delegation of authority to the executive officer for approval of exemptions to basin plan prohibitions is encouraging, and should allow for expeditious approval of projects that include adequate monitoring and mitigation. The exemption process will be critical to the success of fuels management projects on NFS lands in the Lake Tahoe and Truckee watersheds, owing to the need for pile burning in riparian areas. Forest Service regional and national forest staff will continue to work with Regional Board staff to ensure that projects that require basin plan prohibition exemptions can be implemented effectively while maintaining protection for water quality.



Thank you for the opportunity to provide comments on the revised waiver. If you have any questions, please contact Barry Hill of my staff at (707) 562-8968.

Sincerely,

/s/ Richard J. Cook (for)
RANDY MOORE
Regional Forester

cc: Terri Marceron
Tom Quinn



Jim Irvin
Erin Lutrick
Robert G Taylor
Joanne B Roubique
Quentin Youngblood
Sue Norman
Andrew Breitbart
Peter L Adams
Mike LeFevre
Kathy Murphy



DEPARTMENT OF FORESTRY AND FIRE PROTECTION

Post Office Box 944246
 Sacramento, CA 94244-2460
 (916) 653-7772
 Website: www.fire.ca.gov



Letter Code: CALFIRE (Sacramento)

February 9, 2009

Lahontan Regional Water Quality Control Board
 Attn: Harold Singer
 2501 Lake Tahoe Blvd
 South Lake Tahoe, CA 96150

RE: CAL FIRE Comments regarding: 1) the (Tentative) Conditional Waiver of Waste Discharge Requirements Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region (waiver) and the Initial Study Supporting the Preparation of a Mitigated Negative Declaration for the revision of the Timber Waiver (negative declaration).

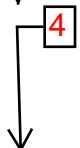
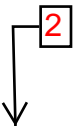
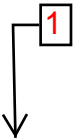
Dear Mr. Singer:

Thank you for the opportunity to provide comments on the draft documents being considered by the Lahontan Regional Water Quality Control Board (Lahontan Board) referenced above. The Department of Forestry and Fire Protection (CAL FIRE) appreciates the time and attention of the Lahontan Board staff to these issues and believes the changes to the language to date are in the interest of the natural resources, their management, and protection.

CAL FIRE believes that additional improvements to the proposed waiver language are warranted and respectfully requests the proposed language be incorporated as indicated in underlined text in the case of additions, and delete text in the case of such deletions.

1. Page 12, Table 1, Category 2, first column, add underlined language as follows:
 "Timber harvest and vegetation management activities conducted by hand crews, including thinning operations and prescribed fire".
2. Page 4, A, Findings Item 6b and also Page 12, Eligibility Criteria Item 2(a): Change language as follows (underlined): Delete "Chipper and brush mowers" and replace with and low ground pressure apparatus and equipment with ground pressures less than 10 pounds per square inch". This language change is more generic, allowing the use of different types of low pressure apparatus and equipment, as opposed to being too specific, and thereby excluding or limiting the use of other appropriate apparatus and equipment types.
3. Page 5, A, Findings, Item 9: Delete "hazard tree removal". Hazard tree removal is a public safety issue under various sections of the Public Resource Code (defensible space, utility line clearance, etc.) and therefore should not be considered a general forest or vegetation management activity.

CONSERVATION IS WISE-KEEP CALIFORNIA GREEN AND GOLDEN



4. Page 10, Category 2, Eligibility Criteria (2) and Condition (2): Change as follows: Utilizing the same reasoning as in Recommendation #2 above, "Low ground pressure apparatus and equipment may be used off-road, except within 25 feet of a water body."
5. Page 10, Category 2, Conditions, Item 2: Delete this section because it is not within Lahontan Board jurisdiction. Rather this is a CAL FIRE and California Board of Forestry and Fire Protection licensing jurisdiction under the Professional Foresters Law. Also, as written, this section violates landowner's rights under the Professional Forester's Law to act on their own behalf regarding marking and removal of trees. See additional comment below on this topic regarding the CEQA document. We agree with and support the response to this item from California State Parks, Sierra District, and CAL FIRE Units.

Further, requiring a landowner to hire an Registered Professional Forester (RFP) to mark trees down to 3" in diameter breast height will increase landowner costs and result in fewer acres being treated. Individually marking such small trees is impractical, excessively time consuming, and costly, and will result in significant delays and increased costs in fuel hazard reduction projects in the Lahontan Region. The result is fewer acres treated at high risk of catastrophic wildfire, leading to increasingly larger and more intense wildfires, which can adversely affect public safety, human life and property, habitat, air and water quality.

The potential for indirect impacts of such excessive requirements, such as the requirement to individually mark such small trees, on air quality and fire protection, should be analyzed as part of the CEQA process. Currently, the negative declaration makes a finding of "No Impact" on air quality and fire protection. Given the indirect affects of such excessive requirements, this finding is incorrect.

Therefore, we recommend that the requirement to individually mark such small trees be removed from the waiver. If the requirement is retained in the waiver, we recommend its indirect impacts on air quality and fire protection be analyzed as part of the CEQA process.

6. Page 13, Category 2, Conditions, Item 7(b): Within the Lake Tahoe and Truckee hydrologic units A, add underlined language that allows for the placement or burning of burn piles within Water body Buffer Zones, Stream Environment Zones in the areas defined unless where topography, access, and/or human hand-thinning limitations allow and pile numbers and size are allowed based upon the latest science or upon mutual agreement by the RPF and Water Board representative upon site visit. *This recommendation applies to all categories containing this condition.*
7. Page 14, Category 2, Conditions, Item 7(c) Delete this section as it is too restrictive and unachievable under prescribed fire conditions, and in some cases may increase the risk to a waterbody by not allowing controlled, light underburning which is a natural historical condition promoting healthy water bodies.
8. Page 15, Category 4, Conditions, Item (8): Delete this section because it is not within Lahontan Water Board jurisdiction, but rather is a CAL FIRE and California Board of Forestry and Fire Protection Licensing jurisdiction as per Professional Foresters Law. See comment 5 above. *This comment applies to all waiver categories containing this condition.*



9. Page 16, Category 4, Conditions, Item 14 (d): Within the Lake Tahoe and Truckee hydrologic units, add underlined language that allows for the placement or burning of burn piles within Water body Buffer Zones, Stream Environment Zones in the areas defined. Unless where topography, access, and/or human hand-thinning limitations allow and pile numbers and size are allowed based upon the latest science or upon mutual agreement by the RPF and Water Board representative upon site visit. This recommendation applies to all categories containing this condition.
10. Page 17, Category 5, Conditions, Item 4(a): Does this condition apply to new skid trails, existing skid trails, or both? Please clarify. This condition as currently written exceeds the current California Forest Practice Act rules and regulations. We recommend this condition match the California Forest Practice Act rules and regulations.

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Comments regarding Definitions (Attachment A)

1. Replace from "Broadcast Burning" to "Prescribed Burning".
2. Replace word "controlled" within Burn Pile definition with "prescribed".
3. Change Winter Period to "October 15 through May 1" so as to remain consistent with the California Forest Practice Act.

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In closing, CAL FIRE looks forward to continuing to work with the Lahontan Board and staff throughout the timber waiver review process, as well as through the Tahoe Forest and Fuels Team and all other forestry projects within the Lake Tahoe Basin and eastern Alpine County. We are in a historic time of change and progress and we believe the above changes will enhance the ability of us all to protect our natural resources in the Lahontan Region from risk of catastrophic fire.

Sincerely,



CRAWFORD TUTTLE
Chief Deputy Director
CAL FIRE

Electronic cc: Todd Ferrara, Natural Resources Agency
Ruben Grijalva, Director, CAL FIRE
Kate Dargan, State Fire Marshal
Del Walters, Executive Officer, CAL FIRE
Bill Hoehman, Northern Region Chief, CAL FIRE
Duane Shintaku, Assistant Deputy Director, CAL FIRE
Clay Brandow, Hydrologist, CAL FIRE
George Gentry, Executive Officer, Board of Forestry and Fire Protection
Bill Holmes, Unit Chief, AEU, CAL FIRE
Brad Harris, Unit Chief, NEU, CAL FIRE
Mary Huggins, Tahoe Basin Division Chief, CAL FIRE



DEPARTMENT OF FORESTRY AND FIRE PROTECTION

Lassen Modoc Plumas Unit
 697-345 Hwy 36
 Susanville, CA 96130
 (530) 257-4171
 (530) 257-8599 (FAX)



Letter Code: CALFIRE (Lassen, Modoc, Plumas)

February 5, 2009

Lahontan Regional Water Quality Control Board
 Attn. Harold Singer
 2501 Lake Tahoe Blvd
 South Lake Tahoe, CA 96150

Dear Mr. Singer,

Thank you for the opportunity to comment on the (Tentative) Conditional Waiver of Waste Discharge Requirements Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region (waiver) and the Initial Study Supporting the Preparation of a Mitigated Negative Declaration for the revision of the Timber Waiver (negative declaration).

The following are CAL FIRE Lassen Modoc Plumas Unit comments. Requested edits are indicated in underlined text in the case of additions, and delete text in the case of such deletions.

1. Page 12, Table 1, Category 2, first column, add underlined language as follows:
 “Timber harvest and vegetation management activities conducted by hand crews, including thinning operations and prescribed fire”.
2. Page 12, Category 2, Conditions, Item 3: Delete this section as it is not within Lahontan Water Board jurisdiction, but rather is a CAL FIRE and California Board of Forestry and Fire Protection Licensing jurisdiction as per Professional Foresters Law. Also, this violates landowner’s rights as a private landowner may mark and/or cut their own trees without an RPF. See additional comment below on this topic regarding the CEQA document. We agree with and support as our own and other CAL FIRE Units and Headquarters.

Individually marking such small trees is impractical, excessively tedious and time consuming, and costly, and will result in significant delays and increased costs in fuel hazard reduction projects in the Lahontan Region. The result is the, fewer acres treated at high risk of catastrophic wildfire, leading to increasingly larger and more intense wildfires, which can adversely affect public safety, human life and property, habitat, and air and water quality.

The potential for indirect impacts of such excessive requirements, such as the requirement to individually mark such small trees, on air quality and fire protection, should be analyzed as part of the CEQA process. Currently, the negative declaration makes a finding of “No Impact” on air quality and fire protection. Given the indirect affects of such excessive requirements, this finding is incorrect. Therefore, we recommend that the requirement to

1

2

3

individually mark such small trees be removed from the waiver. If the requirement is retained in the waiver, we recommend its indirect impacts on air quality and fire protection be analyzed as part of the CEQA process.

3. Page 13, Category 3, Eligibility Criteria, last sentence: “Non-emergency activities are not eligible for Category 3”. Delete the entire sentence or please define for further consideration what is perceived as a “non-emergency” within the post fire emergency.
4. Page 14 Category 4, Eligibility Criteria, Item 5 should allow for aerial or cable harvest operations on slopes over 60%. Items 6, through 8 should be consistent with the California Forest Practice Act, rules and regulations and be specific to potential for overland flow reaching a watercourse or waterbody if that is the intent.
5. Page 15, Category 4, Conditions, Item (8): Delete this section as it is not within Lahontan Water Board jurisdiction, but rather is a CAL FIRE and California Board of Forestry and Fire Protection Licensing jurisdiction as per Professional Foresters Law. See comment 2 above. *This comment applies to all waiver categories containing this condition.*
6. Page 16, Category 4, Conditions, Item 14(a) and Page 21, Category 6, Conditions Item 18 (b): Delete this section as it is too restrictive and unachievable under prescribed fire conditions, and in some cases may increase the risk to a waterbody by not allowing controlled, light underburning which is a natural historical condition promoting healthy waterbodies
7. Page 16, Category 4, Conditions, Item 14(d): Add underlined language to the end of the sentence that allows for the placement or burning of burn piles within Waterbody Buffer Zones and Stream Environment Zones: **unless where topography, access, and/or human hand-thinning limitations allow and pile numbers and size are allowed based upon the latest science or upon mutual agreement by the RPF and Water Board representative upon site visit.** *This recommendation applies to all categories containing this condition.*

Comments regarding Definitions (Attachment A)

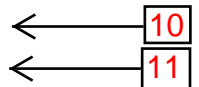
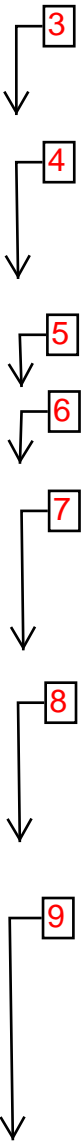
1. Replace from “Broadcast Burning” to “**Prescribed Burning**”.
2. Change Winter Period to “**October 15 through May 1**” so as to remain consistent with the California Forest Practice Act.

We believe the above changes will enhance the ability of all participants to protect our natural resources in the Lahontan Region from risk of catastrophic fire.

Again, thank you for the opportunity to comment. The Lassen Modoc Plumas Unit wishes to continue the professional working relationship currently held with the Lahontan Water Board Staff.

Ivan Houser for

Brad Lutts
Unit Chief
Lassen Modoc Plumas Unit



Cc: Brad Lutts, Unit Chief CAL FIRE
Bill Schultz, Deputy Chief CAL FIRE
Ivan Houser, Unit Forester (Acting) CAL FIRE



DEPARTMENT OF FORESTRY AND FIRE PROTECTION

2841 Mt. Danaher Road
Camino, CA 95709
(530) 644-2345
Website: www.fire.ca.gov



Letter Code: CALFIRE (Amador, El Dorado)

February 3, 2009

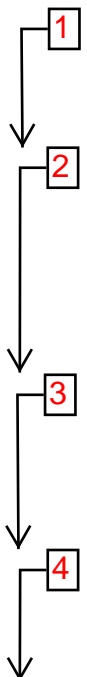
Lahontan Regional Water Quality Control Board
Attn: Harold Singer
2501 Lake Tahoe Blvd
South Lake Tahoe, CA 96150

RE: Comments regarding: 1) the (Tentative) Conditional Waiver of Waste Discharge Requirements Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region (waiver) and the Initial Study Supporting the Preparation of a Mitigated Negative Declaration for the revision of the Timber Waiver (negative declaration).

Dear Mr. Singer,

Thank you and your staff very much for the changes made from the last draft! We very much appreciate the time and attention to these issues and believe the changes are in the interest of the natural resources, their management, and protection. However, we still have some concerns. The following are CAL FIRE's Amador El Dorado Unit comments. Requested edits are indicated in underlined text in the case of additions, and delete text in the case of such deletions.

1. Page 12, Table 1, Category 2, first column, add underlined language as follows:
"Timber harvest and vegetation management activities conducted by hand crews, including thinning operations and prescribed fire".
2. Page 4, A, Findings Item 6b and also Page 12, Eligibility Criteria Item 2(a): Change language as follows (underlined): Delete "Chipper and brush mowers" to and low ground pressure apparatus and equipment with ground pressures less than 10 pounds per square inch". This language change is more generic, allowing the use of different types of low pressure apparatus and equipment, as opposed to being too specific, and thereby excluding or limiting the use of other appropriate apparatus and equipments types.
3. Page 5, A, Findings, Item 9: Delete "hazard tree removal". Hazard tree removal is very often a public safety issue and many times a requirement for removal under various sections of the Public Resource Code (defensible space, utility line clearance, etc) and therefore not considered a general forest or vegetation management activity.
4. Page 10, Category 2, Eligibility Criteria (2) and Condition (2): Change as follows: Utilizing the same reasoning as in Recommendation #2 above, "Low ground pressure apparatus and equipment may be used off-road, except within 25 feet of a waterbody."



CONSERVATION IS WISE-KEEP CALIFORNIA GREEN AND GOLDEN

PLEASE REMEMBER TO CONSERVE ENERGY. FOR TIPS AND INFORMATION, VISIT "FLEX YOUR POWER" AT WWW.CA.GOV.

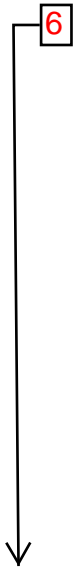
5. Page 10, Category 2, Conditions, Item 2: Delete this section as it is not within Lahontan Water Board jurisdiction, but rather is a CAL FIRE and California Board of Forestry and Fire Protection Licensing jurisdiction as per Professional Foresters Law. Also, this violates landowner's rights as a private landowner may mark and/or cut their own trees without an RPF. See additional comment below on this topic regarding the CEQA document. We agree with and support as our own the response to this item from California State Parks, Sierra District and other CAL FIRE Units and Headquarters.



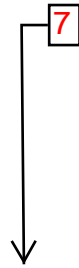
Individually marking such small trees is impractical, excessively tedious and time consuming, and costly, and will result in significant delays and increased costs in fuel hazard reduction projects in the Lahontan Region. The result is fewer acres treated at high risk of catastrophic wildfire, leading to increasingly larger and more intense wildfires, which can adversely affect public safety, human life and property, habitat, and air and water quality.

The potential for indirect impacts of such excessive requirements, such as the requirement to individually mark such small trees, on air quality and fire protection, should be analyzed as part of the CEQA process. Currently, the negative declaration makes a finding of "No Impact" on air quality and fire protection. Given the indirect affects of such excessive requirements, this finding is incorrect.

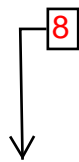
Therefore, we recommend that the requirement to individually mark such small trees be removed from the waiver. If the requirement is retained in waiver, we recommend its indirect impacts on air quality and fire protection be analyzed as part of the CEQA process.



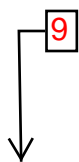
6. Page 13, Category 2, Conditions, Item 7(b): Add underlined language that allows for the placement or burning of burn piles within Waterbody Buffer Zones, Stream Environment Zones in the areas defined (Lake Tahoe and Truckee hydrologic units) unless where topography, access, and/or human hand-thinning limitations allow and pile numbers and size are allowed based upon the latest science or upon mutual agreement by the RPF and Water Board representative upon site visit. *This recommendation applies to all categories containing this condition.*



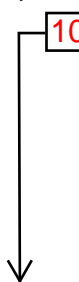
7. Page 14, Category 2, Conditions, Item 7(c) Delete this section as it is too restrictive and unachievable under prescribed fire conditions, and in some cases may increase the risk to a waterbody by not allowing controlled, light underburning which is a natural historical condition promoting healthy waterbodies.



8. Page 15, Category 4, Conditions, Item (8): Delete this section as it is not within Lahontan Water Board jurisdiction, but rather is a CAL FIRE and California Board of Forestry and Fire Protection Licensing jurisdiction as per Professional Foresters Law. See comment 5 above. *This comment applies to all waiver categories containing this condition.*



9. Page 16, Category 4, Conditions, Item 14(d): Add underlined language that allows for the placement or burning of burn piles within Waterbody Buffer Zones, Stream Environment Zones in the areas defined (Lake Tahoe and Truckee hydrologic units) unless where topography, access, and/or human hand-thinning limitations allow and pile numbers and size are allowed based upon the latest science or upon mutual agreement by the RPF and Water Board representative upon site visit. *This recommendation applies to all categories containing this condition.*

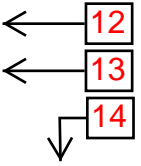


10. Page 17, Category 5, Conditions, Item 4(a): Does this condition apply to new skid trails, existing skid trails, or both? Please clarify. This condition as currently written exceeds the current California Forest Practice Act rules and regulations. We recommend this condition match the California Forest Practice Act rules and regulations.



Comments regarding Definitions (Attachment A)

1. Replace from “Broadcast Burning” to “Prescribed Burning”.
2. Replace word “controlled” within Burn Pile definition with “prescribed”
3. Change Winter Period to “October 15 through May 1” so as to remain consistent with the California Forest Practice Act.



In closing, we in the Amador El Dorado Unit look forward to continuing to work with the Lahontan Board and staff throughout the timber waiver review process, as well as through the Tahoe Forest and Fuels Team (TFFT) and all other forestry projects within the Lake Tahoe Basin, as well as eastern Alpine County. We are in a historical time of change and progress and we believe the above changes will enhance the ability of us all to protect our natural resources in the Lahontan Region from risk of catastrophic fire.

Sincerely,

Mary Huggins
Amador El Dorado Division Chief
Tahoe Basin/Alpine County Division

for

Bill Holmes
Unit Chief
Amador El Dorado Unit

Electronic Cc: Todd Ferrara, Resources Agency
Ruben Grijalva, Director CAL FIRE
Kate Dargan, State Fire Marshal
Del Walter, Executive Officer CAL FIRE
Bill Hoehman, Northern Region Chief CAL FIRE
Duane Shintaku, Assistant Deputy Director CAL FIRE
Clay Brandow, Hydrologist, CAL FIRE
George Gentry, Board of Forestry and Fire Protection
Mary Huggins, Tahoe Basin Division Chief CAL FIRE



DEPARTMENT OF PARKS AND RECREATION
Sierra District
P.O. Box 266
Tahoma, CA 96142
530.525.9535

Ruth Coleman, Director

Letter Code: CA State Parks

February 9, 2009

California Regional Water Quality Control Board
Lahontan Region
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150
Attention: Andrea Stanley

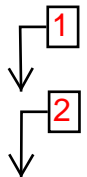
RE: Lahontan Region 2009 Tentative Revised Timber Waiver

Greetings Ms. Stanley,

Thank you for the opportunity to comment on the Tentative Revision of the Conditional Waiver of Waste Discharge Requirements for Waste Discharges Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region or “Timber Waiver”. I am commenting on behalf of the California Department of Parks and Recreation (CA State Parks), Sierra District whose park units are within the Lahontan Region. We would like to share with you our comments and recommendations with the continued intent of improving and further refining the Timber Waiver. Our recommended changes to the Working Draft text are indicated by italic font.

General Comments

- We appreciate that many of our comments were incorporated in the tentative revision and this version of the waiver is clearer and less ambiguous.
- We appreciate that there is an invitation for monitoring program feedback with respect to one’s project on the monitoring forms.



Comment 1

Page 4, A. Findings, 6., (b) For Category 2..., 2nd sentence.

Suggest changing to “Category 2 covers only those projects that are conducted by hand crews and *low ground pressure apparatus and equipment.*” Request change to generic low ground pressure apparatus and equipment instead of specific identification of low ground pressure chippers and mowers since there is and may be in the future other low ground pressure apparatus and equipment that can/will be used by hand crews to assist with tree thinning and removal.



Comment 2

Page 5, A. Findings, 9. “Timber harvest and vegetation management activities”...

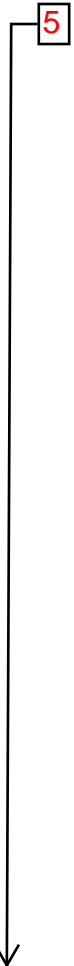


Please remove “hazard tree removal” from the list. Hazard tree removal is considered by CA State Parks as a facility maintenance activity related to facilities management and liability, (i.e., campgrounds, parking lots, public use areas, etc.). Hazard tree removal is not a general forest and vegetation management activity.



Comment 3

Page 12, D. Timber Waiver Categories, Category 2: Timber harvest and vegetation management activities conducted by hand crews, Conditions, (3) “Prior to the commencement of timber harvest and vegetation management activities within Waterbody Buffer Zones (WBZs), trees with a DBH greater than 3 inches planned for removal or trees designated for retention must be marked (including a base marked below the cut line)...”



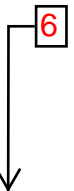
The riparian areas in our park unit forests are densely stocked with trees. It is very time consuming and costly to mark every tree for removal, including a base mark, especially if marking numerous 3 inch DBH white firs. This requirement discourages inclusion of riparian areas for forest health thinning and fuels reduction projects which can lead to untreated corridors of high fuel loading and to the increased risk of spread of catastrophic wildfire which ultimately affects our natural resources, including air and water quality, and public safety. Aesthetically it is not acceptable to mark trees for retention by CA State Park standards. Many times to facilitate efficiency in time and labor, a “designation by description” thinning treatment prescription is written by our Registered Professional Forester (RPF) that is followed by the hand crew. It is the responsibility of the RPF to check that the hand crew is following the treatment prescription.

An alternative to the 3 inch DBH requirement is to increase the DBH of the marked trees in WBZs to 14” DBH to be consistent with the Tahoe Regional Planning Agency, Code of Ordinance Chapter 71.3.

If the 3 inch DBH requirement is to remain in the proposed timber waiver, we recommend that the proposed timber waiver CEQA Initial Study includes the analysis of the indirect impacts on air quality and fire protection.

Comment 4

Page 12, D. Timber Waiver Categories, Category 2: Timber harvest and vegetation management activities conducted by hand crews, Conditions, (5), “All Areas disturbed by timber harvest and vegetation management activities must be stabilized (as defined in Attachment A)...”



Please define the work “stabilized” in Attachment A

Comment 5

Page 12, D. Timber Waiver Categories, Category 2: Timber harvest and vegetation management activities conducted by hand crews, Conditions, (7), (a) If fuel breaks are constructed, effective waterbreaks...



What is the rationale for determining 30% or more “chance” of rain within 24 hours chosen as the threshold for triggering waterbreak construction?

Comment 6

Page 14, D. Timber Waiver Categories, Category 4: Timber harvest and vegetation management activities which rely on existing roads..., Eligibility Criteria, (10) No timber harvest or vegetation management activities that include the application of herbicides...

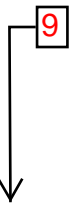
Please clarify if this section pertains to native plant vegetation management activities that affect forest regeneration or non-native invasive weed species eradication or both? Is a timber waiver necessary if conducting non-native invasive weed species eradication or control activities under the Lahontan Regional Water Quality Control Board and Lake Tahoe Weed Coordinating Group Memorandum of Understanding regarding herbicide use in the Lake Tahoe Basin?



Comment 7

Page 14, D. Timber Waiver Categories, Category 4: Timber harvest and vegetation management activities which rely on existing roads..., Conditions, (8) Prior to the commencement of timber harvest and vegetation management activities within Waterbody Buffer Zones...

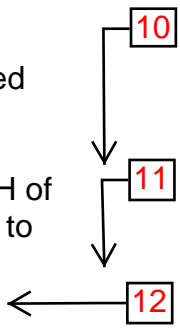
Please see Comment 3 regarding marking trees in Waterbody Buffer Zones.



Comment 8

Page 16, D. Timber Waiver Categories, Category 4: Timber harvest and vegetation management activities which rely on existing roads..., Conditions, (14), a. Prescribed broadcast burns...

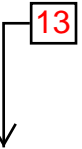
- a) Recommend removing "broadcast".
- b) Recommend increasing the size of the definition of large woody debris to DBH of 30" or greater and greater than 12 feet long. Smaller woody debris is difficult to preserve from fire.
- c) See Comment 5 regarding chance of rain.



Comment 9

Page 21, D. Timber Waiver Categories, Category 6: Timber harvest and vegetation management activities that do not qualify for categories 1-5..., Conditions, (12) All areas disturbed by timber harvest and vegetation management activities must be stabilized...

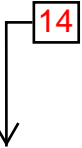
See Comment 4 requesting definition of "stabilized".



Comment 10

Page 21, D. Timber Waiver Categories, Category 6: Timber harvest and vegetation management activities that do not qualify for categories 1-5..., Conditions, (16) Prior to the commencement of timber harvest and vegetation management...

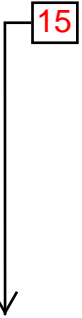
See Comment 3 regarding tree marking DBH.



Comment 12

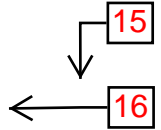
Page 21, D. Timber Waiver Categories, Category 6: Timber harvest and vegetation management activities that do not qualify for categories 1-5..., Conditions, (18), b. Prescribed broadcast burning...

- a) Recommend removing "broadcast" and "the loss of large woody debris (as defined in Attachment A) which..." so the sentence reads as follows:



Prescribed burning (as defined in Attachment A) is allowed as long as the prescription does not result in destabilized soils adjacent to a waterbody.

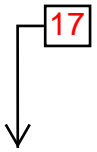
b) Please see Comment 8, b) regarding large woody debris.



Comment 13

Page 22, D. Timber Waiver Categories, Category 6: Timber harvest and vegetation management activities that do not qualify for categories 1-5..., Conditions, (18), d. if fuel breaks are constructed...

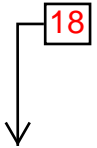
See Comment 5 regarding chance of rain.



Comment 14

Page 22, D. Timber Waiver Categories, Category 6: Timber harvest and vegetation management activities that do not qualify for categories 1-5..., Conditions, (19) Pursuant to Water Code section 13267...

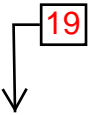
See Comment 6 regarding non-native invasive plants.



Comment 15

Attachment A, page 3, Large Woody Debris.

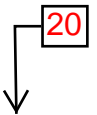
See Comment 8.



Comment 16

Attachment A, page 3, Prescribed Burning

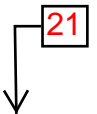
Recommend definition of prescribed burning to include “*under specific environmental conditions*”.



Comment 17

Attachment A, page 3, Stabilized

Need a definition for “stabilized”.



Comment 18

Attachment B, Waterbody Buffer Zones

Recommend changing sentence to:

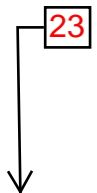
Water Board Staff will accept documents and timber waiver applications that use terminology other than “Waterbody buffer Zones” as long as such zones or areas will not be smaller than the Water Buffer Zones *defined in Table B1. Water Buffer Zone Widths.*



Comment 19

Attachment J, Effectiveness Monitoring Form, bottom 8th of page, beginning with “Inspect all the following areas and infrastructure...”

Please increase the amount of space after each of the areas listed for comments per the directions or make the directions clearer where you want the comments to be placed.



Comment 20

Attachment K, Monitoring and Reporting Program, page 8



Recommend including a chart with monitoring type, monitoring form required, monitoring periods, and monitoring due dates for reference.

24

If you have any questions or would like clarification to any of our comments, please do not hesitate to contact me.

Sincerely,



Tamara Sasaki
Senior Environmental Scientist

cc: Todd Ferrara, Resources Agency
Pam Armas, District Superintendent
Rich Adams, District Forester



EVERGREEN RESOURCE MANAGEMENT

A Natural Resource Management Company

472-120 Richmond Road
Susanville, CA 96130

Office: 530-257-8387
Cell: 530-260-3705

February 4, 2009

Mr. Douglas Cushman
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150

Re: Comments on Lahontan Region-Wide Timber Waiver Proposed Changes

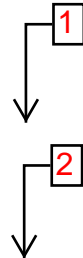
Dear Doug:

The following letter and scientific study were sent to you during the informal comment period for this proposed change. I acknowledge several minor changes, including the allowance for the 1038(i) Forest Fire Prevention Exemption under Category 1. I am not sure how you can allow that exemption and not accept 1038(b), as well.

Please accept the following (letter dated December 4, 2008 to Mr. Douglas Cushman and the study titled "Impact of Slash Pile Size and Burning on Ponderosa Pine Forest Soil Physical Characteristics". Please reconsider how you re-structure this waiver.

Sincerely,

Mark A. Shaffer
President / California RPF # 2485
California LTO # A7052
Consulting Forester – Lassen County Fire Safe Council





EVERGREEN RESOURCE MANAGEMENT

A Natural Resource Management Company

472-120 Richmond Road
Susanville, CA 96130

Office: 530-257-8387
Cell: 530-260-3705

December 4, 2008

Mr. Douglas Cushman
LAHONTAN REGIONAL
WATER QUALITY CONTROL BOARD
2501 Lake Tahoe Blvd
South Lake Tahoe, CA 96150

Re: Lahontan Region-Wide Timber Waiver Working Draft

Dear Doug:

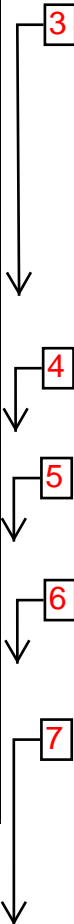
As you know, the Lassen County Fire Safe Council currently utilizes the Less than 10% Dead, Dying and Diseased trees of any size, fuelwood or split products...Exemption that is available to us through Cal-Fire. We are operating under 10 conditions specified in 1038(b) which allows for this work. Currently, we can go to work immediately upon sending a 1038(b) Exemption form into Cal-Fire. However, according to Lahontan Water Quality regulations (both existing and proposed), we are required to wait until we receive the Exemption back from Cal-Fire before sending in a Waiver Application to Water Quality. We can then be notified via phone that we can go to work, or, in the proposed regulations, we can go to work upon verified receipt by Lahontan.

The biggest problem with this is that CDF has to process up to 30 or more exemptions at a time from our organization alone, and get them approved and returned to us before we can submit Waiver Applications to Water Quality. Some time delays on the part of Cal-Fire have been up to 2 months.

Other problems include:

1. A 5 1/2 month working season imposed by Lahontan regulations that otherwise requires a Category 2 waiver (proposed has language addressing this, but includes increased monitoring requirements);
2. Various timeframes in which the grant funding for these projects is available. Some of these timeframes allow for no more than one working season, and if the money is not spent, it must be returned;
3. Due to the nature of our project, many landowners sign up when the equipment is one or two days away. Adhering to the regulations (existing and proposed) will leave many landowners out of the project, breaking up the continuity of the project and increasing costs dramatically.

Doug, you are aware that the Central Valley Water Quality Board utilizes the following language as it pertains to 1038(b) exemptions...



- a. Timber harvest activities (Notices of Exemption or Emergency) within 150 feet of existing structures (i.e., "FireSafe" treatments), harvest of Christmas trees, dead, dying or diseased fuelwood or split products, public agency, public and private utility right of way, fuel hazard reduction, substantially damaged timberland unmerchantable as sawlog and woody debris and slash removal, that are conducted pursuant to a Notice of Exemption accepted by CDF under 14 California Code of Regulations (CCR) Section 1038, will automatically be enrolled in the Waiver.

This language allows the Cal-Fire Exemption to be the document that places us under the Waiver. We're subject to the same enforceable conditions, but the paperwork, process and time lags are taken away.

Additional Comments:

The current water quality Waiver limits the working season to May 1 through October 15 (5 ½ months). The normal working season for CDF is April 1 through November 15 (7 ½ months), with erosion control and weather-related operating restrictions between October 15 and November 15 and between April 1 and May 1.

Current Water Quality regulations are requiring that these operations from October 15 to April 30 be classified under a separate Waiver category, requiring extra paperwork and time. Proposed language requires additional monitoring on a daily basis that serves little purpose in protecting water quality. Adopting the language for operations during this time frame that is currently found in the Forest Practice Rules and allowing the Waiver to continue to be automatic would be beneficial. This language is as follows:

- (1) Tractor yarding or the use of tractors for constructing layouts, firebreaks or other tractor roads shall be done only during dry, rainless periods where soils are not saturated.
- (2) Erosion control structures shall be installed on all constructed skid trails and tractor roads prior to the end of the day if the U.S. Weather Service forecast is a "chance" (30% or more) of rain before the next day, and prior to weekend or other shutdown periods.

Any Operations between November 15 and April 1 could require a Category 4 waiver with monitoring.

Language pertaining to "Harvest or leave tree marking w/in Waterbody Buffer Zones by a Registered Professional Forester" needs to be reviewed by legal counsel to see if enforcement of this provision by Water Quality is possible without any RPF's on staff. Language may require tree cutting under the supervision of an RPF (also check with legal counsel) to help protect shade retention standards.

Language pertaining to chipped material being no more than 2 inches in depth is operationally infeasible. Often, material left as a result of chipping and/or mastication is larger than 2 inches. Alternative language should address an average overall depth with a maximum depth restriction.

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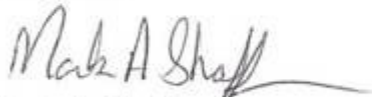
These depths should be subject to discussion and review by RPF's prior to implementation by Lahontan. Again, an average depth with a maximum depth is much more realistic and enforceable.

14 CCR 937.3(c) reads as follows: Use of the broadcast burning prescription of the Stream and Lake Protection Zone for Class I, and Class II, is prohibited. Where necessary to protect downstream beneficial uses, the Director may prohibit burning prescriptions in Class III watercourses;...

While broadcast burning within the WLPZ is prohibited, there is no restriction for piling and burning of hand piles within the standard width of a WLPZ. 14 CCR 937.5 (Burning of Piles and Concentrations of Slash) states this rather clearly. Not restricting hand pile burning within the WLPZ is purposeful due to its benign nature. A study of the effects of pile burning on the physical properties of soil is included for your review.

Finally, not to re-invent the wheel, I am in agreement with the comments made in the letter from W.M. Beaty & Associates, Inc., signed by Staff Forester Ryan Hilburn, in regard to this matter. I urge you to take these comments seriously and incorporate these changes into your proposed Waiver Application Process. If necessary, extra time should be provided for additional comments.

Sincerely,



Mark A. Shaffer
President
California Registered Professional Forester # 2485
Licensed Timber Operator # A7052

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IMPACT OF SLASH PILE SIZE AND BURNING ON PONDEROSA PINE FOREST SOIL PHYSICAL CHARACTERISTICS

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ABSTRACT

Slash-pile burns associated with restoration thinning treatments may change soil characteristics resulting in broad implications for ecosystem functions, processes, and management. This study explores the impacts of size and burning of slash piles on various soil physical characteristics. At the Arboretum in Flagstaff, Arizona, the experiment consisted of burned, unburned, and control plots crossed with large and small sizes of slash piles. Slash from the unburned plots was removed and chipped for disposal elsewhere. The specific soil physical characteristics measured include water infiltration rate, soil moisture content, bulk density, and porosity. The results show no differences in water infiltration rates in the soils under the different treatments, leading us to conclude that burning slash piles did not form a hydrophobic layer in the soil. Soil bulk densities are lower, albeit insignificantly, in unburned pile plots than in burned pile and control plots. Hence, management decisions should recognize that the effects of burning piled slash during drought periods may be slight on these soil physical properties.

INTRODUCTION

Forest restoration has recently generated great interest among researchers and managers as a means of reducing the hazards of wildfire and forest health risks through thinning and prescribed burning (Brown et al. 1977, Snell and Brown 1980, Freeman et al. 1982, DeBano et al. 1998). Slash, unmarketable woody debris resulting from thinning, is often piled and then removed through either chipping or burning (Smith et al. 1997, DeBano et al. 1998). In most cases, prescribed burns remove the slash as well as most of the accumulated forest floor fuel load (Sackett et al. 1996, Covington et al. 1997, US Forest Service [USFS] 1998). Burning slash piles associated with forest thinning prescriptions may result in unintended effects on site characteristics in the treated areas. Severe soil damage can occur under these burn piles due to intense soil heating, however, the damage is limited to the local area under the piles (DeBano et al. 1998). Changes in soil physical characteristics created by either piling slash or burning the slash piles may contribute to floral community change, if not drive the change, by affecting water and nutrient pathways and light and water interception (Martin et al. 1979, DeBano et al. 1998, Neary et al. 1999). Therefore, physical changes in soils would likely result in habitat reduction for native fauna, and have broad implications for ecological

functions, processes, and management. In spite of this, fire is considered an appropriate method to

remove slash since wild fire historically consumed the dead fallen branches that comprise the majority of the slash piles (DeBano et al. 1998, USFS 1998). Land managers generally prefer to burn slash piles not only to reduce harvesting-related residual fuels that become fire hazards, but also because piles burn more efficiently with less smoke and are prudently burned under a broader range of weather conditions than broadcast burning of slash (Hardy 1966). In this study, we evaluate soil physical characteristics that can affect floral species establishment following slash pile burns associated with forest thinning treatments.

OBJECTIVES

Burning slash piles associated with forest thinning prescriptions may result in varying soil physical characteristics. Our objective in this study is to determine the effect of burning slash piles on soil bulk density, porosity, water infiltration capacity, and soil moisture content. We expect slower water infiltration in burned soils due to increased amounts of fine particles (ash from burned slash) that fill macropores in the soil and the formation of a hydrophobic layer resulting from intense heat that bakes the organic material in the forest floor. The expected increase in soil fines would increase soil bulk density while decreasing soil porosity. Furthermore, organic material has a large water-holding capacity, and consuming most, if not all, of the organic matter in and above the soil is expected to lower soil moisture

conditions in burned plots.

Another factor that may affect soil physical characteristics is the size of slash piles. The US Forest Service has no specific guidelines for piling slash, therefore individual Ranger Districts pile slash as they see best fit for the area. Currently the Flagstaff area uses two sizes of hand-piled slash piles.

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The Peaks Ranger District in the Coconino National Forest tends to build smaller piles, <1.5 m high and 3 m wide at the base, while the adjacent Mormon Lake Ranger District tends to build larger and wider piles, in excess of 3 m wide and at least 2 m high. Due to the increased amount of fuel wood and, subsequently, more heat production in the larger burn piles compared to the smaller piles, we further hypothesized that the expected effects described above will be greater under the larger piles than the smaller piles.

Study Area

The experiment was conducted on the grounds of The Arboretum at Flagstaff, approximately 10 km west of Flagstaff, Arizona, within the ponderosa pine (*Pinus ponderosa*)/Arizona fescue (*Festuca arizonica*) forest type. The slash piles were constructed from ponderosa pine slash material that was left on the forested grounds of the Arboretum. The slash piles were remains of a forest restoration thinning that occurred in 1999, in which approximately one third of the forest density was removed. The slash pile burning occurred in conjunction with further thinning in August 2001 by the Flagstaff Fuels Management Team, in which an additional third of the original basal area was removed.

Soils in the study area are typic or mollic eutroboralfs derived from flow and cinder basalt. The soils are classified as a Brolliar very stony loamforested, and contain approximately 40% sand, 40% silt and 20% clay (Arboretum site description compiled by the US Department of Agriculture's Natural Resources Conservation Service (NRCS), written communication). These soils tend to be moderately deep (50-100 cm) and have textures that range from a gravelly to a very cobbly loam (USFS 1995). Gravel is a rock fragment that ranges in size from 2 mm to 8 cm, while cobble ranges from 8 cm to 25 cm in size (Fisher and Binkley 2000). Rock fragments >2 mm make up more than 30% of the

gravelly soils and half of the very cobbly soils. Generally, the slopes associated with these soil types range from 0-15%.

Precipitation over the area during the study period was low compared to the average from the last century. The slash piles were burned and soil samples were collected in 2001 during which a total of 44.58 cm of precipitation fell (data from Pulliam Airport, Flagstaff). During the period between burning and sample collection, the study site received very little precipitation.

SOIL PHYSICAL CHARACTERISTICS

Soil Bulk Density and Porosity

Blake and Hartge (1986) define bulk density (grams/cm³) as the ratio of the mass (g) of oven-dried soil solids to the bulk volume (cm³) of the solids plus the pore space, with the moisture content present during the sampling period. Bulk density can be used to calculate soil porosity (pore space in a soil), convert soil weight to volume, and estimate weight of soil at the landscape scale (Carter 1993). To calculate soil porosity, divide bulk density by the particle density of the soil. Particle density (g/cm³) simply refers to the density of soil particles without any consideration for the volume of pore space in the soil. The particle density of mineral soil is generally approximated at 2.65 g/cm³, since that is the particle density of quartz—a dominant component of mineral soils. The ratio of dry bulk density to the soil particle density gives the fraction of the total space occupied by solid material. Subtracting this ratio from 1.0 gives the pore space in the soil.

Hence the formula:

$$S_t = [1 - (D_b/D_p)] * 100$$

Where S_t is the Total Soil Porosity (%), D_b is Dry Bulk Density (g/cm³), and D_p is Soil Particle Density (g/cm³). Soil porosity in mineral soils may vary from 20 to 70%.

Infiltration Capacity

Infiltration is an interfacial process in which water enters the soil from the surface and moves downward (Hillel 1971). Infiltration capacity is the maximum rate of infiltration that can pass through the soil under standing water conditions. This rate is quite important since it often determines the amount of runoff that might occur after a rain event or snowmelt

(Hillel 1971). But perhaps more importantly,

infiltration capacity determines the quantity and rate at which surface water becomes available to plants. Knowledge of the infiltration rate can be used to identify soil properties such as relative bulk density, porosity, compaction and hydrophobicity below the soil surface. In this study, we use infiltration capacity to determine whether hydrophobic compounds in the soil created a water repellent layer that would, at least momentarily, seal off, or retard infiltration. If a water repellent layer exists, infiltration capacity can also help determine the relative depth of the hydrophobic layer associated with a given treatment.

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When a hydrophobic layer is reached, the rate of the infiltrating water rapidly decreases and approaches zero. Once the wettable soil layer is saturated, pressure from the hydraulic head, at the boundary of the wetted and water-repellant layers would increase by the lack of downward or lateral movement of water (DeBano et al. 1998). Eventually this pressure would induce failure in the hydrophobic layer allowing infiltrating water to penetrate past the hydrophobic layer. The failure in the hydrophobic layer would be reflected by the infiltration rate increasing as water saturates the deeper soil, then decreasing to some long-term constant that represents the deep percolation rate.

Soil Hydrophobicity

One of the most significant physical alterations that may occur in burned soils is an increase in soil water repellency. Water repellency in soils was first observed in the mid-1800's (Bayliss 1911). Those early observations related soil-water repellency to soil fungi (specifically mycelium structures). A phenomenon that drew the attention of researchers during that time was a condition known as a "fairy ring," which describes an approximately circular spatial formation of plants where growth inside the circle appears stimulated. The formation could be so distinct that outside the circle, only bare ground or withered plants occur. In the late 1800's soil moisture was found to be the reason for the formation of such rings. The soil moisture inside the circle of healthy plants was higher than that of the surrounding soil (Lawes et al. 1883). Molliard (1910) reported that soils with mycelium fungi contained only 5-7% soil moisture, compared to 21% in similar areas without the mycelium fungi. Bayliss (1911) provided a case

study in which rain water could not penetrate through mycelia-infested soils, while it penetrated through similar, mycelia-free, soils to a depth of 10 cm. Other mechanisms (such as volatilizing organic materials) may be responsible for the formation of any post-fire water repellency in the ponderosa pine forest type. Water repellent soil (hydrophobic soil) is often found on the surface or a few centimeters below and parallel to the surface (DeBano et al. 1998), characteristically under a layer of severely burned soil or ash (DeBano 1969). Intense heat pushes vaporized organic compounds downward into the soil until they reach cooler soil layers and condense. The organic compounds then coat soil particles, which in turn adhere to each other forming a hydrophobic barrier. Research into fire-induced hydrophobic soils began in the 1950's and accelerated in the 1960's (DeBano 2000a, 2000b). Shortly thereafter, DeBano and Krammes (1966) hypothesized that organic compounds coated soil particles more efficiently at lower temperatures lasting shorter time periods, than at higher temperatures lasting longer periods since high temperatures and long periods tend to destroy the organic compounds (DeBano et al. 1998). Subsequent investigations showed that (1) water repellency changes very little when soil temperatures are <175°C (DeBano 1981, Neary et al. 1999); (2) heating between 175 and 200°C creates intense water repellency (DeBano 1981, March et al. 1994, Neary et al. 1999); (3) destruction of water repellency occurs when soils are heated between 280 and 400°C (Savage 1974, DeBano et al. 1976, March et al. 1994, Giovannini and Lucchesi 1997); and (4) at temperatures of >450°C, virtually all organic material in the soil is consumed (Neary et al. 1999). An important caveat here is that hydrophobic layers produced during fire can vary greatly due to differences in fire intensity and soil characteristics.

STUDY METHODS

Field Measurements

This study investigated burning effects of handpiled slash on soil physical characteristics because much of the forest thinning and fuel reduction currently conducted in the Flagstaff, Arizona, Urban/Wildland Interface Program involves hand-piled slash burning by the Fuels Management Team of the

City of Flagstaff Fire Department. We constructed experimental plots to evaluate the effects of burning two different sizes of slash piles on soil physical characteristics from the perspective of bulk density, porosity, and infiltration capacity and soil moisture content.

Plot Selection and Pile Construction

Prior to constructing slash piles, plots were randomly assigned within each study block with the provision that piles on those sites would burn safely. We avoided sites directly below or immediately upwind

of tree canopies, or those sites in close proximity to other slash piles. Two sizes of slash piles were constructed. Small piles were round at the base, 1.2 m high, and 2.4 m in diameter, while large piles stood 2 m high, 4 m wide and 5 m long forming an oval or oblong shape. Piles were constructed from various sizes of slash, including needle litter, branches, and poles that were too small (<15 cm in diameter) to be removed by the harvesting crew during the 1999 thinning. Slash was grouped into size classes (i.e., 1-3, 4-7, 8-11, 12-15 cm sizes) and the percentage of each experimental pile made up by each size class was determined by measuring the slash pile material at the Northern Arizona University's (NAU) Ecological Restoration Institute and the School of Forestry's research area in Fort Valley

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Figure 1. Soil bulk density versus treatment types. Similar letter indicates an absence of a significant difference ($\alpha = 0.05$). While the burned plots did have a slightly higher bulk density compared to the other treatment plots, the differences were not significant.

outside of Flagstaff. This process ensured that our experimental slash piles were similar to each other and to piles in other areas surrounding Flagstaff.

Soil Infiltration Capacity

Infiltration rates were measured using a doubling infiltration meter after sampling the soils in the burned, unburned, and control plots. Infiltration rate measurements

took place near the center of the plots but not adjacent to the soil sampling spots. We analyzed the data to determine whether or not burning had any effect on soil infiltration capacity. If burning had created hydrophobic soils, then the rate of infiltration would have temporarily approached zero after the overlying soil became saturated.

Moisture Content

Discrete values of soil moisture content were measured using time domain reflectometry (TDR) (Soil Moisture Equipment Corp. 1996). We inserted probes of 15 cm in length vertically into the ground near the center of every plot as well as at points 60 cm outside the plots. Since data collection with TDR is simple and quick, it was practical to measure outside the treatment plots to help determine any variations in soil moisture content between treatment plots and untreated sites or controls. This measurement occurred at the same time soil samples were gathered for laboratory analysis.

Bulk Density

Bulk density is a measure of the amount of soil particles (matter) in a volume of soil. The core method was used to calculate bulk density (Carter 1993). Soil pits were dug to about 15 cm deep near the center of each plot. The soil was scraped away from one of the walls to access undisturbed soil. The corer was placed horizontally against this undisturbed wall of soil, centered at 5 cm of depth, and tapped into the undisturbed soil column. Soil cores were thereby extracted from a single layer of soil. The ends of the cores were then capped (to maintain the cylindrical volume of the soil sample) and transported to a laboratory at NAU for analysis.

Laboratory Analysis of Bulk Density and Soil Porosity

Soil cores were weighed and then oven dried in their tubes for 72 hours at 105°C. Bulk density (g/cm^3) was then calculated by dividing the weight (in grams) of the dried soil by the bulk volume (in cm^3) of the soil core (Carter 1993). Total soil porosity was calculated by dividing the dry bulk density by the soil particle density value of 2.65 g/cm^3 , which is common for mineral soils like those in the study site (Carter 1993).

Statistical Analysis

The final infiltration rates of the treatment plots were compared to each other using SPSS (SPSS 11.5, SPSS Inc. 2003). Treatment effects were analyzed using one-way ANOVA comparisons of the infiltration rates in each treatment type (large, small, burned, unburned and control). We ran normality and homogeneity of variance tests and accounted for alpha inflation using Tukey's Honestly Significant Difference (HSD) (Zar 1999). In this study we selected a statistical significance level of $\alpha=0.05$.

RESULTS

Soil Bulk Density

The bulk density values of the soils in the entire suite of treatment plots and the control ranged between 1.1 g/cm³ and 1.24 g/cm³ (Fig. 1). This range is very tight with little variation between treatments, and shows no significant differences in bulk density between any of the treatments at the 95% confidence level.

Soil Porosity

In this study, we determined porosity from soil bulk density and soil particle density values. Because there was no significant difference in the bulk density values, we do not expect the porosity values to differ significantly from each other. Table 1 displays the lack of significant difference in soil porosity values between any of the treatments at the 95% confidence coefficient.

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Soil Infiltration Capacity

Table 2 displays distinct differences in infiltration capacity measurements between treatments (p=0.02). Large burned and unburned pile plots had significantly greater infiltration rates than that of small unburned plots (p=0.050 and 0.019, respectively).

However, the patterns of infiltration showed no distinct differences between treatments. All treatments had high initial infiltration rates that reduced to a constant rate within a short period of about 15 minutes (Fig. 2). Typically, the infiltration rate values become constant at about 2 liters (L)/hr. The resulting pattern indicates the absence of any significant formation of hydrophobic layers in the soils.

Soil Moisture Content

The test for soil moisture content shows no significant differences between individual pile sizes, treatment types, and soil moisture contents inside and those outside of the plots (Table 3). However, there are some significant differences in soil moisture content between interactions of size, treatment, and inside/outside conditions. One such difference is between the soil moisture contents of large, burned pile plots (L+B) and that of small, unburned (S+Unb) pile plots (p=0.049) (Fig. 3). Soil moisture conditions inside L+B plots also differed significantly

from the conditions outside the S+Unb plots (p=0.047). However, there are no significant differences

between the soil moisture contents of L+B and that of small, burned (S+B) pile plots or between L+B and large, unburned (L+Unb) pile plots. There are also no significant differences between the soil moisture contents of the control plots and either the L+B or S+Unb plots. Inconsistent variation in soil moisture conditions in these comparisons may be more due to microsite differences than due to differences between treatments.

Other noteworthy differences exist, but differences are at, or around the 0.10 confidence level. These differences are between the soil moisture contents of large, burned plots and those of large, unburned plots (p=0.06), as well as between moisture contents of small burned plots and large burned plots (p=0.11). Similar differences were observed between soil moisture conditions outside the treatment plots. These differences are between soil moisture contents outside small burned (S+B) plots and those outside L+B plots (p=0.11), between those outside S+B

Table 1. ANOVA Test results showing no significant differences in soil porosity between treatment types.

Source	df	Sum of squares	Mean square	F value	Pr>F
Model	13	346.165330	26.628102	1.37	0.2198
Error	36	698.278520	19.396626		
Corrected total	49	1044.443850			

R²=0.331435

Coefficient of variance = 7.823637

Root MSE = 4.404160

Porosity mean = 56.29300

Table 2. ANOVA Test results showing significance in water infiltration capacity differences between treatment types at final infiltration test period (after 111 minutes).

Sum of squares	df	Mean square	F	Significance	
Between groups	7.160	4	1.790	3.264	0.020
Within groups	24.676	45	0.548		
Total	31.837	49			

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plots and outside S+Unb plots (p=0.06), and between those outside S+B plots and outside the control plots (p=0.08).

ANALYSIS OF RESULTS

Soil Bulk Density/Porosity

The results of this study failed to support our

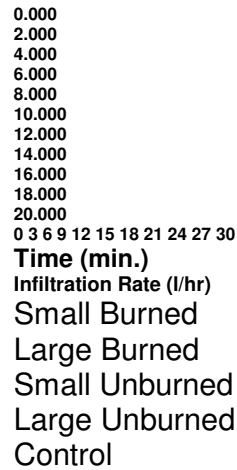
hypothesis that fine particles from wood ash would increase soil bulk density. The absence of significant differences in soil bulk density or porosity values across treatments is intriguing since the fires consumed over 95% (as estimated by the City of Flagstaff Fuels Manager) of the organic material in the burned slash piles. This almost complete burning of the slash piles resulted in copious accumulation of ash in the burned plots. The ash should have introduced

a large amount of fine particles into the soil macropores and thus affected the soil bulk density and porosity values of the plots regardless of compaction or heat effects from fire. Further, fires that generate ground temperatures between 220-460°C can consume the organic matter in soils, deteriorating the soil structure (DeBano et al. 1998). Such deterioration in soil structure in turn would decrease the amount of soil macropores. Since macropores are largely responsible for the rate of water infiltration into soils, any soil structural deterioration that reduces the amount of macropores would lead to a reduction in infiltration rates (Neary et al. 2003). Nonetheless, no such effect appeared in this study. The lack of changes in infiltration rates between treatments is most likely due to (1) the very cobbly structure of the soils, which creates channels for water movement (Brady and Weil 1996), and (2) the absence of changes in soil bulk density and porosity.

Soil Infiltration Capacity

The results of this study also fail to support our hypothesis that increased fine materials from the burned slash would affect the soil infiltration capacity in two ways: (1) the fine materials would plug the porous space through which water moves and (2) form a hydrophobic layer below the surface that retards downward water movement. However, we did not see such effects in this study. While distinct differences exist in infiltration capacity between different treatments, the changes in infiltration rates remain the same across all treatments (Fig. 2); after the first 18 minutes the infiltration rate in each experimental treatment remained almost constant at 1.0-2.2 L/hr. The changes in infiltration rates in the control and unburned plots did not differ from those in the burned plots. This indicates the absence of any significant formation of a hydrophobic layer. Even large, unburned plots, which had considerably higher initial infiltration rates, showed rates similar

to the other treatments after the initial three minutes. Possibly, fine particles of ash and organic material left on the soil surface did not enter into the soil to clog the macropores and produce hydrophobicity because of the lack of precipitation needed to trans-



Figures 2. Infiltration rate (l/hr) versus time (in minutes) during a 30 minutes period. Extension of the period of infiltration test (not shown) indicated some significant differences in the final, constant rates of infiltration in the large burned and unburned plots compared to those in the small unburned plots ($\alpha = 0.05$).

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port those fines down to some uniform layer. Also, rapid wind speeds sometimes prevalent in the study area might have blown most of the wood ash off the study plots before the ash could penetrate into the soil. However, a more probable explanation for the lack of hydrophobicity is that since slash pile fires often produce temperatures from 500-700°C at and slightly below the soil surface, any organic compounds on or near the surface would have been incinerated, thus prohibiting the formation of a hydrophobic layer (Rundel 1983, Neary et al. 1999). As heat from the burning slash penetrated downward through the soil column, soil at some depth would have experienced temperatures between 175-250°C. These temperatures would vaporize any hydrophobic compounds present into gases that can coat the soil particles (Savage 1974, DeBano et al. 1976, March et al. 1994, Giovannini and Lucches 1997). Roberts (1965) found that slash-pile burning can generate temperatures exceeding 250°C as deep as 10 cm in mineral soil. Consequently, while soil layers somewhere below approximately 5 cm would have experienced temperatures between 175-250°C, these soil

layers were probably too deep to have enough organic matter to form an uninterrupted hydrophobic layer.

Soil Moisture Content

The results of this experiment also fail to support our hypothesis that soils in burned plots would have lower moisture contents than soils in unburned or control plots due to the consumption of organic matter, which has large water holding capacity. Soils in large, burned pile plots (L+B) had significantly less moisture content than those outside the small, unburned (S+Unb) pile plots. However, analysis of the main effects of burning and size show that neither result in significant differences. There were also no differences between the controls and either the L+B or S+Unb pile plots. Thus the difference appears to be due to an interaction of size and treatment, however soil moisture data from outside the plots suggest otherwise. Soil moisture content inside the S+Unb plots was similar to the moisture content outside the S+Unb plots (Fig. 3). Therefore site conditions probably affected the moisture conditions

of small unburned plots more than any effect from treatment interactions.

CONCLUSIONS AND RECOMMENDATIONS

In much of the southern Colorado Plateau, burning slash piles is generally conducted in association with forest restoration thinning. Although ground and belowground temperatures were not measured in this study, descriptions of high-severity fire effects (including reddish mineral soil, complete consumption of duff and logs as well as extended char layers) match conditions of burned slash pile plots in the area (Albini et al. 1996, Hungerford 1996, DeBano et al. 1998). Soil temperatures under high severity wildfires can exceed 250°C (DeBano et al. 1998, Neary et al. 2003), while slash pile temperature can exceed 500°C slightly below the soil surface (Rundel 1983, Neary et al. 1999). The severe nature of these burns explains some of the physical properties observed after the slash piles burned.

The changes in soil physical characteristics observed in this study do not appear to conflict with forest restoration goals. Although some differences did exist between burned plots and unburned plots, generally the differences did not show any patterns and often they did not exist between treatments and controls. Water infiltration rates (Fig. 2) exemplified

this point since the rates associated with most of the treatments differed significantly, yet all of the treatments

displayed the same pattern of high initial infiltration rates that decreased quickly to a constant rate. Assuming the slash pile burn effects were severe, this lack of hydrophobicity is consistent with other studies that state that water repellency is destroyed when soil temperatures exceed 288°C (Savage 1974, DeBano et al. 1976). Further, the results suggest that the amount of ash fines, from the burned piles, entering the macro-pores in the soil was insufficient to alter infiltration rates. This corresponds to the results displayed by soil bulk density analysis. Bulk density did not indicate the expected increase associated with soil compaction from piling the slash, nor did bulk density increase in the burned plots due to entry of fine ash particles (Fig. 1). The situation with porosity

is the same, since porosity values were determined from the bulk density values.

Soil moisture content displayed a different situation (albeit not significant) between the large, burned pile plots and the large, unburned pile plots ($p=0.06$) and this implies a potential effect of intense burns of long durations on the soil. However, soil moisture within large, burned plots failed to differ from the moisture content in controls adjacent to, and outside of, the large, burned plots ($p=0.614$). Moisture levels in large, burned plots also failed to differ from moisture levels in control plots ($p=0.814$). According to these results, soil moisture is not significantly affected by the treatments in this study. This result is inconsistent with the idea that newly burned soil surfaces would have increased evaporation due to increased temperatures caused by increases in unimpeded solar radiation falling on the soil surface (Christensen and Muller 1975, Pickett and White 1985, Neary et al. 1999). The extremely low amount of precipitation during the time between

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burning and sampling the soil moisture could have a major influence on our findings. Our findings may also reflect the theory that a decrease or absence of interception by vegetation and OM may result in decreased evapotranspiration of water (Bosch and Hewlett 1982, Whitehead and Robinson 1993, DeBano 1998).

Research in the 1960's and 1970's suggested that non-ionic wetting agents could be beneficial in

counteracting any hydrophobic layer created in soils. Wetting agents have been effectively administered onto soils after intense wildfires in a reasonably successful effort to reduce erosion and runoff (DeBano 2000b). Hydrophobic layers caused by wild fires can exist across landscape scales, and amending the soil to prevent erosion and induce percolation is definitely warranted. However, results in this study, which are based on data from a single dry year, indicate that restorationists and other land managers may not need to amend or treat the soil to offset physical changes from burning hand piled slash since no dramatic effects were observed. This conclusion should be taken cautiously since continued observation of the treatment plots is necessary to witness longer-term effects over different climatic conditions.

A major goal of forest restoration treatments in the Southwest is to thin the ponderosa pine overstory in an effort to reduce catastrophic wild fires as well as to promote understory health to levels of diversity and structure that are both socially and ecologically desirable. We must be careful that the methods we use to restore these forests do not compromise the overall goals that we strive to achieve. To this end, it is important to uncover the mechanisms that may or may not result in habitat reduction for native fauna, and have broad implications for ecological functions, processes, and management. This study has demonstrated that initial (first year) changes in soil infiltration capacity, soil moisture content, bulk density and porosity due to burning of slash piles are not causal mechanisms for habitat reduction since profound changes in these soil characteristics did not occur.

ACKNOWLEDGMENTS

We thank The Arboretum at Flagstaff, and Flagstaff Fire Departments Fuels Management Crew. Support for this study came from the Bureau of Land Management (Grant # PAA-01-7002) through the Ecological Restoration Institute at Northern Arizona University, the State of Arizona Proposition 301, the National Science Foundations Sustainability of Semi-Arid Hydrology and Riparian Areas (SAHRA) (Grant # Y542104), and the USDA Forest Service, Rocky Mountain Research Station (Grant # 01-JV-11221606-214).

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Letter Code: LASSEN FSC

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Secretary
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February 4, 2009

Lahontan Regional Water Quality Control Board
2510 Lake Tahoe Boulevard
South Lake Tahoe, California 96150

The following letters were sent to you during your informal comment period. Please accept them as comments for the formal comment period.

Lahontan needs to extend the exemption of the waiver requirements to the 10% Dead & Dying/Fuelwood Exemption just as they have for the Forest Fire Prevention Exemption and 150' From the Home Exemption. Again we encourage you to adopt the same process that the Central Valley Water Quality Control Board uses as outlined in the attached letters. Any activities conducted under those exemptions are automatically enrolled in the Central Valley's program. No additional filing or paperwork is required.

This is especially important now that governor has laid out a clear mandate to eliminate redundant regulatory activities by state agencies. We can think of no better example of redundancy than Lahontan's parallel regulation of fire safe council fuel treatment activities. The Department of Forestry and Fire Protection is quite capable of ensuring environmental compliance with regard to these minor timber treatments. And they are minor, that is why they are allowed to be conducted under an exemption.

Thank you for your consideration.

Very Truly,

Thomas W. Esgate,
Managing Director

cc: State Senator
Assemblyman
Governor





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 Secretary
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December 4, 2008

Lahontan Regional Water Quality Control Board
 2510 Lake Tahoe Boulevard
 South Lake Tahoe, California 96150

Input and Comments Concerning Timber Waiver Revisions

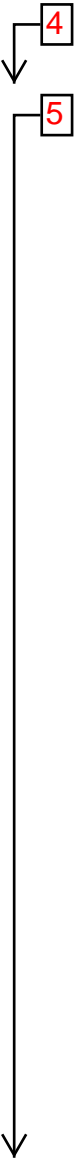
The current Lahontan Timber Waiver process is costing our fire safe council thousands of dollars in unnecessary expenditures, money that could go to into protecting Lassen County communities, and hundreds of hours of staff time for filling out unnecessary paper work. We are hopeful that Lahontan will consider adopting the Central Valley Water Quality Control Board (CVWQCB) model for operating under a waiver. It’s a simple process that automatically enrolls projects operating under CalFire exemptions in the waiver program. The relevant CVWQCB language sets this forth reads as follows:

Eligibility Criteria:

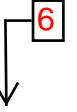
- a. Timber harvest activities (Notices of Exemption or Emergency) within 150 feet of existing structures (i.e., “FireSafe” treatments), harvest of Christmas trees, dead, dying or diseased fuelwood or split products, public agency, public and private utility right of way, fuel hazard reduction, substantially damaged timberland unmerchantable as sawlog and woody debris and slash removal, that are conducted pursuant to a Notice of Exemption accepted by CDF under 14 California Code of Regulations (CCR), will automatically be enrolled in the Waiver.

Lassen County communities within CVWQCB region can be signed up for fire safe and conservation/restoration projects seamlessly and benefit from efficient project implementation at lower costs. The citizens living within the Lahontan Region, and those on the Fire Safe Council charged with landowner sign up, are literally being buried in Lahontan paper work and faced with seemingly endless bureaucratic inquiries and aggressive notices to comply. By the way, in the past 5 years our Fire Safe Council has never received a notice of violation from CalFire for any of our projects.

We strongly urge Lahontan to adopt the CVWQCB model for waivers operating under CalFire exemptions so that scarce fuel reduction funding can be put to work protecting life and property without overburdening and unnecessary regulation. Furthermore, there are also fuel reduction and conservation practices that do not even require CalFire permitting, for example, hand work and mastication. In cases where a CalFire exemption or permit is not required, neither should a filing with Lahontan be required.



There are also technical issues that need to be addressed in the Lahontan waiver process and we strongly urge you to consider the comments of Mark Shaffer, the Fire Safe Council's consulting forester, when revising the process.



Very truly,

Dorine Beckman,
Chair

Cc: State Senator
Assemblyman
Governor

cc: Tom Esgate

County of Lassen
BOARD OF SUPERVISORS



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County Administration Office
221 S. Roop Street, Suite 4
Susanville, CA 96130
Phone: 530-251-8333
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November 25, 2008

State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

Re: Input and Comments Concerning Timber Waiver Revisions

Dear Representatives:

The current Lahontan Timber Waiver process is costing our local Fire Safe Council thousands of dollars in unnecessary expenditures, money that could go into protecting Lassen County communities, and hundreds of hours of staff time filling out paper work. We are hopeful that Lahontan will consider adopting the Central Valley Water Quality Control Board (CVWQCB) model for operating under a waiver. It's a simple process that automatically enrolls projects operating under CalFire exemptions in the waiver program. The relevant CVWQCB language that sets this forth reads as follows:

Eligibility Criteria:

- a. Timber harvest activities (Notices of Exemption or Emergency) within 150 feet of existing structures (i.e., "FireSafe" treatments), harvest of Christmas trees, dead, dying or diseased fuelwood or split products, public agency, public and private utility right of way, fuel hazard reduction, substantially damaged timberland unmerchantable as sawlog and woody debris and slash removal, that are conducted pursuant to a Notice of Exemption accepted by CDF under 14 California Code of Regulations (CCR), will automatically be enrolled in the Waiver.

Lassen County communities within CVWQCB region can be signed up for fire safe projects seamlessly and benefit from efficient project implementation at lower costs. The citizens living within Lahontan Region, and those of the Fire Safe Council charged with landowner sign up, are literally being buried in Lahontan paper work and faced with seemingly endless bureaucratic inquiries and notices to comply. Please note that in the past 5 years, the Fire Safe Council has never received a notice of violation from the CalFire on any of their projects.



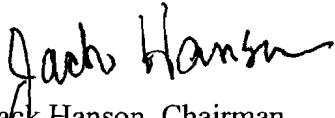
We strongly urge Lahontan to adopt the CVWQCB model for waivers operating under CalFire exemptions so that scarce fuel reduction funding can be put to work protecting life and property without overburdening and unnecessary regulation.

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There are also technical issues that need to be addressed in the Lahontan waiver process and we strongly urge you to consider the comments of Mark Shaffer, the Fire Safe Council's consulting forester, when revising the process.

9
↓

Sincerely,



Jack Hanson, Chairman
Lassen County Board of Supervisors

cc:

Governor Arnold Schwarzenegger
State Capitol
Sacramento, CA 95814

Senator Dave Cox
State Capitol, Room 2068
Sacramento, CA 95814

California Resources Agency
Mike Chrisman, Secretary
1416 Ninth Street, Suite 1311
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State Water Resources Control Board
Dorothy R. Rice, Executive Director
1001 I Street
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Lahontan Regional Water Quality Control Board
2510 Lake Tahoe Boulevard
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DEPARTMENT OF FISH AND GAME

http://www.dfg.ca.gov
Inland Deserts Region
407 West Line Street
Bishop, CA 93514
(760) 872-1171
(760) 872-1284 FAX



Letter Code: DFG

February 9, 2009

Ms. Andrea Stanley
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

Subject: Revision of Conditional Waiver of Waste Discharge Requirements for Timber Harvest and Vegetation Management Activities in the Lahontan Region

Dear Ms. Stanley:

The Department of Fish and Game (Department) has reviewed the Initial Study (IS) supporting a Mitigated Negative Declaration (MND) for the above referenced project. The proposed project is the Revision of Conditional Waiver of Waste Discharge Requirements for Timber Harvest and Vegetation Management Activities (THW) in the Lahontan Region.

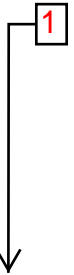
The Department is providing comments on the IS/MND as the State agency which has statutory and common law responsibilities with regard to fish and wildlife resources and habitats. California's fish and wildlife resources, including their habitats, are held in trust for the people of the State by the Department (Fish and Game Code §711.7). The Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitats necessary for biologically sustainable populations of those species (Fish and Game Code §1802). The Department's Fish and wildlife management functions are implemented through its administration and enforcement of Fish and Game Code (Fish and Game Code §702). The Department is a trustee agency for fish and wildlife under the California Environmental Quality Act (see CEQA Guidelines, 14 CCR 15386(a)). The Department is providing these comments in furtherance of these statutory responsibilities, as well as its common law role as trustee for the public's fish and wildlife.

The Department offers the following comments and recommendations.

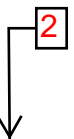
As mentioned by Department staff during the scoping process, the large geographic area and multiple purposes for projects should be acknowledged. Vegetation management in Los Angeles County during winter will be extremely different from the same in Mono or Modoc counties. Requirements to protect the environment in each of these areas can be very different. For example, winter conditions may mean snow in one area--which could reduce discharge if project implementation were to occur during that season--or rain in another, during which project implementation would increase

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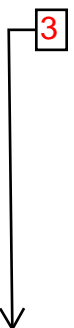
discharge. Complicating matters are a multitude of factors like soil type, slope, vegetation type, and project purpose. Separate waivers with titles indicative of project purpose (e.g. Aspen Regeneration, Invasive Species Removal, Meadow Restoration) would also help to clarify the purpose and need of the “waiver” or “waste discharge requirements” for property owners and land managers when conducting timber harvest or vegetation management activities. Many landowners, including agency land managers, are not aware of these requirements for habitat restoration projects.



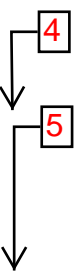
The stated purpose of the revised THW is to simplify the waiver for users and promote fuels reduction while ensuring protection of water quality. It appears that the proposed rules do simplify the process for projects in densely developed areas (less than 3-acre parcels). However, the Department is concerned that including mechanized equipment entry within riparian zones (projects under the proposed Category 1) may pose threats to riparian habitat and water quality because there are no notification requirements for these activities.



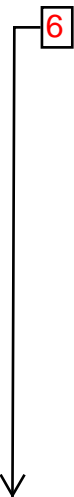
As a trustee agency for fish and wildlife resources, the Department is often involved with reviewing, approving, funding, and conducting various vegetation management activities on both private and public lands. A major concern of the Department under the proposed THW is the requirement to use a Registered Professional Forester (RPF) or Federal Forestry Professional (FFP) under Category 2, 4 and 6. Categorical Exemptions, such as CEQA Guidelines §15304(d), exist to reduce onerous requirements for projects that are conducted for the benefit of California, and in the Department’s case, specifically for the benefit of California’s natural resources on State lands. Under these circumstances, as a trustee agency over fish and wildlife resources, the Department would rely on its professional staff, rather than an RPF or FFP to make resource determinations.



Commercial projects should be regulated differently from projects that are attempting to address vegetation management for ecosystem health or to reduce the threat of catastrophic fire in riparian and wetland areas. Small construction sites and small parcels, especially those adjacent to waters of the state, have the potential to cause more damage to water quality due to the cumulative impact of multiple projects and the potential for already impaired riparian and upland habitat that will not buffer or prevent discharge as well as larger, undeveloped or low-density areas with intact vegetation.



For small projects that do not precisely fit under proposed Category 1, the Department foresees a reduction in restoration projects that would be beneficial to wildlife habitat in riparian areas. Economically restricting rules, such as requiring an RPF for riparian work, and protracted monitoring requirements may deter project proponents. The Department acknowledges that the public may not be aware of potential project impacts to water quality and wildlife habitat. However, when natural resource agency professionals work closely with landowners to improve wildlife habitat (e.g. through the Federal Partners for Wildlife Program), incorporated agency involvement should be more than adequate to determine which trees should be removed during a project. The Department recommends that projects on private lands that are conducted for habitat



restoration and in close collaboration with a natural resource agency (i.e. an agency with the purpose of managing and improving conditions for wildlife), be included in Category 1.

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The Department reviews, approves, funds, and conducts many invasive species removal projects that focus on deleterious plants in the riparian corridor. These projects are often conducted by non-profits or local agencies and are funded by small grants. Example projects include: conifer removal from aspen groves; tamarisk, locust, and Russian olive removal from riparian corridors; juniper and pinyon pine removal from sage meadows; and other habitat restoration/invasive species control type projects. The requirement that an RPF be involved for any riparian work involving removal of trees greater than 3 inches dbh neither ensures habitat protection nor promotes future habitat restoration work in light of the current economic climate in California (e.g. reduced grant monies available for these types of projects). Conditions 2, 3, and 4 under Category 6 that require an RPF or FFP to identify various criteria can be done by other natural resource professionals. Although tamarisk removal utilizes hand crews, the cut and paint method of applying herbicide will push these projects into Category 6, which will require an RPF or FFP to mark any tamarisk, Russian olive, Tree of Heaven or other invasive species over 3 inches dbh. Under the 2007 waiver, there is a requirement that scientists with stated minimum qualifications be involved where sensitive habitat is being treated (in addition to the RPF or FFP which is a requirement specific to the Lake Tahoe). In the proposed THW, this requirement has been omitted and is now only under the purview of an RPF or FFP. The Department recommends that an appropriately-qualified natural resource professional be added as an option to the current RPF or FFP requirement and hopes that Board staff can work with the Department to encourage and facilitate non-profits to continue invasive species removal.

7

Waiver specific comments

Attachment C. The application for Category 4 erroneously states that there are 11 rather than 10 criteria.

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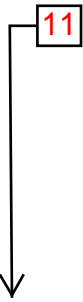
Page 6, 14(c). States that the waiver will balance the need for fuel hazard reduction with protection of water quality by expediting permitting for lower impact fuels hazard reduction and forest enhancement projects. The Department does not agree that the RPF/FRF requirement for riparian work is the only (or best) way to accomplish this-- there are many other natural resource professionals trained in land and wildlife management that are qualified to determine how to achieve desired project outcomes while minimizing impacts to natural resources. Conditions for Category 1, unless public education is included as a component of this waiver process, are of concern to the Department and should be reevaluated.

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The Department commends and appreciates the goal of waiver General Provision 2 that allows for the division of projects into more than one category.

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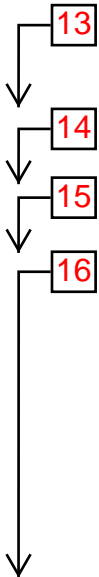
The Table 1 summary is not complete with regard to categorical caveats, so direction should be made to reference the text for further information regarding Category criteria. For example, Category 1 defensible space/fire prevention could indicate to a project proponent that their project would not require notification. Within the body of the document, however, Category 1 is further defined to be limited to parcels of 3 acres or less. The Department understands that the table is a summary, but makes this recommendation to prevent the reader from coming to an erroneous conclusion about the category requirements.



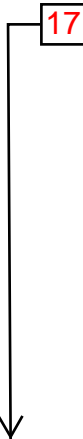
Unfortunately, many species of herbaceous and woody plants have invaded the riparian corridors of California. Invasive species removal may require the take of trees larger than 3 inches dbh. In addition, proper application of cut and paint herbicide, in a localized, targeted application, is often the most effective method to remove many invasive plant species, and it seems much more controlled than dry application of borax salts that can blow or wash into waterways during or after application. Revised Category 4 prohibits herbicide use, except dry application or borax or sporax. The Department hopes that the Board will consider adding 'cut and paint applications' of herbicides designed to be used near water into Category 4.



The Department questions the rationale that places 'construction activities' in Category 1, regardless of proximity to waters of the state. The Department recommends that Category 1 projects should have the same protective measures regarding work in the riparian as Category 2, and suggests that project size rather than parcel size is the deciding factor of whether a project should require more or less monitoring reports and restrictions. One suggestion would be to combine Categories 1 and 2, with the new category having water zone restrictions that are now in Category 2. In addition, the Department questions the rationale that allows mechanical access off existing roads in Category 1, but not Category 2, and, in fact, in any other category, off road mechanical equipment (tractors, masticators, etc.) use invokes higher monitoring requirements. While the Department comprehends that damage can occur with repeated off road use, a one-time project where off-road use is not expected to create ongoing erosion issues or create new roads should be used as criteria that allow projects to fall under Category 1. That is, if off-road access is required, but the project proponent does not perceive habitat damage due to limited access events and work on low-gradient, non-saturated soils, the project should fall into Category 1.



The IS/MND and draft waiver (Page 3 and 5, respectively) both define a myriad of projects that fall under 'timber harvest and vegetation management activities,' none of which includes commercial harvest. It is perplexing, therefore, that an RPF or FFP is required to mark trees for projects such as aspen regeneration, meadow rejuvenation, fuels reduction, and invasive species removal. It seems that the Board is using excerpts from the Forest Practice Rules that focus on revenue-generating projects with goals quite different from those that would be implemented to improve wildlife habitat. In addition, as commercial harvest is not listed in the definition of projects covered by this waiver, as mentioned previously during scoping, it is suggested that the current



nomenclature for the waiver be changed to delete or relegate to a subtitle the phrase “timber harvest.” Agencies, non-profits, and individuals conducting restoration will be more likely to comprehend that a waiver is necessary and implement Board requirements under a “vegetation management waiver.”

17

IS/MND specific comments

It is within the authority of the Board to regulate land uses in a watershed that may infuse pollutants into waters of the state. Requiring RPFs or FFPs to implement Board standards seems beyond that realm of authority. Many other classifications of natural resource professionals are perfectly capable of assessing watershed conditions and implementing projects that meet Board standards. Whether the project is on private, State, or federal lands, there are numerous classifications natural resource professionals qualified to make the requested determinations, an RPF not necessarily being the most desired classification for designing a restoration project for aquatic species, for example. Thus, additional personnel would be required, and in many cases, the RPF or FFP would not already be on staff, thus would need to be contracted. The Department is concerned that this specific requirement will either encourage more revenue-generating timber harvest projects to pay the salary of the RPF or discourage fuel reduction and habitat restoration projects due to the extra costs incurred by this requirement.

18

The Department questions the inconsistency of requiring RPFs or FFPs to mark trees, while placing the possibly more important component of monitoring water quality on project proponents with no required qualifications. This implies that a skidder operator or high school level summer intern has the expertise to determine impacts to aquatic invertebrates, for example, but a biologist or agency land manager does not have the capability to determine which trees should be removed to improve habitat or remove an invasive species. The Department suggests providing guidelines of what may cause an impact to water quality for private individuals conducting projects--especially with regard to Category 1 projects.

19

Page 7: The categories are organized based on threats to water quality, but the Department perceives that small parcel owners may have larger impacts to water quality due to potential higher density of impacts than projects on large public or private lands.

20

Page 17: The IS/MND assumes that the waiver is in compliance with the Basin Plan, and that projects will be designed and implemented to “ensure biological resources are protected, and any impacts will be reduced to less than significant levels.” But the only professional required is an RPF. Thus, “protection or enhancement of fish passage and protection of riparian vegetation”...is dependent upon an RPF while a Fishery Professional has no authority within the confines of this waiver to conduct a project that may require removal of trees without obtaining the assistance of an RPF.

21

Page 18: Simply because an area is urban or industrial does not mean that impacts to water quality are low. Category 1 is described as very low or no threat to water quality, yet includes construction clearing and urban defensible space. The Department would rather see criteria such as low slope, stable soils, vegetation type and density, distance to water, as criteria--as they are in some of the other categories. As previously stated, restoration projects should have a separate waiver with different criteria/requirements from commercial timber harvest, the method and monitoring may be the same, but the goal of restoration projects is to improve habitat quality and stability of sites--including water quality (a goal much different from commercial timber harvest).

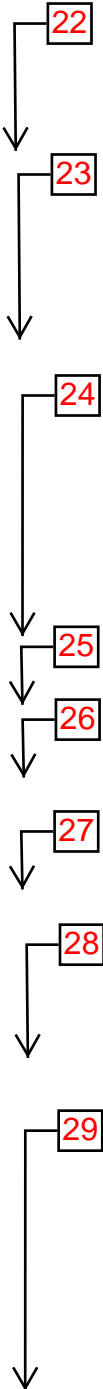
Page 26 states that the categorical treatment of timber harvest activities is designed to ensure that impacts from soil erosion will be less than significant. These categories and projects vary from those conducted around existing structures, which fall under Category 1 with low or no threat to water quality, to timber harvest activities on sensitive land which fall under Category 6. Category 1 allows activities up to the water's edge, regardless of the type of water, which does not seem to imply 'very low or no threat' to water quality, while the same activities within 75 feet of a fish-bearing water on a larger parcel, fall within Category 6. The Department also questions the zoning requirements. Why are agricultural and resource management zones not included in Category 1? Why does a parcel size of 'less than 3 acres' reduce the potential impacts to water quality rather than the project size and project components?

Page 37: Is an RPF required for all categories except Category 1 if trees greater than 3 inches dbh are being removed?

Page 37: It would be beneficial to cite the studies that demarcate the difference in impact between 10 pounds per square inch and 13, since 10 can be utilized in Category 2, but if it's 13 pounds per square inch, the project moves into a more restrictive category .

The Department's current understanding of this waiver is that it assumes that all habitat restoration projects to reduce fuel, remove invasive species, etc. will result in waste discharge almost with no regard to proximity to water, project design, soil type, and slope. The Department agrees that water quality standards should be upheld, and that notification should occur for work where a discharge is expected. However, for vegetation management projects where no discharge is anticipated, the Department questions the notification, monitoring reports, and RPF requirements being put forth in this waiver.

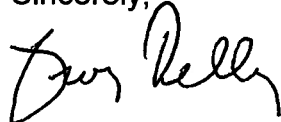
The Department appreciates and supports the attempt to streamline the process of notification for waivers of discharge and to reduce potential threats to water quality and hopes that our recommendations will assist in accomplishing this goal.



Ms. Stanley
February 9, 2009
Page 7 of 7

If you have any questions or comments, please contact Ms. Dawne Becker via email at dbecker@dfg.ca.gov or at the letterhead telephone number or address.

Sincerely,

A handwritten signature in black ink, appearing to read "Troy Kelly". The signature is written in a cursive style with a large initial "T" and "K".

Troy Kelly FOR:

Brad Henderson
Habitat Conservation Supervisor

cc: Dawne Becker
Troy Kelly



Sierra Forest Legacy
Protecting Sierra Nevada Forests and Communities



League to Save Lake Tahoe

California Regional Water Quality Control Board,
Lahontan Region
Attn: Andrea Stanley
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150

February 9, 2009

Letter Code: Sierra Club, SFL, and League

Dear Ms. Stanley:

We submit the following comments on behalf of the Sierra Forest Legacy, the Tahoe Group of the Sierra Club and the League to Save Lake Tahoe. We would like to thank the Lahontan Water Board (hereafter “Lahontan”) for the opportunity to provide comments on the Draft proposed Region-wide Timber Waiver (“Waiver”). We agree that there is a need to better streamline the permitting process for fuels reduction projects and appreciate Lahontan’s efforts to improve its Regional Timber Waiver. However, as discussed in previous letters and meetings with staff, we have concerns that the proposed changes to existing law portend a substantially reduced role for Lahontan in protecting water quality within its region. As stated in our 12/5/08 letter on the working draft, we expect Lahontan to complete a comprehensive environmental review for these proposed changes, as required by the California Environmental Quality Act (“CEQA”), Pub. Res. Code § 21000 *et seq.* As discussed further in this letter, the documentation provided with the proposed Waiver fails to perform this review as it relates to the entire Lahontan Region, and specifically the Lake Tahoe Basin, which as a designated Outstanding National Resource Water (ONRW), affords special protection.

However, we do not believe that including the necessary information will require a significant investment of time and resources by Lahontan staff. Rather, according to recent discussions with staff, much of the information we expect appears to be available and/or known to Lahontan staff and simply needs to be included in the proposed waiver and/or environmental analysis so the public is provided with the same information Lahontan used to inform proposed changes. In other areas, proposed changes are not supported by adequate scientific evidence; in these cases, we recommend that other Categories and/or regulations available in the proposed waiver (for example, regulations for demonstration projects) allow for fuels reduction projects which are eligible for the Waiver to proceed but to be done in a way which prevents significant impacts while providing important scientific information that can be used to guide the development of future projects.

We remain hopeful that Lahontan will take responsible action that ensures the improvement in water quality and other beneficial uses that Lahontan is charged to protect under California law while still allowing for necessary fuel reduction activities to occur.

Jennifer Quashnick,
Tahoe Area Sierra Club

Carl Young
League to Save Lake Tahoe

Michael Graf
Sierra Forest Legacy

1

Demonstration Projects:

Demonstration Projects were the subject of extensive discussion during the Tahoe Fire Commission process and vegetation management workshops. There has been a general recognition by all parties involved that more data is needed regarding the environmental impacts of fuels reduction activities and possible mitigation measures, especially in sensitive environments like stream environment zones and on steep slopes. However, because it is important to implement fuels reduction projects in a timely manner, efforts have focused on developing ways to complete projects without causing significant environmental impacts while gathering the data necessary to meet the following objectives:

- 1) Answer remaining research questions regarding the impacts of various methods;
- 2) Evaluate the efficacy of BMPs/mitigation measures; and
- 3) Prevent significant impacts through adapting project activities when data indicate impacts are occurring.

As a result, recent workshops and scientific reports have focused on implementing fuels reduction projects with consistent monitoring methods to answer remaining research questions.

Once a demonstration project has proven a method and/or BMP is effective at preventing significant impacts, this information can be used to guide future projects without the additional monitoring requirements. For example, the Heavenly Creek SEZ project demonstrated that the impacts of the cut-to-length harvester, *as used in those specific conditions*, were less than significant. Thus, these methods have been proven acceptable for use in future projects with comparable conditions and the additional monitoring requirements associated with demonstration projects would not be needed.

Lahontan should incorporate a section into the Waiver, where appropriate, which addresses demonstration projects. In fact, we heard project implementers express the same request during the public workshops held in November. As discussed with Lahontan staff during our 2/4/09 meeting, we request that language be added to Category 6 to recognize that demonstration projects may proceed with Executive Officer approval of the approach (additionally, the Waiver should reiterate General Provision 4 as well). The Waiver must clearly define what a demonstration project is. In addition to implementation, effectiveness and forensic monitoring (required for other Category 4 and 6 projects), all demonstration projects will require quantitative monitoring of impacts to soils, vegetation recovery, infiltration rate, etc. Monitoring protocols will be approved on a case-by-case basis and will be required prior to the start of the project, during the project, immediately after completion and following the winter after a project has been completed.

Once a demonstration project has shown that activities can be successfully mitigated and/or a given BMP is effective in appropriate situations, then such activities/BMPs can be used in other projects eligible for the Timber Waiver under comparable conditions.

Pile Burning in Sensitive Waterbody Buffer Zones

As discussed at our 2/4/09 meeting with Lahontan staff, mitigation for pile burning in sensitive Waterbody Buffer Zones (e.g. stream environment zones ([SEZs] in Lake Tahoe Basin) has yet to be proven effective. Fortunately, there are proposed demonstration projects in the planning stages which aim to investigate such mitigation (e.g. Alpine Meadows). However, the proposed Waiver allows pile burning in SEZs when impacts can be mitigated based on the expectation that during the 5 year time frame of the Waiver, new information will be gleaned from such demonstration projects that there will eventually be proven mitigation options. However, because this ‘placeholder’ concept is not clear in the proposed Waiver, we request the Timber Waiver specifically include a requirement that until effective mitigation measures have been determined, pile burning in SEZs should only occur if the project includes a demonstration component incorporating rigorous scientific data collection and analysis that examines the effectiveness of the mitigation measures. Once effective mitigation measures have been proven, future projects in comparable conditions could proceed under the Timber Waiver Category 6, Condition 18 without requiring a demonstration component.

3

Selection of environmental thresholds of allowable disturbance

As stated in our 12/5/08 comments:

“The proposed Waiver includes significant revisions to the waiver categories, aimed at creating categories associated with environmental impact, rather than land ownership or which entity is implementing a project. The scientific basis for the selected ‘impact’ limits must be provided in the environmental documentation. For example, the working draft (Category 2) proposes to allow equipment up to 10 pounds per square inch (psi) off of existing roads¹ without notification or monitoring. In this example, we expect the environmental documentation to include adequate scientific evidence supporting the selection of the 10 psi limit. The document should also evaluate alternative ‘impact limits’ and their effect on the environment and project implementation and monitoring.”

4

The proposed Waiver and Initial Study (IS) did not include this evidence. Per CEQA, the public must be provided the same information that Lahontan has used to proposed the new Waiver. Further, a member of the public should be able to view the evidence and understand how Lahontan selected the values it has proposed. Yet based on answers received at our 2/4/09 meeting with Lahontan staff, it appears that several values were chosen based on ‘institutional knowledge’ by Lahontan staff, and the only way for the public to find out this information is to contact Lahontan staff and make specific requests. This is certainly not the type of informational document required by CEQA.

Lahontan must include all evidence, including analyses, comparisons, references to other documents, etc., in the environmental review for the proposed Waiver. The environmental review must assess every impact of the proposed Waiver, the extent of that impact and how it is mitigated or addressed in the proposed Waiver.

Several categories allow equipment in sensitive “Waterbody buffer zones” up to 13 psi. In order to conclude that this ‘limit’ will not result in significant impacts, there must be evidence showing no impact on all soil types that would be encountered by projects in the Lahontan Region. We could not find any such evidence in the IS or associated references.

5

¹ Except within 25 feet of a water body.

Lahontan staff confirmed that no such evidence exists; the only study of such impacts in SEZs appears to be the Heavenly Creek SEZ project, which only tests equipment on the particular soil types in the project area. In fact, the project documentation recognizes that additional research on other soil types is needed:

“Monitoring should also be conducted where CTL technology is proposed for use on sites that have significantly different site conditions, including steeper slopes, soils with a higher silt-to-clay content, or less pre-existing vegetation cover in the form of grasses and shrubs.”

(Heavenly Creek SEZ Demonstration Project, 2007 Soil Monitoring Report, USDA Forest Service, LTBMU, page 20).²

According to the LTBMU Heavenly Creek Final Report, the USFS intended to work with Lahontan and TRPA to further investigate the use of equipment on other soil types:

“...A procedure will be developed by LTBMU staff for comparing the sensitivity of the Heavenly SEZ site relative to other SEZ sites proposed for future mechanical treatment. The delineation criteria for comparison will incorporate the characteristics of SEZs that make them prone to impacts from mechanical operations, such as connectivity to ground water and surface water, soil type, and slope. The criteria and methodology for comparing SEZ characteristics will be reviewed by staff at the Lahontan Regional Water Quality Control Board and the Tahoe Regional Planning Agency prior to its application...”

Were the criteria and methodology developed and peer reviewed? Is there a scientific report available from the USFS outlining their methods, results and conclusions? It appears that the USFS planned to investigate the use of cut to length equipment on other soil types *prior to its application*, yet no further research was performed. How can Lahontan conclude no significant impact if the impacts are unknown?

In summary, the environmental documentation fails to assess the impacts of allowing equipment up to 13 psi on all soil types in the Lahontan Region, and thus fails to analyze the environmental impacts of the proposed project. The same question exists for the allowance of equipment up to 10 psi found in category 2. Further, the document fails to analyze any alternative ‘limits’.

Lake Tahoe’s designation as Outstanding National Resource Water (ONRW):

We are pleased the proposed Waiver has been developed to include the Lake Tahoe Basin in the event it is not covered by another waiver. Lake Tahoe is a designated ONRW and a world-known National Treasure with a very fragile watershed and ever-decreasing clarity. However, it appears that only two areas within the proposed waiver may afford Lake Tahoe the additional protection it requires, which are provisions in Category 6 (as they reference possible prohibition exemptions) and Attachment O, which identifies additional USFS monitoring provisions for 303(d) water bodies (or those at or above TOC). Where is the analysis of how the Waiver will achieve Lake Tahoe’s more stringent environmental standards on all projects? This analysis must be included and presented clearly in the environmental documentation.

² http://www.fs.fed.us/r5/ltbmu/documents/ecd/2008/Heavenly_Creek_SEZ_Report_Final.pdf

Comparison between existing and proposed Waiver:

The CEQA documentation does not provide an analysis of how monitoring requirements will change throughout the Lahontan Region (including the Tahoe Basin) as a result of the new waiver. In particular there is inadequate analysis of how the Forest Service will monitor projects subject to this waiver. For example:

7

- The documents fail to provide a clear comparison of the existing versus proposed waiver’s regulation of various activities. For example, what are the existing requirements compared to proposed requirements for projects that would fall in the proposed Category 2? Upon what evidence are any regulations (primarily monitoring and reporting requirements) reduced?
- How do the proposed monitoring and reporting requirements specifically compare to the existing “Monitoring and Reporting Program?” A simple tabular representation would help inform the public of the changes being proposed, including examples of typical fuels reduction projects and how they would be covered under the current versus proposed Waiver.

7a

7b

Additional Concerns for the Lake Tahoe Basin:

We remain particularly concerned about this issue given that Lahontan's waiver for the Tahoe Basin is currently before the State Board on review. If the State Board grants our Petition, we do not believe that the current CEQA documents for this regional waiver would constitute an adequate analysis of the issues regarding water quality in the Tahoe Basin.

8

To the extent Lahontan believes that this waiver would be controlling in the event the State Board were to grant the Petition, it must analyze the effects of reducing the monitoring components of the 2007 waiver as applied to projects in the Tahoe Basin. Accordingly, we hereby incorporate our previous comments, expert declaration and submitted evidence as part of these comments as well.

Other comments:

On page 10 of the proposed waiver, we recommend Lahontan clarifies how much ‘advance notice’ is needed as required in number 7. Notice should provide adequate time for Lahontan to assess impacts of the change.

9

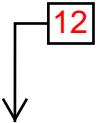
The existing waiver requires the submission of maps and other project information (page 4, number 8). Lahontan staff explained that this information will remain available under the proposed Waiver, yet not actually *required*.. We request the proposed Waiver/IS discuss what information will be available and where the public can access such information.

10

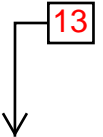
On page 12 of the proposed Waiver, we recommend Lahontan add the following (in bold): “...(3) No construction of new landings **or expansion of existing landings.**”

11

On page 13 and in other areas, the new Waiver limits chipped material in Water zones to 2 inches average and 4 inches maximum. As we stated at the 2/4/09 meeting, the environmental documentation should explain what this limit is based upon and the reason it was selected.

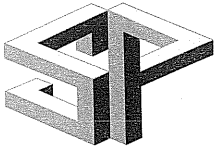


Additionally, the same section, number 7, includes requirements based on a specific forecast. The environmental documentation should explain the basis for the selection of these parameters and include historical weather data showing actual conditions occurring after these forecasts.



As we stated at the 11/14/08 public workshop, Lahontan should review and assess the adequacy and success of the 2007 MRP before making changes to the program. How can Lahontan assess what has been effective and what needs improvement without reviewing how the program has operated since its adoption in February 2007? In the proposed Waiver, several changes are proposed to the monitoring and reporting requirements; we reiterate our request that Lahontan first examine how well existing requirements have performed before proposing such changes.



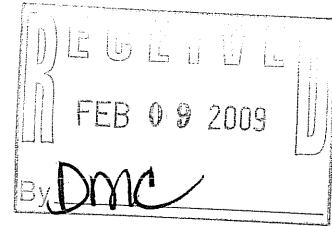


Sierra Pacific Industries

Tahoe District • P.O. Box 1450 • Cedar Ridge, California 95924 • (530) 272-2297

February 5, 2009

Mr. Douglas Cushman
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150



Email: dcushman@waterboards.ca.gov
Phone: (530) 542-5417
Fax: (530) 544-2271

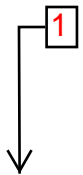
Dear Mr. Cushman,

First of all I'd like to thank you for incorporating some of the public concerns into your revised waiver language.

I have reviewed the (Tentative) Conditional Waiver of Waste Discharge Requirements. My comments and questions follow. Comments are bullet pointed and followed or preceded by context taken from the Document.

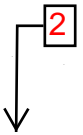
Page 2 (Table 1)

- Category 3: Following our discussion I reviewed this Category. It appears to only include "Public" agencies as written here but in the Category description (page 13) it appears private individuals or companies can use this one too under certain circumstances. Can you please clarify this?



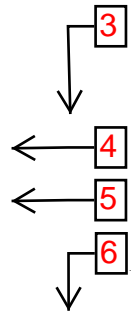
Page 14 (Category 4), Eligibility Criteria 8:

- Some mechanical sides will deck on sideslopes (>20%) without earthwork being needed. Would recommend adding some language here to reflect that this entails earthwork (grading, shaping).



Page 17 (Category 5), Conditions 2-4:

- Condition 2: By "clearly" indicating do you mean a simple yes or no statement or is mapping required for the 4 items (I am assuming mapping). Items a,b,c are already required to be mapped for THP's; item d is not.
- Condition 3: Once again, a yes or no statement?
- Condition 4: Yes or no statement?



○ Item a:

- 1. Do you mean existing skid trails also or newly constructed skid trails?

- 2. Is this an average slope over 20 acres (as per FPR 934.2(f)(2)?
This requirement is above and beyond the Forest Practice Rules.
 - As this was mentioned also in my previous letter I would appreciate an explanation as to why your agency thinks this is appropriate and what, if any, additional mitigation you would require for tractor operations on these slope gradients.
- Condition 1: Activities may begin upon receipt... (Page 3 "Application processing timeline states 5 working days)



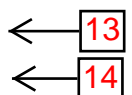
General observations:

- Categories 4 and 6 both list using the daily monitoring forms if operations occur past October 15th. Both categories also state: "All areas disturbed by timber harvest and vegetation management activities must be stabilized at the conclusion of operations or before October 15th". These statements seem to contradict each other.
- Categories 4 and 6 Application Forms both ask for location of all existing watercourse crossings (Item #9/10: Map of project area). Do you want all existing CMP's mapped? Would prefer changing this to *all existing temporary watercourse crossings where work is proposed*. (which is already requested in the Specific Project Information)
- SPI has used its' own monitoring forms up to this point and is hoping to continue to use these forms.
- Concerns with the timing of Category 6 for both start of operations and herbicide application. (30 day waiting period)
 - After discussing these issues with you with you I am more assured we will be able to pursue earlier starting times as long as we communicate our needs for timelines on specific operation(s).



Typos?

- **Category 4 Application Form** (lists 11 criteria instead of 10)
 - Item 8: Describe activities on slopes >20% ????

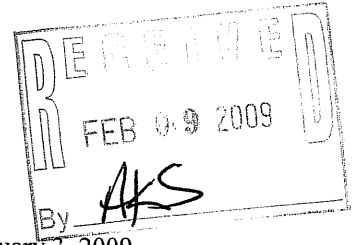


Thank you for allowing us to review and comment on your project.

Sincerely

Doug Praetzel
Forester-Sierra Pacific Industries
RPF #2402

Brett Emery
P.O. Box 758
Bridgeport, CA 93517
760/920-0734



February 3, 2009

Letter Code: EMERY

Andrea Stanley
Lahontan RWQCB
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150

Re: Comments on proposed 2009 Timber Waiver Program.

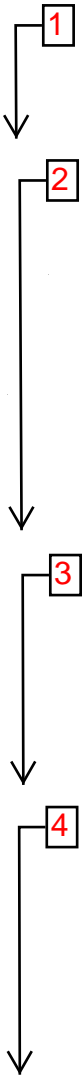
I received a copy of the 2009 proposed revisions to the Timber Waiver Program and would like to comment on the Program and some of the proposed changes.

It is not clear from the accompanying documents that there are data substantiating a region-wide need for this level of regulation, especially in the case of infrequent entry, non-commercial fuel reduction or habitat enhancement projects. It appears that the standards applied in the Tahoe Basin under the 2007 Timber Waiver Program are now arbitrarily being imposed on the Region as a whole.

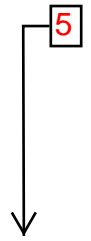
It is also not clear why the proposed Lahontan Region Timber Waiver Program appears to rely so much on the California Forest Practice Rules and Registered Professional Foresters/Federal Forestry Professionals to supervise vegetation management activities that have minor incidental or no commercial timber harvest component. Timber management activities that are subject to Forest Practice Rules primarily include sustainable yield of commercial species, with secondary concerns about fuels reduction and restoration of forest structure, and little to no concerns about restoration of declining habitat or non-commercial species (eg. riparian forests, pinyon/juniper forests). Commercial harvest of sawlogs and/or fuelwood is an important and appropriate component of some, but not all, fuel reduction and restoration activities. The application of the California Forest Practice Rules and oversight by RPFs/FFPs is in part responsible for the current condition of our forests. Forest Practice Rules should continue to be revised and applied where commercial timber harvest activities take place, but it is not appropriate to apply them to fuel reduction and habitat enhancement projects that do not include commercial harvest.

Perhaps the Regional Board should consider structuring separate Waiver Programs - one for commercial timber harvest activities (which would fall under Forest Practice Rules, revised to address the concerns of the Lahontan Regional Board), and another for infrequent vegetation management activities primarily focused on fuel reduction and restoration projects. Separate programs with separate titles would also help to clarify the purpose and need of the programs for property owners and land managers. In my experience, many property owners are uncomfortable signing an application labeled "Timber Waiver", thus compromising the effectiveness of community or watershed scale fuel reduction and restoration efforts.

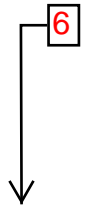
Forests, brushlands, and grasslands in the Lahontan Region evolved under conditions where disturbance from fires occurred relatively frequently. Riparian forests are adapted to the added disturbance of overbank flows. Attempting to manage forests and brushlands without consideration of natural disturbance regimes and their effect on baseline water quality is inappropriate. Prescribed fire and fire use are important for restoring and managing lands in the Lahontan Region, and should not only be available, but promoted as appropriate tools for land owners and managers. Disturbance and impacts to water quality from properly applied fire is minimal compared to the disturbance and impacts to water quality from watershed and regional scale fires that result from lack of or inappropriate management.



Category 1 projects. Why is there a three acre limitation on parcels eligible for this category? Are there data to support negligible impacts associated with projects at this scale? The threshold of a three acre or less residential lot size may be appropriate in areas such as the Lake Tahoe Basin, Truckee, or Mammoth Lakes, but is not appropriate to the majority of lands within the Lahontan Region. In areas with smaller parcel size, threats to water quality may already be greater than in those areas with larger parcels. Impacts from landscaping, pesticide use, vehicle use, disposal of pet and yard waste, and encroachment into waterbody buffer zones already exist in many of these areas. Projects eligible under Category 1 should be expanded to include larger residential parcels.



Why are there no waterbody setbacks for Category 1 projects? It is implied that projects eligible under Category 1 allow use of any size equipment or vehicle to at least the top of bank of any waterbody (and possibly to water's edge in areas with coarse soils). Similarly, it is implied that pile burning, broadcast burning, and disposal of chips/harvest debris may be allowed to the top of bank of a waterbody. There are no requirements for retention of stabilizing vegetation, large woody debris, or thermal cover within waterbody protection zones. The conditions of Category 2 should be included for Category 1 projects.



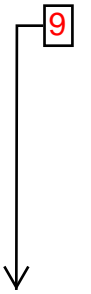
Construction projects may include a large amount of soil and ground disturbance. At a minimum, the conditions of Category 2 should apply.



Category 2 projects. What is the justification for requiring an RPF/FFP or supervised designee to mark trees three inches or greater in size for treatment or retention within waterbody buffer zones? Once again, this requirement may be appropriate in the Lake Tahoe Basin, Mammoth Lakes, or Truckee, but is not appropriate for the majority of lands within the Lahontan Region. To apply this requirement to non-commercial thinnings, riparian restoration, and removal of invasive exotic species (Tamarisk, Russian olive) in riparian areas is ridiculous and costly. The requirement of hiring an RPF to perform this work will likely lead to the increase in otherwise unnecessary removal of merchantable trees as a component of fuel reduction and riparian enhancement projects in order to pay the additional cost of having an RPF on the project. Many fuel reduction and riparian enhancement projects will either not be implemented or will be reduced in size if this requirement is retained. The availability of grant funding for such projects is already limited without imposing this costly and unnecessary requirement. The remaining required conditions for projects under Category 2 seem sufficient to protect surface waters from discharges of deleterious material and retention of an appropriate percentage of vegetation within waterbody buffer zones.



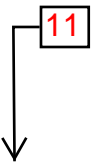
Category 4 and 6 projects. Retention and recruitment of large woody debris is important in forest and riparian ecosystems. Many forests within the Lahontan Region currently have an overabundance of large woody debris as a result of fire suppression policies and poor land and livestock management. Under proposed Categories 4 and 6, prescribed burning is allowed within waterbody buffer zones as long as this activity does not result in the loss of large woody debris. This is inconsistent with the fact that Categories 1 through 6 contain no specified limitation on hand removal of large woody debris within waterbody buffer zones. Rather than prohibiting loss or removal of large woody debris, and given the variability between watersheds in existing volume and placement of large woody debris, it may be better to prescribe certain retention or recruitment targets.



The term "stabilized" as used in the conditions for Categories 1, 2, 4, and 6 is not defined in Attachment A.



Finally, I would recommend that Regional Board staff work on development and dissemination of educational materials for landowners, land managers and public works employees. A publication similar to the Sediment and Erosion Control Handbook (available for purchase from the San Francisco Regional Board office), focusing on applied best practices to avoid or mitigate water quality concerns associated with vegetation management and timber harvest activities, would be helpful.



Thank you for the opportunity to comment on the proposed changes to your Timber Waiver Program

Sincerely,


Brett Emery

Philip E. Nemir
Forestry & Appraisal Services
P.O. Box 1717
Susanville, CA 96130
philnemir@hotmail.com
(530-257-2294)

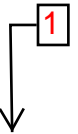
February 9, 2009

California Regional Water Quality Control Board
Lahontan Region
Attn: Andrea Stanley
2501 Lake Tahoe Blvd
South Lake Tahoe, CA 96150

SUBJECT: Revisions to Timber Waiver

Members of the Water Quality Control Board:

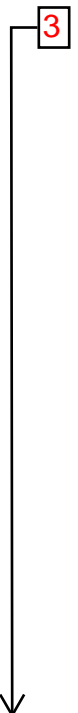
The “Waiver for Waste Discharge Requirements for Timber Harvest and Vegetation Management” adopted in 2007 is clearly needed. While the circulated revisions are an improvement over the existing requirements, much more needs to be done to simplify the process.



Of special note is the quote on page 2 of the Initial study that makes reference to the need to **“eliminate or otherwise reduce the adverse effects of confusing, overlapping, or unnecessarily restrictive regulations and regulatory procedures...”**. Unfortunately, this statement still applies to the proposed revisions and areas outside of the TRPA region.



I would suggest that the Water Quality Control Board needs a major paradigm shift in how it thinks about and protects water quality in the Lahontan Region. I would assert that the 2007 requirements have done little or nothing to improve water quality protection (at least from what I’ve seen here in northeastern California). The Board should abandon the application and regulatory approach that places a substantial burden on its limited staffing. Instead of dealing with a glut of unnecessary paperwork, staff should be spending 80% of their time in the field. The Board should work toward a goal of annual staff field assessment of 20% of the streams and lakes in the Lahontan Region. This would entail staff actually walking up stream channels and along lakefront, to identify threats to water quality, and work with landowners to correct problems and apply pragmatic solutions. One staff member should be able to easily assess 100 miles of stream a year. If the focus was on Class I and II watercourses, a lesser amount of survey work would be required, and the highest priority watercourses would be studied.



I believe that my proposal would actually accomplish better water quality protection than what the Board is achieving today. Any activities negatively impacting

water quality would be identified during a stream survey, and could be reduced or eliminated with direct contact of the responsible parties.

Additionally, the Timber Waiver revisions, as currently written, cannot be effectively enforced by Lahontan staff. The total area of the Region is over 21,000,000 acres. This is huge. If every landowner who could be required to submit a form, based on the very broad definition of “timber harvest and vegetation management activities”, did so, your office would be inundated with paper. The more realistic scenario is that a very low percentage of property owners will actually comply. And, your Staff has no effective way of knowing when activities are occurring unless they are doing field inspections.

I would propose the following changes to your revisions that would better meet the message of the Governor’s Proclamation:

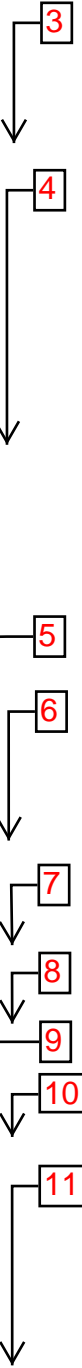
1. Combine Categories 1, 2, and 3. No notification or monitoring required.
2. Category 4. The winter period re-defined to December 1 to February 29 to more accurately reflect climate change effects since the “winter period” definition was developed 36 years ago for the State Forest Practice Act. No application required if the project is submitted to CAL FIRE or other public agency.
3. Category 5. No application required. Waiver request included as part of THP, or NTMP process since Water Board is already involved in the process. This avoids duplication and excessive regulation. Submission of only one monitoring form (Winter Implementation) for harvest operations with Class I and II watercourses by July 15 after first winter. Drop “Fall Implementation” monitoring. Drop “Forsenic” monitoring except where operations occur with “Extreme” erosion hazard, and Class I or II watercourses.
4. Category 6. Remove prescribed burning and pile burning where activities are more than 25 feet from the edge of Class I and II watercourses (move to Category 2). Requiring notification for these activities is unnecessary and excessive. For instance, fifteen piles six-foot in diameter per acre only accounts for 1% of the area. I would suggest that any impacts from burning those piles is less than significant.

Thanks for consideration of my comments.

Sincerely,

Philip E. Nemir

Philip E. Nemir
Registered Professional
Forester No. 1666



Section 3. RESPONSES TO COMMENTS

1. Andrew Breibart, Hydrologist, USFS-Lassen National Forest (Letter Code: LASSEN NF)	
Lassen NF # 1	<p>The proposed Timber Waiver deliberately limits the types of equipment that may be used under Category 2 for several reasons: (a) to limit the nature of activities that can proceed with no notification so that there will be no adverse effects (b) to allow equipment access (e.g., chippers and brush mowers with low psi) to <u>support</u> hand crew operations, and (c) to allow for small equipment access with conditions (i.e., ATVs and snowmobiles) to assist in the transport of hand crews.</p> <p>The eligibility criteria of Category 2 have been modified to allow for “light equipment with ground pressures less than 10 pounds per square inch (psi), such as chippers, brush mowers, or similar equipment for onsite processing of materials cut by hand crews.” This language modification will allow other equipment with less than 10 psi to operate off roads to assist with onsite processing of materials cut by hand crews.</p>
Lassen NF # 2	Yes, Category 3 will pertain to activities conducted under a BAER (Burn Area Emergency Response) Plan, including soil stabilization, upgrading of road and stream crossings, and the rehabilitation of fire lines constructed during fire suppression efforts. All of these activities would qualify as activities taken to minimize threats to life or property, and/or to stabilize and prevent unacceptable degradation of natural cultural resources resulting from the effects of a wildfire.
2. Randy Moore, Regional Forester, USFS-Region 5 (Letter Code: USFS Region 5)	
USFS Region 5 # 1	Comment noted.
USFS Region 5 # 2	Comment noted.
3. Crawford Tuttle, CAL FIRE-Chief Deputy Director (Letter Code: CAL FIRE Sacramento)	
CAL FIRE Sacramento # 1	Comment noted.
CAL FIRE Sacramento # 2	All language stating “prescribed burn” has been changed to “prescribed fire,” or where necessary, “pile burning” or “broadcast burning” is used.
CAL FIRE Sacramento # 3	Please see response <u>Lassen NF # 1</u> . (page 5)
CAL FIRE Sacramento # 4	<p>Hazard tree removal undertaken to comply with state, local, or county defensible space requirements or in response to an emergency or imminent threat to life or property, are automatically enrolled under Category 1 (which does not require notification to the Water Board). Felling of storm debris and individual hazard trees along utility corridors will be covered under Category 1 and do not require notification to the Water Board. Timber harvest and vegetation management activities undertaken to comply with California Public Resources Code section 4291 are eligible under Category 1.</p> <p>Scheduled or routine hazard tree removal conducted along linear features such as utility corridors are not covered under Category 1 because Water Board staff find such activities within forested landscapes may involve equipment, steep slopes, and multiple watercourse crossings. Scheduled routine utility line vegetation management activities will be eligible under a higher-order category (i.e., Category 2, 4, or 6) depending upon the nature of the work and landscape involved.</p>
CAL FIRE Sacramento # 5	Please see response <u>Lassen NF # 1</u> .

<p>CAL FIRE Sacramento # 6</p>	<p>Water Board staff assume this comment is in reference to Page 12, Category 2, Condition 3 (this condition was <i>Page 10, Category 2, Condition 2</i> under a previous draft version of the proposed revised Timber Waiver).</p> <p>After consultation with legal counsel, Water Board staff is confident that we are within our authority in making certain professional credentials and/or qualifications a condition of a waiver. As amended, project proponents can also rely on the expertise of a Natural Resource Professional where there is no other legal requirement to use a Registered Professional Forester (RPF) or Federal Forestry Professional.</p> <p>After consultation with CAL FIRE staff, Water Board staff have added language (underlined) to the following General Condition on page 11 of the Timber Waiver: <u>“This Timber Waiver does not permit any illegal activity, and does not preclude the need for permits or licenses which may be required by other governmental agencies, or other approvals by the Water Board such as discharges subject to a National Pollutant Discharge Elimination System (NPDES) permit under the Clean Water Act, including silvicultural point sources as defined in 40 Code of Federal Regulations, section 122.27. This waiver is not a substitute for state water quality certification under section 401 of the federal Clean Water Act which is required if a federal Clean Water Act section 404 permit is required. Also persons practicing forestry must ensure that they maintain appropriate licenses and certifications pursuant to Public Resources Code section 752 and 753.”</u> We have also added an additional explanation in the Definitions (Attachement A) for Natural Resource Professional.</p>
<p>CAL FIRE Sacramento # 7</p>	<p>Water Board staff have added the following language (underlined) to conditions within Categories 2, 4, and 6, that apply to the removal of trees within Water Body Buffer Zones:</p> <p>“Prior to the commencement of timber harvest and vegetation management activities within Waterbody Buffer Zones (as defined in Attachment B), trees with a DBH greater than 3 inches planned for removal, or trees designated for retention, must be marked (including a base mark below the cutline) <u>or designated by written prescription and/or sample mark</u> by either a:</p> <ol style="list-style-type: none"> a. Registered Professional Forester or supervised designee, b. Federal Forestry Professional (as defined in Attachment A) or supervised designee, <u>or</u> c. <u>Natural Resource Professional, or supervised designee.</u>”
<p>CAL FIRE Sacramento # 8</p>	<p>Water Board staff recognize the difficulty associated with vegetation management within Waterbody Buffer Zones with common site constraints such as topography, access, and/or human hand-thinning limitations. Such constraints make it difficult and costly to remove accumulated biomass from areas near lakes and streams. Therefore the regulated/implementing community has expressed a strong interest in having onsite treatment options (e.g., chipping or burning) incorporated within the proposed revised Timber Waiver.</p> <p>Water Board staff have included provisions within the Timber Waiver to allow for chipping within Waterbody Buffer Zones. Please see response <u>SFL et al # 12.</u></p> <p>To allow the placement and burning of burn piles within Waterbody Buffer Zones within the Timber Waiver the Water Board must determine that such activity is consistent with the Basin Plan for the Lahontan Region (Burn Plan) and is in the public interest, pursuant to Water Code section 13269. Water Board staff has added conditions to Categories 2 and 4 allowing limited burning in Waterbody Buffer Zones. In the Little Truckee and Truckee River HUs, the Basin Plan contains specific prohibitions against the discharge of waste within 100 year floodplains. In the Lake Tahoe HU, the Basin Plan contains prohibitions against permanent disturbance within SEZs, without defining ‘permanent.’ Water Board Executive Officer will consider granting exemptions for pile burning in the Tahoe and Truckee HUs where appropriate mitigation and monitoring is proposed. Water Board staff recognizes there is a need for more information on the impacts and appropriate mitigation for pile burning within Stream Environment Zones. Limited information exists today suggesting burning can occur with minimal impacts (LTBMU, 2008). However, quantitative studies are now being proposed. As this information is gathered, amendments to the Timber Waiver may be considered. The Water Board does find it within the public interest and consistent with the Basin Plan to permit these activities. Therefore Water Board staff added Finding 6 of the proposed Timber Waiver to support demonstration projects. These activities are covered under Category 6.</p>

CAL FIRE Sacramento # 9	Water Board staff assume this comment is in reference to Page <u>13</u> , Category 2, Condition 7(c). Water Board staff deliberately limit the types of activities that can proceed under Category 2 (see response Lassen NF # 1). If such conditions are too restrictive for a burn plan that is part of a hand crew project, then the burn plan should be submitted to the Water Board under Category 4, 5, or 6. See General Provision 2.
CAL FIRE Sacramento # 10	Please see response CAL FIRE Sacramento # 6 .
CAL FIRE Sacramento # 11	Please see response CAL FIRE Sacramento # 8 .
CAL FIRE Sacramento # 12	Water Board staff discovered that the 40% slope threshold was an error. Condition 4 of Category 5 now states that the RPF must clearly indicate whether new or existing skid trails on slopes greater than <u>50%</u> are included within the plan. Water Board staff have clarified this condition by stipulating that this condition applies to new and existing skid trails.
CAL FIRE Sacramento # 13	Water Board staff will not make this change. We will retain the definition of “Broadcast Burning.” Please note that “Prescribed Fire” and “Burn Pile” are also defined separately in Attachment A.
CAL FIRE Sacramento # 14	This change was made previously. “Burn Pile” is defined within Attachment A as “hand and machine constructed piles of organic materials intended for burning.”
CAL FIRE Sacramento # 15	Water Board staff have changed all definitions of the Winter Period within the Timber Waiver (and attachments) to <u>October 15 through May 1</u> for the Lake Tahoe and Truckee River Hydrologic Units; and <u>November 15 through April 1</u> elsewhere in the Lahontan Region. This change is consistent with the Water Quality Control Plan for the Lahontan Region (Basin Plan).
4. Brad Lutts, Unit Chief, CAL FIRE-Lassen Modoc Plumas Unit (Letter Code: CAL FIRE Lassen)	
CAL FIRE Lassen # 1	All language stating “prescribed burn” has been changed to “prescribed fire.”
CAL FIRE Lassen # 2	Please see response CAL FIRE Sacramento # 6 .
CAL FIRE Lassen # 3	Please see response CAL FIRE Sacramento # 7 .
CAL FIRE Lassen # 4	We have removed the following statement from the eligibility criteria of Category 3. “Non-emergency activities are not eligible for Category 3.”
CAL FIRE Lassen # 5	We have revised Category 4, condition 5 to allow for aerial or cable operations on slopes greater than 60%.
CAL FIRE Lassen # 6	Water Board staff have added the following language to Eligibility Criterion 8 of Category 4: “No construction of landings requiring earthwork (i.e., grading or excavation) on slopes greater than 20% within 200 feet of a watercourse and where there is potential for sediment delivery to a waterbody due to soil disturbances.”
CAL FIRE Lassen # 7	Please see response CAL FIRE Sacramento # 6 .
CAL FIRE Lassen # 8	Water Board staff have dropped the condition for retention of large woody debris. The other conditions under the prescribed fire condition adequately protect water quality.

CAL FIRE Lassen # 9	Please see response <u>CAL FIRE Sacramento # 8.</u>
CAL FIRE Lassen # 10	Please see response <u>CAL FIRE Sacramento # 13</u>
CAL FIRE Lassen # 11	Please see response <u>CAL FIRE Sacramento # 15.</u>
5. Bill Holmes, Unit Chief, CAL FIRE-Amador El Dorado Unit (Letter Code: CAL FIRE El Dorado)	
CAL FIRE El Dorado # 1	All language stating “prescribed burn” has been changed to “prescribed fire.”
CAL FIRE El Dorado # 2	Please see response <u>Lassen NF # 1.</u>
CAL FIRE El Dorado # 3	Please see response <u>CAL FIRE Sacramento # 4.</u>
CAL FIRE El Dorado # 4	Please see response <u>Lassen NF # 1.</u>
CAL FIRE El Dorado # 5	Please see response <u>CAL FIRE Sacramento # 6.</u>
CAL FIRE El Dorado # 6	Please see response <u>CAL FIRE Sacramento # 7.</u>
CAL FIRE El Dorado # 7	Please see response <u>CAL FIRE Sacramento # 8.</u>
CAL FIRE El Dorado # 8	Please see response <u>CAL FIRE Sacramento # 9.</u>
CAL FIRE El Dorado # 9	Please see response <u>CAL FIRE Sacramento # 6.</u>
CAL FIRE El Dorado # 10	Please see response <u>CAL FIRE Sacramento # 8.</u>
CAL FIRE El Dorado # 11	Please see response <u>CAL FIRE Sacramento # 12.</u>
CAL FIRE El Dorado # 12	Please see response <u>CAL FIRE Sacramento # 13.</u>
CAL FIRE El Dorado # 13	Please see response <u>CAL FIRE Sacramento # 14.</u>
CAL FIRE El Dorado # 14	Please see response <u>CAL FIRE Sacramento # 15.</u>

6. Tamara Sasaki, Senior Environmental Scientist, CA State Parks (Letter Code: CA State Parks)	
CA State Parks # 1	Comment noted.
CA State Parks # 2	Comment noted.
CA State Parks # 3	Water Board staff will not make this change, but did modify the language for . Please see response <u>Lassen NF # 1.</u>
CA State Parks # 4	Water Board staff will not make this change. Please see response <u>CAL FIRE Sacramento # 4.</u> Hazard tree removal undertaken within 300 feet of facilities (i.e. campgrounds, parking lots, and public use areas) or in response to an imminent threat to life or property, are automatically enrolled under Category 1 (which does not require notification to the Water Board). Note: this does not include “routine” tree removal near linear features such as roads, trails, or utility corridors, unless there is no threat of waste discharge to waters of the state. As is stated on page 1 of the proposed revised Timber Waiver: “Only persons proposing timber harvest and/or vegetation management activities that could result in a discharge or threatened discharge of waste earthen or organic materials or other wastes to Waters of the State are subject to regulation by the Water Board and need to apply for coverage under this waiver of waste discharge requirements of file a report of waste discharge pursuant to California Water Code section 13260.”
CA State Parks # 5	Water Board staff have added the options of following a written prescription or sample mark, rather than identifying every tree for cutting or retention.
CA State Parks # 6	Water Board staff have included a definition for “stabilized” within Attachment A.
CA State Parks # 7	Water Board staff encourage project proponents to install all erosion and sediment control structures (e.g. waterbreaks) as soon as is practicable. However, in the interest of stipulating enforceable thresholds and language within the conditions of the proposed revised Timber Waiver, Water Board staff opted to include existing CAL FIRE regulations, California Code of Regulations, title 14, section 914.6, subdivision (a)(2).
CA State Parks # 8	Water Board staff has modified Category 4 to allow herbicide applications that are associated with timber harvest or vegetation management activities under Category 4. Activities solely focused on invasive species eradication under the Tahoe Weed Coordinating Group MOU do not need coverage under the waiver.
CA State Parks # 9	Water Board staff has made changes the proposed revised Timber Waiver to address this comment. Please see response <u>CA State Parks # 5.</u>
CA State Parks # 10	Water Board staff have removed this condition. Please see response to <u>CALFIRE Lassen #8.</u>
CA State Parks # 11	Water Board staff have removed the condition regarding retention of large woody debris. Please see response to <u>CALFIRE Lassen #8.</u>
CA State Parks # 12	Please see response <u>CA State Parks # 7.</u>
CA State Parks # 13	Water Board staff has made changes the proposed revised Timber Waiver to address this comment. Please see response <u>CA State Parks # 6.</u>

CA State Parks # 14	Please see response <u>CA State Parks # 5.</u>
CA State Parks # 15	Please see response <u>CA State Parks # 10.</u>
CA State Parks # 16	Please see response <u>CA State Parks # 11.</u>
CA State Parks # 17	Please see response <u>CA State Parks # 7.</u>
CA State Parks # 18	Please see response <u>CA State Parks # 8.</u>
CA State Parks # 19	Please see response <u>CA State Parks # 11.</u>
CA State Parks # 20	Water Board staff added “under specified environmental conditions” to the definition of “Prescribed Fire” in Attachment A.
CA State Parks # 21	Water Board staff has made changes the proposed revised Timber Waiver to address this comment. Please see response <u>CA State Parks # 6.</u>
CA State Parks # 22	Water Board staff revised the language to reference Table B1 when mentioning Waterbody Buffer Zone Widths in Attachment B.
CA State Parks # 23	Water Board staff have revised the Effectiveness Monitoring Form (Attachment J) in an effort to make the directions more clear.
CA State Parks # 24	Water Board staff have added Attachment P which provides a charted summary of the monitoring and reporting required for Categories 4, 5, and 6. As recommended, these charts specify the monitoring type, monitoring form required, monitoring periods, and reporting due dates.
7. Mark Shaffer, President and Registered Professional Forester (RPF), Evergreen Resource Management (Letter Code: Evergreen)	
Evergreen # 1	Water Board staff modified Category 1 to include CAL FIRE “Christmas Tree; Dead, Dying or Diseased; Fuelwood or Split Products Exemption” CCR, title 14, section 1038, subdivision (b) as long as no exceptions occur to conditions 6 or 9 of the CALFIRE exemption.
Evergreen # 2	Comment noted.
Evergreen # 3	Only timber harvest activities (Timber Harvest Plans, Non-Industrial Timber Management Plans, other plans, and Amendments) that propose to proceed under Category 5 of the proposed revised Timber Waiver must have approval from CAL FIRE before enrolling under the Timber Waiver. This condition does not apply to fuel reduction projects that would typically be eligible under proposed Categories 1, 2, 4, or 6.
Evergreen # 4	The proposed revised Timber Waiver allows for timber harvest and vegetation management activities throughout the year. The level of monitoring required for certain types of activities that proceed in the winter has decreased for some activities and increased for others (based on potential for environmental impacts). As an addendum to the Initial Study, Water Board staff has created a document that compares the notification, monitoring, and reporting conditions of the existing Timber Waiver with the notification, monitoring, and reporting conditions of the proposed revised Timber Waiver.
Evergreen # 5	Comment noted. Activities that meet the eligibility criteria and conditions of Categories 1 and 2 may begin without notification to Water Board staff. Activities that meet the eligibility criteria and conditions of Categories 4 and 5 may begin upon

	<p>verification from Water Board staff that an application was received (as determined by a notice of receipt from Water Board staff or by confirmation of delivery by the United States Postal Service).</p> <p>Activities that meet the eligibility criteria and conditions of Category 6 may begin once Water Board staff has notified the discharger that their application is complete, or 30 days following receipt of an application by Water Board staff (as determined by a notice of receipt from Water Board staff, or by confirmation of delivery by the United States Postal Service). Dischargers may request expedited review of the application by notifying Water Board staff.</p>
Evergreen # 6	Comment noted, please see response <u>Evergreen # 5.</u>
Evergreen # 7	Comment noted, please see responses <u>Evergreen # 1 and Evergreen #5.</u>
Evergreen # 8	Please see response <u>Evergreen # 5.</u>
Evergreen # 9	Please see response <u>CALFIRE Sacramento #6.</u>
Evergreen # 10	Condition 6 of Category 2 and Condition 11 of Category 4 both state: “Chipped and masticated material must not be discharged to waterbodies, or be deposited in locations where such material may discharge to a waterbody. Within Waterbody Buffer Zones chipped and masticated material must not exceed <u>an average</u> of two inches in depth, with a <u>maximum depth</u> of four inches.”
Evergreen # 11	Comment noted.
Evergreen # 12	Comment noted.
Evergreen # 13	<p>Comment noted.</p> <p>Before the formal 30 day public comment period held between January 6 and February 9, 2009, Water Board staff allowed for several other opportunities for public comment, including an informal comment period on the draft proposed revised Timber Waiver that concluded on December 5, 2008, and an early public comment period between June 11 and July 11, 2008, after Water Board staff announced their intent to revise the Timber Waiver.</p> <p>Water Board staff have also hosted several public workshops region wide during and following these comment periods.</p>
8. Thomas Esgate, Managing Director, Lassen County Fire Safe Council, Inc. (Letter Code: Lassen FSC)	
Lassen FSC # 1	Please see response <u>Evergreen # 1.</u>
Lassen FSC # 2	Comment noted.
Lassen FSC # 3	Comment noted.
Lassen FSC # 4	Comment noted.
Lassen FSC # 5	Comment noted.
Lassen FSC # 6	Comment noted.
Lassen FSC # 7	Comment noted.
Lassen FSC # 8	Comment noted.

Lassen FSC # 9	Comment noted.
9. Brad Henderson, Habitat Conservation Supervisor, California Department of Fish and Game (Letter Code: Lassen FSC)	
DFG # 1	<p>Water Board staff appreciate your concerns and have included some watershed specific requirements. The proposed waiver also allows for alternate monitoring requirements to address site-specific concerns and water quality risks. Water Board staff find the proposed Timber Waiver sufficiently addresses project purpose and location variables by categorizing projects based on threat to water quality and prescribing specific eligibility criteria and conditions.</p> <p>Water Board staff do not feel that making regulatory distinctions based on the purpose of tree removal (e.g., commercial timber harvest vs. habitat enhancement) is necessary within the proposed Timber Waiver. Despite differences in purpose these activities could result in water quality impacts (e.g., heavy equipment operation off roads or tree removal near riparian areas or on steep slopes). In short, because the risk of water quality impacts could be the same despite the purpose, Water Board staff find that making the distinction as to whether trees are being felled for commercial sale or for environmental improvement is not appropriate for the revised Timber Waiver.</p>
DFG # 2	<p>Category 1 activities are subject to all the general conditions of the revised Timber Waiver. General Condition No. 4 prohibits the creation of pollution, contamination, or nuisance, as defined by Water Code section 13050, subdivisions (k), (l), and (m).</p> <p>Water Board staff have also added the following general condition to the waiver: Earthen and organic material (including soil, silt, sand, clay, rock, slash, sawdust, and bark) must not be discharged to waterbodies, or be deposited in locations where such material may discharge to waterbodies.</p> <p>Water Board staff have added the following condition to Category 1: Timber harvest and vegetation management activities must not cause or create erosion, destabilization of stream banks, temperature increases in waterbodies, disturbance to non-target Waterbody Buffer Zone vegetation, or concentrated surface runoff.</p> <p>Activities eligible under Category 1 are limited to areas near structures and near areas zoned as residential, commercial, or industrial; or are conducted under a Forest Fire Prevention Exemption issued by CAL FIRE pursuant to California Code of Regulations (CCR), title 14, section 1038, subdivision (i) or a CAL FIRE Exemption pursuant to CCR, title 14, section 1038 (b) where no equipment is allowed within a WLPZ, except for maintenance of existing structures or roads, and no harvesting within a WLPZ is allowed.</p> <p>Equipment access to trees near structures, and areas zoned as residential, commercial, or industrial, will rely mostly on existing roads and driveways that exist as part of the residential, commercial, or industrial infrastructure.</p>
DFG # 3	<p>Water Board staff have modified the eligibility criteria and conditions of Categories 4 and 6 to allow for a Natural Resource Professional, or supervised designee, to make tree markings within Waterbody Buffer Zones. A Natural Resource Professional is defined within Attachment A as “persons with a bachelor’s degree or higher in a biological, ecological, or other relevant science (e.g., soils, hydrology, botany, fisheries). This person is not a substitute for a Registered Professional Forester when one is required by federal or state code or regulation.”</p>
DFG # 4	<p>Please see response DFG # 1, last paragraph. Commercial Timber Harvest Plans (THPs) will be regulated somewhat differently under Category 5. The chief reason for segregating commercial THPs in a separate category is to recognize that CAL FIRE’s THP review process substitutes for the EIR process under the California Environmental Quality Act because the THP process has been certified pursuant to Public Resources Code section 21080.5. The THP process includes Water Board staff participation as a review team member. As a member of the CAL FIRE review team, Water Board staff receive detailed project information independent of the Timber Waiver application process and make recommendations to reduce potential impacts to less than significant.</p> <p>Incorporation of recommendations made by Water Board staff during the CAL FIRE Review Team process is Eligibility Criterion 2 of Category 5.</p>

DFG # 5	Comment noted. Please see response <u>DFG # 2.</u>
DFG # 6	<p>Please see responses <u>DFG # 1</u> (last paragraph) and <u>DFG # 3.</u> Applicants for the Timber Waiver may request reduced monitoring and reporting requirements subject to approval by the Executive Officer (see Condition 3 of Category 4, Condition 6 of Category 5, and Conditions 6 and 7 of Category 6).</p> <p>Water Board staff do not need to be notified of habitat restoration activities that qualify under Categories 1, 2, and 3. Water Board staff do need to be notified of habitat restoration activities that include activities that qualify under Category 4. Habitat restoration activities that would only qualify under Category 6 do require monitoring.</p> <p>To seek individual or reduced monitoring and reporting requirements the project proponent must submit information describing how the project poses no significant threat to water quality pursuant to Water Code section 13269.</p>
DFG # 7	Water Board staff have modified conditions 2, 3, and 4 of Category 6 to allow for a Natural Resource Professional. Please see response <u>DFG # 3.</u>
DFG # 8	Water Board staff have revised the application for Category 4 (Attachment C) to state that there are 10 criteria for eligibility.
DFG # 9	Comment noted. Please see responses <u>DFG # 1, 2, 3, and 7.</u>
DFG # 10	Comment noted.
DFG # 11	Water Board staff added additional language to the title of Table 1 to caution readers about the limited information furnished within Table 1. Water Board staff have also added Attachment P which provides a charted summary of the monitoring and reporting required for Categories 4, 5, and 6. These charts specify the monitoring type, monitoring form required, monitoring periods, and reporting due dates.
DFG # 12	<p>It is not the intent of the Water Board to deter project proponents from implementing effective habitat and riparian restoration projects. If greater than 3 inches DBH trees are proposed for removal, such removal must be supervised by a qualified professional (RPF, Federal Forestry Professional, or Natural Resource Professional) who is aware of the potential impacts associated with vegetation removal adjacent to surface waters.</p> <p>Water Board staff no longer specify dry application only. Paint-on applications will also be permitted under Categories 4, 5, and 6.</p>
DFG # 13	See additional conditions in General Conditions and Category 1 conditions. Category 1 is intended to allow residential construction on up to 3 acre lots within existing subdivisions. The Water Board's Basin Plan restricts or prohibits (in the Lake Tahoe and Truckee River Hydrologic Units) the creation of new disturbance in riparian areas. It is reasonably presumed that such development has also been previously subject to environmental review as part of a County's General Plan or local development plan.
DFG # 14	Water Board staff chose to stipulate parcel size under eligibility criterion 2 of Category 1 so as to limit piece-mealing or staggered implementation on larger parcels. Water Board staff specified certain conditions for Categories 1 and 2, to ensure such activities are self-limiting.
DFG # 15	Water Board staff will not combine Categories 1 and 2. Activities eligible under Category 2 are limited to those completed by hand-crews and therefore should be subject to different conditions than those of Category 1. Segregating the types of activities that can proceed under Category 1 and Category 2 allows for the assignment of more specific conditions to fit those specific activities.
DFG # 16	Water Board staff will not make this change. Please see response <u>Lassen NF # 1</u> and <u>DFG # 2.</u>
DFG # 17	Comment noted. Please see response <u>DFG # 1</u> (last paragraph), <u>DFG # 3,</u> and <u>DFG # 7.</u> The project title is Conditional Waiver of Waste Discharge Requirements for Waste Discharges Resulting from

	Timber Harvest and <u>Vegetation Management Activities</u> in the Lahontan Region.
DFG # 18	Please see response <u>DFG # 3</u> .
DFG # 19	Please see response <u>DFG # 3</u> . Water Board staff works with fire safe councils and other organizations to provide outreach on potential water quality impacts associated with residential properties.
DFG # 20	Comment noted. Please see response <u>DFG # 2</u> and <u>DFG #13</u> .
DFG # 21	Comment noted. Please see response <u>DFG # 3</u> .
DFG # 22	Comment noted. Please see response <u>DFG # 2</u> .
DFG # 23	Comment noted. Please see response <u>DFG # 1</u> , last paragraph.
DFG # 24	Comment noted. Please see response <u>DFG # 2</u> . The notification, monitoring, and reporting requirements of Category 6 are much more comprehensive.
DFG # 25	Please see response <u>DFG # 2</u> and <u>DFG #14</u> . Expanding the types of activities that can proceed under Category 1 to agricultural and resource management zones could potentially include many commercial silvicultural activities and activities that are not self-limiting.
DFG # 26	Please see response <u>DFG # 2</u> .
DFG # 27	Conditions of Categories 2, 4, and 6 require that an RPF, Federal Forestry Professional, or Natural Resource Professional supervise the marking of trees greater than 3 inches DBH for removal within a Waterbody Buffer Zone. Please see response <u>DFG # 7</u> . This condition does not apply to the removal of trees greater than 3 inches DBF outside of Waterbody Buffer Zones.
DFG # 28	Comment noted. Please see response <u>Lassen NF # 1</u> .
DFG # 29	Comment noted. Proximity to water, project design, and soil stability are accounted for in the eligibility criteria and conditions of the proposed revised Timber Waiver. The notification, monitoring, and reporting requirements are minimal to none for lower threat projects (Categories 1 – 4), and are more specific for potentially higher threat activities conducted under Categories 5 and 6. Please see response <u>DFG # 3</u> regarding RPF requirements.
10. Jennifer Quashnick, Tahoe Area Sierra Club; Carl Young, League to Save Lake Tahoe; Michael Graf, Sierra Forest Legacy (Letter Code: SFL et al)	
SFL et al # 1	The proposed project involves an expansion of the types of activities that can proceed without notification to the Water Board; it does not change any laws. These activities will be automatically enrolled under the Timber Waiver are still subject to conditions of the Timber Waiver. Water Board staff have determined these activities have no potentially significant threat to water quality. Water Board staff will still be aware of most of these projects because CAL FIRE provides the Water Board with copies of CALFIRE Exemptions. The proposed project does not involve a reduction in the notification and monitoring requirements for higher-threat activities, including post-fire salvage logging, industrial timber harvest, and operations within sensitive areas (including steep slopes and riparian areas). Water Board staff anticipate that the reduction in notification and monitoring requirements for low threat projects will result in increased staff availability for agency monitoring and regulation of the higher threat projects; resulting in a net increase in Water Board staff protection of water quality in the Lahontan Region.

SFL et al # 2	<p>Water Board staff agree that there is a need for more information on the impacts and appropriate mitigation for certain types of timber harvest and vegetation management activities. For example, future regulatory decisions regarding the following will need to be supported with evidence of whether these activities can proceed without a significant impact either because they do not result in significant impacts or impacts can be mitigated to a less than significant level.</p> <ul style="list-style-type: none"> (a) the placement and burning of burn piles within Waterbody Buffer Zones, 100-year floodplains of the Little Truckee or Truckee River hydrologic units, or 100-year floodplains or Stream Environment Zones of the Lake Tahoe hydrologic unit. (b) the operation of various types of equipment on slopes greater than 50%, or 30% in the Lake Tahoe Hydrologic Unit. (c) prescribed fire within Waterbody Buffer Zones, 100-year floodplains of the Little Truckee or Truckee River hydrologic units, or 100-year floodplains or Stream Environment Zones of the Lake Tahoe hydrologic unit. <p>This evidence can be gathered from specific monitoring and with demonstration projects. Water Board staff have added Finding 6 of the proposed Timber Waiver so as to support demonstration projects. Also see revised conditions in Category 6 regarding additional monitoring. As part of the Executive Officer's discretion in granting prohibition exemptions, additional mitigation measures and monitoring may be required to be included in plans (Waiver conditions require approved plans are implemented).</p>
SFL et al # 3	<p>Water Board staff agree, and the inclusion of finding No. 6 addresses this request. Also see Attachment N. Pile burning within Tahoe SEZs will require prohibition exemption findings to be made if considered by the Water Board under the proposed waiver.</p>
SFL et al # 4	<p>A remote-controlled chipper with a psi of 10 psi or less has been used to assist hand crews within SEZs in the Lake Tahoe Basin with no observed impact (Lake Valley Fire Protection 2006).</p>
SFL et al # 5	<p>The proposed waiver (Finding No. 6) and Attachment N now recognize the applicability of the Heavenly SEZ Demo project to only future cut-to-length operations on granitic soils. All other low impact equipment on similar soils or use of cut-to-length equipment on volcanic soils will be subject to Basin Plan prohibitions. The Executive Officer is required to make required findings, provide a 10 day review, and grant an exemption prior to the activity proceeding.</p>
SFL et al # 6	<p>The proposed revised Timber Waiver requires compliance with the Water Quality Control Plan for the Lahontan Region (Basin Plan). The Basin Plan included all additional environmental standards for the Lake Tahoe Hydrologic Unit. Environmental analysis and documentation was completed when the Basin Plan was adopted in 1995. Finding No. 5 was added, along with modifications of some of the waiver conditions to apply strictly to the Lake Tahoe Basin.</p>
SFL et al # 7	<p>As an addendum to the Initial Study, Water Board staff has created a document that compares the notification, monitoring, and reporting conditions of the existing Timber Waiver with the notification, monitoring, and reporting conditions of the proposed revised Timber Waiver (see Attachment 1).</p>
SFL et al # 7a	<p>Please see response SFL et al # 7.</p>
SFL et al # 7b	<p>Please see response SFL et al # 7.</p>
SFL et al # 8	<p>Please see response SFL et al #6 and # 7. The proposed revised Timber Waiver includes timber harvest and vegetation management activities in the Lake Tahoe Hydrologic Unit. In the event that the 2008 Memorandum of Understanding between the Water Board and the Tahoe Regional Planning Agency (TRPA) is terminated, timber harvest and vegetation management activities proposed within the Lake Tahoe Basin may be eligible under the proposed revised Timber Waiver.</p>
SFL et al # 9	<p>Water Board staff agree that the amount of advance notice required should be explicitly stated. See revised general condition No. 4.</p>
SFL et al # 10	<p>Maps that clearly indicate the project area location and information including access roads, waterbodies, watercourse crossings, landings, skid trails within Waterbody Buffer Zones is required to complete an application for coverage under Categories 4 and 6 of the proposed revised Timber Waiver (See Category 4 and 6 conditions and the Category 4 and 6 Applications, Attachments C and K).</p> <p>Detailed plan area maps are produced as part of the Category 5 Timber Harvest Plan (THP) review process pursuant to California Code of Regulations, title 14 (Forest Practice Rules), and furnish</p>

	<p>information adequate for Water Board staff review of proposed timber harvest activities.</p> <p>Inspection of, and/or obtaining copies of, public records maintained by the Water Board is governed by the California Public Records Act. Records of projects that apply and proceed under the Timber Waiver must be made available to the public promptly upon request as long as such disclosure does not jeopardize competing constitutional rights to privacy and the government's need to perform its functions in a reasonably efficient manner (e.g., by maintaining the confidentiality of some records relating to pending investigations and litigation). The California Public Records Act establishes reasonable procedures providing for prompt disclosure while allowing government agencies the time to locate records and to determine which records, if any, are exempt from disclosure. Records that relate to archeological site information is statutorily exempt from public disclosure. A complete list of statutory exemptions is found in the California Public Records Act.</p> <p>Finding 4(f) also explicitly states that monitoring results shall be made available to the public.</p>
SFL et al # 11	Water Board staff agree and the statement "or expansion of existing landings" was added to eligibility criterion 3, of Category 2.
SFL et al # 12	<p>One of the conditions of Categories 2 and 4 of the proposed revised Timber Waiver specifies that "Chipped and masticated material must not be discharged to waterbodies, or be deposited in locations where such material may discharge to a waterbody. Within Waterbody Buffer Zones chipped and masticated material must not exceed an average of two inches in depth, with a maximum depth of four inches."</p> <p>Water Board staff decided to add a condition regarding the deposition of chipped and masticated material to the lower-order categories of the proposed revised Timber Waiver because staff have noted an increase in vegetation management and fuel reduction projects that employ on-site treatment such as chipping and mastication of thinned trees. Water Board staff foresee potential benefits and potential ecological and water quality risk associated with leaving chipped and masticated biomass within project areas including Waterbody Buffer Zones. Environmental and water quality benefits include erosion control (Hatchett et al., 2006), buffering soil from compaction due to equipment operation (Hatchett et al., 2006), nitrogen immobilization (Homyak et al., 2008), and favorable germination environment for some species (Wolk and Rocca, 2008). Potential ecological and water quality risk can be associated with delivery of chipped and masticated material to surface waters either by direct placement or via stormwater or snowmelt runoff, or suppression of vegetation growth when the depth of material is excessive (Wolk and Rocca, 2008).</p>
SFL et al # 13	This condition is identical to one found in the California Forest Practice Rules (CCR, title 14, sections 914.6, 934.6, 954.6 (a) (2).
SFL et al # 14	The 2007 Waiver has not been in place long enough to adequately assess the efficacy of the monitoring requirements. Monitoring requirements for the greater risk categories have not been changed substantially. Monitoring and Reporting Forms have been provided to ensure improved reporting. Changes to monitoring requirements are limited and illustrated in the documents described above (See response SFL et al # 7). The Waiver general conditions require dischargers to notify the Water Board of discharges of waste to waterbodies (Condition No. 2).
11. Doug Praetzel, Forester & RPF, Sierra Pacific Industries (Letter Code: SPI)	
SPI # 1	For clarification, Water Board staff removed "Public agencies" from Condition 1 of Category 3. Private individuals and companies may conduct post-fire emergency erosion control (not Emergency Exemptions) on their land under the Timber Waiver if the activities meet the eligibility criteria and conditions of Category 3.
SPI # 2	Water Board staff agree that adding the language "requiring earthwork" allows the condition to more accurately reflect the intent of eligibility criteria 8 of Category 4.
SPI # 3	Water Board staff confirm that this information must already be included in the Timber Harvest Plan (THP) pursuant to California Code of Regulations (CCR), title 14, section 1034. If this information is already mapped within the approved THP, a yes or no statement or additional map production is not necessary to satisfy this condition. Water Board staff will verify this information is present during THP review.

	Water Board staff removed Condition 2(d), because these features are rarely affected by commercial timber harvest, and if such activities are proposed they would be identified in the THP pursuant to CCR, title 14, section 1034, subdivision (x)(16).
SPI # 4	This information is not required to be included within the THP. Therefore Water Board staff revised the language of Condition 3 of Category 5 to say that this information must be indicated (within the approved Plan or <u>as an addendum to the Timber Waiver application</u>).
SPI # 5	This information must already be included in the Timber Harvest Plan (THP) pursuant to California Code of Regulations (CCR), title 14, section 1034. If this information is already included within the approved THP, a yes or no statement or additional map production is not necessary to satisfy this condition. Water Board staff will verify this information is present during THP review.
SPI # 6	Please see response <u>CAL FIRE Sacramento # 12.</u>
SPI # 7	Please see response <u>CAL FIRE Sacramento # 12.</u>
SPI # 8	Water Board staff have revised the language on Table 1 to more accurately reflect Condition 1 of Category 5, "Work may begin upon receipt of application by Water Board."
SPI # 9	Water Board staff do not think that Condition 12 of Category 4 contradicts with the allowance for limited operations during the winter period. Winter operations should not result in the destabilization of soils. This is ensured by Conditions 7 and 8 which limit tractor, vehicle, and equipment operations to: dry soil conditions, hard-frozen soil conditions, or conditions where snow depth is sufficient to not allow visible disturbance of soils. Similarly, Water Board staff do not think that Condition 12 of Category 6 contradicts with the allowance for activities during the winter period. Conditions 9 and 10 limit tractor, vehicle, and equipment operations to: dry soil conditions, hard-frozen soil conditions, or conditions where snow depth is sufficient to not allow visible disturbance of soils.
SPI # 10	Water Board staff will not make this change. To complete a Category 4 or 6 application, the discharger must disclose the location of all watercourse crossings, including existing culvert or corrugated metal pipe (CMP) crossings.
SPI # 11	A general provision has been added allowing Dischargers the ability to request a modified or alternate monitoring and reporting program, subject to approval by the Executive Officer. Also, on each of the Monitoring and Reporting Forms, a statement allows for the use of your own forms if they contain the equivalent information or if a revised monitoring program is approved by the Executive Officer.
SPI # 12	Comment noted. Water Board staff encourage project applicants to notify staff of any issues regarding timing of review and approval of Category 6 projects. In many cases, Water Board staff may be able to expedite review. Please be advised that expedited review can always be requested, but Water Board staff may not have the work load flexibility to accommodate short notice requests. Therefore it is in the best interest of the applicant that they notify Water Board staff of pending projects as soon as possible. Category 4 now includes herbicide application where only the herbicide application plan needs to be submitted at least 30 days in advance of the application; other activities may proceed without delay.
SPI # 13	Water Board staff have revised the application for Category 4 (Attachment C) to state that there are 10 criteria for eligibility.
SPI # 14	Water Board staff discovered that the 20% slope threshold was an error. Water Board have revised Item 8 of the Category 4 Application Form (Attachment C).
12. Brett Emery, Bridgeport, CA (Letter Code: Emery)	
Emery # 1	The 2007 Timber Waiver applied to the entire Lahontan Region and covered vegetation management activities in addition to timber harvests. The differences between the existing 2007 Timber Waiver and the proposed revised Timber Waiver include: <ul style="list-style-type: none"> • a reorganization of Timber Waiver categories based on threat to water quality, and de-emphasizing land ownership as a basis for categorization • an expansion of the types of activities that may proceed under the revised Timber Waiver without notification to Water Board staff

	<ul style="list-style-type: none"> • an expansion of the types of activities that may proceed under the revised Timber Waiver without 30-day notification to Water Board staff • revision and refinement of Timber Waiver eligibility criteria, conditions, and definitions • the removal, reduction, and/or clarification of monitoring requirements for certain categories of activities • an expansion of conditional opportunities for activities within sensitive lands¹ • allowance for conditional operation of low ground pressure equipment to within 25 feet of a watercourse • allowance for the deposition of limited chipped material within Waterbody Buffer Zones <p>These changes in the Timber Waiver are proposed by Water Board staff for several reasons:</p> <ul style="list-style-type: none"> • to streamline implementation of a broader range of vegetation management activities to mitigate the threat of catastrophic wildfire, while ensuring less than significant impacts to water quality • to facilitate compliance with Timber Waiver conditions, and assist applicants in identifying eligibility criteria, conditions, and monitoring requirements that apply to their proposed activities • to allow Water Board staff to focus limited staff resources on timber harvest and vegetation management activities that pose greater threats to water quality.
Emery # 2	<p>Comment noted. Please see response DFG # 3 regarding RPF requirements and see response DFG # 1 (last paragraph) regarding regulatory distinctions between commercial and non-commercial timber harvest and vegetation management activities.</p> <p>When regulating timber harvest and vegetation management activities Water Board staff have chosen to recognize the California Forest Practice Rules (FPRs) in the interest of not duplicating other state regulations.</p>
Emery # 3	<p>Please see response DFG # 1 regarding regulatory distinctions between commercial and non-commercial timber harvest and vegetation management activities. Please see response DFG # 17 regarding the title of the proposed revised Timber Waiver, <i>Conditional Wavier of Waste Discharge Requirements for Waste Discharges Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region</i>.</p>
Emery # 4	<p>Water Board staff do not seek to discourage appropriate prescribed fire within or near riparian areas with the Timber Waiver. See revisions made to allow prescribed fire within Categories 2, 4, 5 and 6. In some cases, monitoring is required.</p>
Emery # 5	<p>Please see response DFG # 2, DFG # 11, and DFG # 14.</p>
Emery # 6	<p>Please see response DFG # 2.</p>
Emery # 7	<p>Please see response DFG # 2, DFG # 13 and DFG # 15.</p>
Emery # 8	<p>Please see response DFG # 3 regarding RPF requirements. Please see response DFG # 12 regarding conditions for removal of greater than 3-inch DBH trees.</p>
Emery # 9	<p>Please see response CAL FIRE Sacramento # 9.</p>
Emery # 10	<p>Water Board staff have include a definition for “stabilized” within Attachment A.</p>
Emery # 11	<p>Comment noted.</p>

¹ The term ‘sensitive lands’ used within this Initial Study and the Timber Waiver includes: aquatic and wetland habitat, soils with high or extreme erosion hazard rating, slopes greater than 40%, known slides and unstable areas (including unstable and erodible watercourse banks, migrating channels, overflow channels, watercourse channels with inadequate flow capacity, flood prone areas, riparian areas, 100-year floodplains within the Truckee River, Little Truckee River, and Lake Tahoe Hydrologic Units (HUs), slopes over 30% in the Lake Tahoe HU, and Stream Environment Zones within the Lake Tahoe HU.

13. Philip Nemir, RPF, Forestry & Appraisal Services (Letter Code: Nemir)	
Nemir # 1	Comment noted.
Nemir # 2	Comment noted.
Nemir # 3	Comment noted. Water Board staff anticipate that the re-categorization combined with reduced notification, monitoring, and reporting requirements for lower-threat projects will open up staff time and resources for more thorough regulation of the higher threat projects.
Nemir # 4	Comment noted.
Nemir # 5	Water Board staff will not make this change. Water Board staff have segregated these activities in interest of pairing appropriate conditions to specific types of activities. Segregating these activities also preserves the self-limiting nature of the activities that can proceed with no notification.
Nemir # 6	Water Board staff will not make this change. Wet conditions frequently exist before December 1 and persist after February 29.
Nemir # 7	Water Board staff have significantly reduced what is required for those applying to proceed with timber harvest activities under Category 5. The only information requested on the Category 5 application form (Attachment F) are the Plan name, CAL FIRE Plan number, landowner's contact information, other contact information, a yes/no question regarding CAL FIRE Director approval of the Plan, RPF contact information, a yes/no question regarding Water Board staff participation in the CAL FIRE review team process for the Plan, and a signature from the Landowner, agent thereof, or Land Manager, certifying compliance with all conditions of the Timber Waiver.
Nemir # 8	Water Board staff will not make this change because each year winter operations occur, the discharger must verify that conditions of the waiver were met and any BMPs proposed as part of the plan were implemented.
Nemir # 9	Please see response <u>DFG # 6.</u>
Nemir # 10	Please see response <u>DFG # 6.</u>
Nemir # 11	Please see response <u>Emery # 4</u> and <u>CAL FIRE Sacramento # 8.</u>

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

BOARD ORDER NO. R6T- 2009- (PROPOSED)

CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS

FOR

**WASTE DISCHARGES RESULTING FROM
TIMBER HARVEST AND VEGETATION MANAGEMENT ACTIVITIES
IN THE LAHONTAN REGION
"2009 TIMBER WAIVER"**

Modoc, Lassen, Plumas, Sierra, Nevada, Placer, El Dorado, Alpine, Mono, Inyo,
San Bernardino, Kern, and Los Angeles Counties

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- Section A: Findings.** Provides the legal and factual basis for the Timber Waiver.
- Section B: General Provisions.** Statements regarding waiver applicability, waiver effective and expiration dates, and liability.
- Section C: General Conditions.** Conditions that apply to projects regulated by this Timber Waiver.
- Section D: Timber Waiver Categories.** Category-specific eligibility criteria and conditions for activities regulated by this Timber Waiver.
1. Defensible space and construction activities
 2. Hand crew operations
 3. Post fire rehabilitation
 4. Activities that rely on existing roads & meet 10 criteria
 5. CAL FIRE-approved plans
 6. Activities that do not qualify for Categories 1 - 5
- Section E: Certification.** Statement of certification by the Executive Officer.
- List of Attachments** – Definitions, applications, monitoring and reporting forms

A. FINDINGS

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

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 (including but not limited to waste earthen and organic materials) 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 Water Board a report of waste discharge containing information which may be required by the Water Board. Only persons proposing timber harvest and/or vegetation management activities that may potentially result in a discharge or threatened discharge of waste to waters of the state are subject to regulation by the

Water Board and need to apply for 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 California Water Code section 13260.

2. The Water Board has identified wastes associated with timber harvest and vegetation management activities (as defined in Attachment A and in this Order referred to as “activities”) as having a potential effect on water quality. Activities eligible for this Timber Waiver range from fuel reduction work conducted around existing structures to commercial timber harvest and vary in potential threat to water quality. For example, project characteristics such as method of tree removal, intensity and proximity of activities to surface waters, and the sensitivity of the area will influence the mitigation measures needed to ensure the activity will have a less-than-significant impact on water quality and the environment. The types of activities that are eligible for this Timber Waiver have been divided into six categories to address the diversity of activities and the associated scale of conditions. Segregating these activities into categories is intended to assist dischargers in identifying eligibility criteria and conditions that apply to their particular activity. Table 1 summarizes the six categories of activities eligible for the Timber Waiver.

Table 1: Summary of Timber Harvest and Vegetation Management Activity

Categories. Please note that this table supplies only a brief summary of the eligibility criteria, conditions, and requirements of each category, please refer to Section D. Timber Waiver Categories (pages 12-28 for more complete information).

Category	Type of timber harvest and vegetation management activities	Notification, application, and monitoring requirements	Application processing timeline
1	Activities associated with defensible space, defense zone, forest fire prevention, and construction activities	No notification, application or monitoring.	None
2	Activities conducted by hand crews, including prescribed fire outside Waterbody Buffer Zones		
3	Planned post fire rehabilitation	Written notification within 7 days of initiation. No monitoring required as part of Timber Waiver.	Work may begin upon receipt of application by Water Board.
4	Activities which rely on existing roads, meet 10 criteria, and may include winter period operations	Application, implementation monitoring and reporting, and Project Completion Form submittals required. Winter monitoring required if equipment is operated during the winter period.	

Category	Type of timber harvest and vegetation management activities	Notification, application, and monitoring requirements	Application processing timeline
5	CAL FIRE – approved Timber Harvest Plan, Non-Industrial Timber Management Plans, or other CALFIRE Plans	Application, monitoring and reporting, and Project Completion Form submittals required.	Work may begin upon receipt of application by Water Board.
6	Activities that do not qualify for categories 1-5, and may include activities within 100-year floodplains or Stream Environment Zones	Application, monitoring and reporting, and Project Completion Form submittals required	Application submitted at least 30 days before beginning work.

3. 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.
4. 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.
 - (g) The Water Board may include as a condition of a waiver the payment of an annual fee established by the State Water Resources Control Board (State Water Board). (At the time of adoption of this Timber Waiver, the State Water Board has not

established annual fee regulations with respect to timber harvest and vegetation management activities).

5. The Water Quality Control Plan for the Lahontan Region (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 extremely fine sediment (less than 16 micrometers in size) to be the primary cause of clarity loss in Lake Tahoe and anticipates adopting a Total Maximum Daily Load for sediment and nutrient discharges to Lake Tahoe in 2010. The Water Board adopted a Total Maximum Daily Load for sediment discharge to the Truckee River in 2008 focusing on controlling sediment from roads and land disturbances. Therefore, this waiver adds additional conditions and requirements within the Lake Tahoe, Little Truckee River and Truckee River HUs to ensure compliance with the Basin Plan.
6. The Water Board recognizes the need statewide to address the current and growing threat of catastrophic wildfire. Decades of fire suppression have resulted in thick stands of trees and vegetation requiring 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. Limited quantitative information about site specific effects of certain activities conducted in these areas are known. Similarly, the water quality effects from wildfire in these areas can be significant and, to some extent, may be estimated based on fire intensity and predicted hydrology. The Water Board recognizes a need for more information on the impacts and appropriate mitigation measures for equipment use and pile burning within 100-year floodplains of the Little Truckee River, Truckee River or Lake Tahoe HUs, or in Lake Tahoe HU SEZs. Research and demonstration activities are being proposed and the Water Board is allowing these activities to proceed under this waiver. To ensure these activities do not in themselves create a potentially significant effect on the environment, Water Board directs its staff to:
 - (a) impose additional monitoring, such as quantitative monitoring of impacts to soils (compaction, infiltration rate, etc.), ground cover inventories, vegetation recovery, or water quality analysis (see Conditions 5 and 6 of Category 6);
 - (b) ensure plans include appropriate design features to prevent or limit impacts to water quality;
 - (c) impose specific environmental triggers or thresholds that must not be exceeded during implementation; and
 - (d) notify the public of projects requiring a prohibition exemption a minimum of ten days before such an exemption and coverage under this waiver is considered.

7. The Water Board finds that the results of the USFS-Lake Tahoe Basin Management Unit Heavenly Valley Creek Stream Environment Zone Demonstration Project (USFS-LTBMU, 2008) provide sufficient evidence that permanent disturbance of SEZs did not occur from the operation of 13 psi cut-to-length equipment on dry granitic soils. 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 dry soil conditions occurs. Additionally, the results will be considered sufficient for use of the same or similar low ground pressure equipment elsewhere in the Lahontan Region.
8. 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 Category 1, 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.
 - ii. conducted under a Forest Fire Prevention Exemption issued by the California Department of Forestry and Fire Protection (CAL FIRE) pursuant to California Code of Regulations, title 14, section 1038, subdivision (i). The Water Board finds that these activities do not pose a significant threat to water quality because of the CAL FIRE requirements that limit these activities.
 - iii. conducted under a Dead, Dying, Diseased Exemption issued by CALFIRE pursuant to California Code of Regulations, title 14, section 1038 (b) without exceptions to 1038 (b) condition nos. 6 or 9. The Water Board finds that these activities do not pose a significant threat to water quality because of the CAL FIRE requirements and the Water Board's additional restrictions on activities in waterbody buffer zones.
 - (b) For Category 2, 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 for onsite processing of materials cut by hand crews. The Water Board finds activities that comply with the criteria and conditions for Category 2 do not pose a significant threat to water quality.
 - (c) For Category 3, the Water Board waives monitoring requirements. Category 3 applies only to those activities conducted for post-fire rehabilitation, and covers activities to minimize threats to life, property, water quality, and natural and cultural resources. These activities are either 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.

9. On February 14, 2007, in accordance with Water Code section 13269, the Water Board adopted Resolution No. R6T-2007-0008 which revised the previous conditional waiver of waste discharge requirements for discharges related to timber harvest activities in the Lahontan Region (Resolution No. R6T-2003-0001). The Water Board is considering a revised Timber Waiver at this time to address:
 - (a) requests made by the Water Board,
 - (b) requests made by the regulated public and agencies, and
 - (c) 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 following the 2007 Angora fire in South Lake Tahoe.
10. Certain terms used in this Timber Waiver have a specific, regulatory definition. The definition of these terms as listed in Attachment A may differ from common, dictionary definitions. All other terms shall have the same definitions as prescribed by the California Forest Practice Rules (California Code of Regulations, title 14, section 895.1 et seq.), Public Resources Code section 4528, subdivision (f), and the Porter-Cologne Water Quality Control Act (Water Code section 13000 et seq.). Definitions contained in Water Code Section 13050(d) controls for the purpose of the Timber Waiver.
11. "Discharger" means the landowner(s), any duly authorized representative of the landowner(s), and anyone working on behalf of the landowner(s) in the conduct of timber harvest and vegetation management. Discharger includes any "person" as that term is defined by Water Code section 13050, subdivision (c).
12. The Water Board adopted the Water Quality Control Plan for the Lahontan Region (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. The Basin Plan contains water quality objectives developed to protect the waters for the listed beneficial uses. The factors in Water Code section 13241, including economic considerations, were considered as required during the development of water quality objectives. Prohibitions, provisions, and conditions contained in this Timber Waiver implement these previously developed water quality objectives. Compliance with water quality objectives will protect the waters for beneficial uses as identified in the Basin Plan.
13. State Water Board Resolution No. 68-16 ("Statement of Policy with Respect to Maintenance of High Quality Waters in California") requires that the Water Board regulate discharges of waste to waters of the state to achieve the highest water quality consistent with maximum benefit to the people of the state. It further requires that

dischargers meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that pollution or nuisance will not occur and that the highest water quality consistent with maximum benefit to the people of the state will be maintained. This Timber Waiver is consistent with Resolution No. 68-16 because it requires compliance with applicable water quality control plans, including applicable water quality objectives, prohibits the creation of pollution or nuisance, and sets forth conditions that require the implementation of additional management practices (in addition to those required in the California Forest Practice Rules [California Code of Regulations, title 14, section 895.1 et seq] and U.S. Forest Service Best Management Practices guidance manuals) to assure protection of beneficial uses of waters of the state and maintenance of the highest water quality consistent with maximum benefit to the people of the state.

14. The Timber Waiver is consistent with the Basin Plan and is in the public interest 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 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 timber harvest activities, 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 will respond to the need for expedited permitting for lower-impact fuels hazard reduction and forest enhancement activities, while still maintaining water quality protection through conditions and a monitoring program (under certain circumstances) as described in the Timber Waiver. 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 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 California Forest Practice Act Rules and Regulations. This provides a process for the incorporation of water quality protective measures into Timber Harvest Plans beyond those required by the California Forest Practice Act Rules and Regulations.
15. This Timber Waiver shall not create a vested right to discharge waste and all such discharges shall be considered a privilege, as provided for in Water Code section 13263, subdivision (g). The Water Board Executive Officer may terminate the applicability of the Timber Waiver described herein to any activity at any time when such termination is in the public interest and/or the activity could affect the quality of waters of the state for beneficial uses.
 16. The Water Board has prepared a Mitigated Negative Declaration with regard to the Timber Waiver in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code section 21000 et seq.) and state CEQA Guidelines (California Code of Regulations, title 14, section 15000 et seq.), and has considered the Mitigated Negative Declaration and determined there will be no significant adverse impacts to the environment from waiving waste discharge requirements for the categories of activities specified herein. The Water Board hereby certifies the Mitigated Negative Declaration for this Timber Waiver. The Executive Officer shall file all appropriate notices.
 17. The Water Board held a public hearing on May 13-14, 2009, in South Lake Tahoe, California, and considered all evidence concerning this matter.

IT IS HEREBY ORDERED that any discharger meeting applicable eligibility criteria and requirements for activities in the Lahontan Region regulated by this Timber Waiver must comply with the General Provisions and all applicable general and category-specific conditions of this Timber Waiver, as set forth below.

B. GENERAL PROVISIONS

1. Pursuant to Water Code section 13269, subdivision (a), the Water Board waives requirements to submit reports of waste discharge and obtain waste discharge requirements for persons proposing or conducting activities which meet the eligibility criteria and comply with the conditions and general provisions set forth in this Timber Waiver.

2. The Water Board anticipates that most activities will proceed under a single category of the Timber Waiver. However, if a project is phased, or divided geographically, such that portions qualify under Category 1, 2, or 3; and other portions qualify under Category 4, 5, or 6; the discharger has the option of enrolling such phases or portions under different categories. Water Board notification is only required for the portions of projects or activities that qualify under Category 4, 5, or 6.
3. The Water Board does not waive the filing of a report of waste discharge or waive waste discharge requirements for persons proposing activities with impacts that are not mitigated to less-than-significant levels, such as those identified in a California Environmental Quality Act environmental impact report, or a National Environmental Policy Act or Tahoe Regional Planning Agency environmental impact statement. Not all timber harvest and vegetation management activities proposed in the Lahontan Region will be eligible for this Timber Waiver. Dischargers proposing activities that are not eligible for this Timber Waiver must file a report of waste discharge with the Water Board pursuant to Water Code section 13260.
4. This Timber Waiver shall become effective on May 13, 2009, and shall expire on May 13, 2014, unless terminated or renewed by the Water Board. Discharges regulated under this Timber Waiver are not authorized, and waste discharge requirements are not waived, after May 13, 2014, unless this Timber Waiver is renewed by Water Board action.
5. Discharges regulated under the 2007 Waiver of Waste Discharge Requirements for Timber Harvest Activities (Resolution No. R6T-2007-0008) may continue or proceed under that waiver until it expires on February 14, 2012, or may choose to re-apply under this waiver. After May 13, 2009, no new applications for permit coverage under Resolution No. R6T-2007-0008 (the 2007 Timber Waiver) will be accepted.
6. Timber harvest and vegetation management activities approved by the California Department of Forestry and Fire Protection under an Exemption or Emergency Notice may be eligible for coverage under Timber Waiver Categories 1, 2, 3, 4, or 6, depending on the scope of the proposed activities.
7. For activities conducted by the U.S. Forest Service, the Water Board finds that the U.S. Forest Service's Best Management Practices Evaluation Program (BMPEP) fulfills, in part, Timber Waiver monitoring requirements for Timber Waiver Categories 4 and 6. Monitoring requirements in addition to the BMPEP that must be undertaken by the U.S. Forest Service in order to satisfy all monitoring and reporting requirements include implementation monitoring, and focused "high risk" effectiveness monitoring for activities that are located in watersheds that are at or above the Threshold of Concern (as determined by the U.S. Forest Service's cumulative watershed effects analysis), or on the Clean Water Act section 303(d) list for sediment impairment. Additional details on specific U.S. Forest Service requirements are described in Attachment O, Monitoring and Reporting Program for U.S. Forest Service Activities Enrolled Under Timber Waiver Categories 4 or 6.

8. Dischargers may request a waiver of monitoring or propose an alternate monitoring and reporting program, subject to approval by the Executive Officer pursuant to Water Code Section 13269. The Executive Officer may impose additional or revised monitoring and reporting requirements pursuant to Water Code Section 13267. The Executive Officer may modify application, monitoring and reporting forms (Attachments C through M).

C. GENERAL CONDITIONS

1. Activities must be conducted in compliance with the Basin Plan, as amended, and other applicable laws, regulations and plans.
2. Wastes, including but not limited to, petroleum products, soil, silt, sand, clay, rock, felled trees, slash, sawdust, bark, herbicides, must not be discharged to surface waters or be deposited in locations where such material may discharge to surface waters. If discharge of wastes to surface waters occurs (not previously authorized by the Water Board), the discharger must notify the Water Board by telephone or email within 24 hours of detection of the discharge or the next business day, whichever comes first.
3. **Condition for activities within the Little Truckee River, Truckee River or Lake Tahoe HUs only:** If timber harvest and vegetation management activities are planned within 100-year floodplains of the Little Truckee River, Truckee River or Lake Tahoe HUs, or Stream Environment Zones or high erosion hazard lands (Bailey Land Classification 1a, 1c, or 2) of the Lake Tahoe HU, waste discharge prohibitions may apply. Review Attachment N to verify if any proposed activities would need a Basin Plan prohibition exemption prior to proceeding.
4. Activities conducted under the Timber Waiver must comply with the category-specific eligibility criteria and conditions, including monitoring and reporting requirements where specified. The discharger must conduct activities in accordance with information submitted in the application for waiver coverage, if one is required. For Categories 4, 5, and 6, the discharger must conduct monitoring and reporting pursuant to Water Code section 13267.
5. Timber harvest and vegetation management activities must be conducted in accordance with any mitigation and monitoring plans developed as part of complying with the California Environmental Quality Act, National Environmental Policy Act, California Forest Practice Act Rules and Regulations, and/or Tahoe Regional Planning Agency environmental analysis requirements.
6. Timber harvest and vegetation management activities subject to this Timber Waiver must not create a pollution, contamination, or nuisance, as defined by Water Code section 13050, subdivisions (k), (l), and (m).
7. All equipment used must be monitored for leaks, and removed from service if necessary to protect water quality. All spills must be immediately contained and spilled materials and/or contaminated soils must be properly disposed. An

emergency spill kit adequate to contain spills that could result from onsite equipment must be at the project site at all times of equipment use.

8. This Timber Waiver does not permit any illegal activity, and does not preclude the need for permits or licenses which may be required by other governmental agencies, or other approvals by the Water Board such as discharges subject to a National Pollutant Discharge Elimination System (NPDES) permit under the Clean Water Act, including silvicultural point sources as defined in 40 Code of Federal Regulations, section 122.27. This waiver is not a substitute for state water quality certification under section 401 of the federal Clean Water Act which is required if a federal permit, such as a Clean Water Act section 404 permit, is required. Also persons practicing forestry must ensure that they maintain appropriate licenses and certifications pursuant to Public Resources Code section 752 and 753.
9. Pursuant to Water Code section 13267 subdivision (b) and Water Code section 13269 subdivision (a), any proposed material change to the activities proceeding under the Timber Waiver must be reported to Water Board staff in advance of implementation of any such change. Material changes include:
 - (a) Change of project location or size,
 - (b) Change to proposed winter period operations,
 - (c) Relocation or addition of watercourse crossings.
10. Any proposed material change to the activities proceeding under the Timber Waiver that would result in the activity qualifying under Category 6 must be reported to the Water Board staff a minimum of **30 days** before the proposed implementation of any such change pursuant to Water Code section 13267, subdivision (b) and Water Code section 13269, subdivision (a).
11. A report of waste discharge must be filed with the Water Board pursuant to Water Code Section 13260 for any proposed material change to the activities proceeding under the Timber Waiver that would result in ineligibility for Timber Waiver coverage.
12. For the purpose of performing inspections and conducting monitoring, Water Board staff must be allowed reasonable access onto property where timber harvest and vegetation management activities are proposed, are being conducted, or have been terminated or completed. Inspections and monitoring may include sample collection, measuring, and photographing/taping to determine compliance with waiver conditions and eligibility criteria. Such inspections and monitoring are consistent with Water Code section 13267, subdivision (c), Public Resources Code section 4604, subdivision (b)(1), and other applicable laws.

Prior to, or immediately upon entering the property, Water Board staff will attempt to contact the site owner, persons performing the timber harvest and vegetation management activities, or other on-site representative(s) in order to inform the landowner or persons onsite of each inspection, and to discuss any safety considerations. If consent to access to property is unreasonably withheld, the

Executive Officer may terminate the applicability of the Timber Waiver.

13. **Condition for Categories 4, 5, or 6:** For the purpose of observing, inspecting, photographing, digitally recording or video taping, measuring, and/or collecting samples or other monitoring information to document compliance or non-compliance with the eligibility criteria, conditions, or provisions of this Timber Waiver, dischargers agree to allow Water Board staff:
- (a) Entry at any time, with or without advance notice, onto: (1) the real property where timber harvest and vegetation management activities covered under this Timber Waiver are proposed, are being conducted, or have concluded; and (2) any and all outdoor areas in the control or ownership of the discharger, in the vicinity of and downstream of timber harvest and vegetation management activities.
 - (b) Access to and permission to copy any record required to be kept under the conditions of this Timber Waiver, including, but not limited to, any self-monitoring records and/or equipment used to fulfill monitoring requirements.

D. TIMBER WAIVER CATEGORIES

Category 1: Defensible space, fire prevention, dead-dying-diseased tree removal, and construction activities

Eligibility Criteria:

Activities which may proceed under this category are those:

- (1) Undertaken to comply with state, local, or county defensible space requirements, including California Public Resources Code (PRC) section 4291 requirements, OR
- (2) On undeveloped lots (as defined in Attachment A) up to three acres in size for the purpose of fuels reduction and/or construction activities, OR
- (3) Conducted on public lands or with public funding (where a Registered Professional Forester, Federal Forestry Professional or Natural Resource Professional has developed and oversees the plan) to provide up to a 300-foot defense zone adjacent to subdivision boundaries, private parcel lot lines, and/or around structures and facilities (not including linear features such as roads, trails, or utility corridors), OR
- (4) Conducted under a CAL FIRE issued Forest Fire Prevention Exemption and in compliance with California Code of Regulations, title 14, section 1038, subdivision(i), OR
- (5) Undertaken to remove hazard trees in response to an imminent threat to life or property, OR

- (6) Conducted under a CALFIRE issued Dead, Dying, Diseased Exemption in compliance with California Code of Regulations, title 14, section 1038 (b) without any exceptions to Section 1038 (b) condition nos. 6 or 9.

Conditions:

Dischargers conducting activities meeting the eligibility criteria listed above are not required to notify, apply, or report monitoring to the Water Board if they comply with the following conditions:

- (1) Timber harvest and vegetation management activities must not cause or create erosion, destabilization of stream banks, temperature increases in waterbodies, disturbance to non-target Waterbody Buffer Zone vegetation, or concentrated surface runoff.
- (2) All areas disturbed by activities must be stabilized (as defined in Attachment A) at the conclusion of the activity or before the winter period as defined in Attachment A (whichever is sooner).
- (3) Equipment, including tractors and vehicles, must not be driven across watercourses (including dry ephemeral streams) except over existing watercourse crossings.
- (4) The operation of equipment, including tractors and vehicles, shall minimize soil disturbance to the maximum extent practicable.
- (5) No tractor, vehicle, or equipment use on saturated soils (see definition of saturated soil conditions in Attachment A).
- (6) All activities conducted under Category 1 must comply with the General Conditions of this Timber Waiver and meet one of the category-specific eligibility criteria listed above.

Category 2: Activities conducted by hand crews (defined in Attachment A) including thinning operations and prescribed fire

Eligibility Criteria:

Activities which may proceed under this category must meet all of the following eligibility criteria:

- (1) Activities shall be conducted by hand, except for low impact equipment, see Eligibility Criteria 2(a) below, to assist hand crew operations.
- (2) Tractor, vehicle, and equipment access shall be limited to existing roads with the following exceptions:
 - a. Low impact equipment with ground pressures less than 10 pounds per square inch (psi), such as chippers, brush mowers, or similar equipment for onsite processing of materials cut by hand crews and

- b. Single passenger all-terrain vehicles (ATVs) or snowmobiles.
- (3) No construction of new landings or expansion of existing landings.

Conditions:

Dischargers conducting activities meeting the eligibility criteria listed above are not required to notify, apply, or report monitoring to the Water Board if they comply with the following conditions:

- (1) On existing roads, tractors, vehicles, low-ground-pressure chippers or other equipment shall not be operated during saturated soil conditions (as defined in Attachment A).
- (2) Operation of ATVs, chippers, brush mowers, or similar equipment off roads must always occur at distances greater than 25 feet from a waterbody and when at least one of the following conditions occurs:
 - a. Soils are dry (as defined in Attachment A), or
 - b. Hard-frozen soil conditions (as defined in Attachment A) exist, or
 - c. Snow depth is sufficient to not allow visible disturbance of soils, AND
- (3) Prior to the commencement of activities within Waterbody Buffer Zones (as defined in Attachment B), trees with a DBH¹ greater than 3 inches planned for removal, or trees designated for retention, must be marked (including a base mark below the cutline) or designated by written prescription by either a:
 - a. Registered Professional Forester or supervised designee,
 - b. Federal Forestry Professional (as defined in Attachment A) or supervised designee, or
 - c. Natural Resource Professional, or supervised designee.
- (4) Activities must not cause or create erosion, destabilization of stream banks, temperature increases in waterbodies, disturbance to non-target Waterbody Buffer Zone vegetation, or concentrated surface runoff.
- (5) All areas disturbed by timber harvest and vegetation management activities must be stabilized at the conclusion of operations or before the winter period as defined in Attachment A (whichever is sooner).
- (6) Chipped and masticated material must not be discharged to waterbodies, or be deposited in locations where such material may discharge to a waterbody. Within Waterbody Buffer Zones chipped and masticated material must not exceed an average of two inches in depth, with a maximum depth of four inches.
- (7) The following conditions apply to prescribed fire:

¹ DBH (Diameter at Breast Height) means the diameter of the tree measured outside bark, at breast height, a point 4.5 feet (1.37 m) above ground level.

- a. If fuel breaks are constructed, effective waterbreaks must be constructed at the end of burning operations or prior to sunset if the National Weather Service forecast is a “chance” (30% or more) of rain within the next 24 hours.
- b. No placement or burning of burn piles within Waterbody Buffer Zones (as defined in Attachment A), Stream Environment Zones in the Lake Tahoe HU, or 100-year floodplains in the Little Truckee River, Truckee River or Lake Tahoe HUs except burn piles may be placed within Waterbody Buffer Zones outside SEZs in the Tahoe HU under all of the following circumstances:
 - i. Piles must not be located within 100 year floodplain of any watercourse or within 25 feet of a watercourse.
 - ii. Piles must be limited in size to no more than 10 feet in diameter and 5 feet in height.
 - iii. No more than 10% of the area within the Waterbody Buffer Zone shall be covered in piles
- c. Broadcast burning (as defined in Attachment A) is allowed as long as the prescription does not include active ignition within Waterbody Buffer Zones.

(Note: Prescribed fire within Waterbody Buffer Zones that do not meet the above conditions may be authorized pursuant to an activity-specific notification under Category 4 or 6. See General Provision 2.)

- (8) All activities conducted under Category 2 must comply with the General Conditions of this Timber Waiver and meet the category-specific eligibility criteria listed above.

Category 3: Post-fire emergency rehabilitation

Eligibility Criteria:

Activities implemented to minimize threats to life or property, and/or to stabilize soil and prevent unacceptable degradation to natural and cultural resources resulting from the effects of a wildfire and suppression of a wildfire. Activities conducted under a CAL FIRE Emergency Exemption do not qualify for Category 3.

Conditions:

- (1) Land owners or their representatives planning or conducting activities described above must contact Water Board staff in writing within seven (7) days of initiating these activities and provide the location and a description of the activities being conducted.
- (2) **Condition for activities within the Little Truckee, Truckee River or Lake Tahoe hydrologic units only:** If timber harvest and vegetation management activities are planned within 100-year floodplains of the Little Truckee River, Truckee River or Lake Tahoe HUs, or Lake Tahoe HU Stream Environment Zones, waste discharge prohibitions may apply. Review Attachment N to verify if any proposed activities would need a Basin Plan prohibition exemption prior to proceeding.

- (3) All activities conducted under Category 3 must comply with the General Conditions of this Timber Waiver and meet the category-specific eligibility criteria listed above.

Category 4: Activities which rely on existing roads, meet the following 10 criteria, and may include winter-period operations

Eligibility Criteria:

Activities which may proceed under this category must meet the following eligibility criteria:

- (1) No construction of new roads.
- (2) No construction of new watercourse crossings except for the construction of over-snow watercourse crossings and up to one dry Class III crossing per five acres.
- (3) No widening of watercourse crossings or road surfaces.
- (4) No tractor, vehicle, or equipment operations within Waterbody Buffer Zones (as defined in Attachment B), meadows, or wet areas, except for:
 - a. Use and maintenance of existing roads
 - b. Over-snow
 - c. Use of equipment with ground pressures less than 13 psi
 - d. Up to one dry Class III crossing per five acres
- (5) No activities on slopes greater than 60%, except for aerial or cable operations.
- (6) No tractor, vehicle, or equipment operations on slopes greater than 50%.
- (7) No construction of new skid trails on slopes greater than 40%, except over-snow operations.
- (8) No construction of landings requiring earthwork (i.e., grading or excavation) on slopes greater than 20% within 200 feet of a watercourse and where there is potential for sediment delivery to a waterbody due to soil disturbances.
- (9) No tractor, vehicle, or equipment operations on soils with high or extreme erosion hazard rating, known slides, or unstable areas, except over-snow operations.
- (10) In the Tahoe HU, equipment operations must be in compliance with the Basin Plan and TRPA regulations concerning steep slopes and high erosion hazard lands.

Conditions:

Dischargers conducting activities meeting the eligibility criteria listed above must comply with the following conditions in order to proceed under this Timber Waiver category:

- (1) Submit a complete Category 4 Application Form (Attachment C). Activities may begin upon verification from Water Board staff that an application was received as determined by a notice of receipt from Water Board staff or by confirmation of delivery by the United States Postal Service or other private carrier.
- (2) Pursuant to Water Code section 13267, **Implementation monitoring**, as described in the Category 4 Implementation Monitoring Form (Attachment D), must be completed before November 15 of every year for the duration of activities. Monitoring information must be submitted to the Water Board by January 15 of the following year.
- (3) Pursuant to Water Code section 13267, if tractor, vehicle, or equipment operations occur in the winter period (as defined in Attachment A), the discharger must comply with the Category 4 **Daily Winter-Period Monitoring Program** (Attachment E). Data accumulated during this monitoring must be retained by the discharger and submitted July 15 of every year.
- (4) Over-snow watercourse crossings may be constructed as long as they are removed at the conclusion of operations or before a rain event if there is a risk of diversion or obstruction of the natural flow of water within the channel. Removal of such watercourse crossings must be done without disturbing watercourse bed or banks.
- (5) Facilities that cross watercourses that support fish must be installed and maintained so as to allow for unrestricted passage of fish during all life stages.
- (6) Within Water Body Buffer Zones and off existing roads, only operation of equipment with ground pressures less than 13 psi may occur:
 - a. When soils are dry (as defined in Attachment A) to a minimum depth of 12 inches and equilibrated groundwater levels are at least 2 feet below the soil surface, or
 - b. When hard-frozen soil conditions (as defined in Attachment A) exist, or
 - c. When snow depth is sufficient to not allow visible disturbance of soils,

AND

Equipment operations must occur at distances greater than 25 feet from a waterbody except for up to one Class III dry crossing per five acres.

- (7) In the Truckee River, Little Truckee River and Lake Tahoe HUs, only 13 psi cut-to-length equipment on granitic soils may operate within Lake Tahoe SEZs or 100 year floodplains under this category. Dischargers proposing other equipment or activities on volcanic soils must apply for a basin plan prohibition exemption for Executive Officer consideration under Category 6 of the waiver.

- (8) Tractor, vehicle, or equipment operations on roads or anywhere outside Water Body Buffer Zones must be limited to:
- Times of the year when soils are not saturated (as defined in Attachment A), or
 - Over hard-frozen soil conditions (as defined in Attachment A), or
 - When snow depth is sufficient to not allow visible disturbance of soils.
- (9) Prior to the commencement of activities within Waterbody Buffer Zones (as defined in Attachment B), trees with a DBH² greater than 3 inches planned for removal, or trees designated for retention, must be marked (including a base mark below the cutline) or designated by written prescription by either a:
- Registered Professional Forester or supervised designee,
 - Federal Forestry Professional (as defined in Attachment A) or supervised designee, or
 - Natural Resource Professional, or supervised designee.
- (10) Activities must not cause or create erosion, destabilization of stream banks, temperature increases in waterbodies, disturbance to non-target vegetation within Waterbody Buffer Zones, or concentrated surface runoff.
- (11) Chipped and masticated material must not be discharged to waterbodies, or be deposited in locations where such material may discharge to a waterbody. Within Waterbody Buffer Zones chipped and masticated material must not exceed an average of two inches in depth, with a maximum depth of four inches.
- (12) All completed areas disturbed by activities must be stabilized at the conclusion of operations or before the winter period (whichever is sooner). For winter operations, areas must be stabilized prior to sunset if the National Weather Service forecast is a "chance" (30% or more) of rain within the next 24 hours.
- (13) In areas where tractors, vehicles, or equipment are operated over-snow the following must be clearly marked for operator visibility:
- All waterbodies,
 - Culverts, and
 - Stream crossings.
- (14) Plowing of roads, landings, and turnouts during over-snow operations must allow for adequate road drainage, and must not:
- Expose soils,
 - Damage road surfaces and associated drainage structures, or

² DBH (Diameter at Breast Height) means the diameter of the tree measured outside bark, at breast height, a point 4.5 feet (1.37 m) above ground level.

- c. Result in concentrated flows of snowmelt and runoff that has the potential to reach a waterbody.

(15) The following conditions apply to prescribed fire:

- a. Areas burned within Waterbody Buffer Zones must be left in a condition such that ash, soils, and/or debris will not discharge to a waterbody.
- b. If fuel breaks are constructed, effective waterbreaks must be constructed at the end of burning operations or prior to sunset if the National Weather Service forecast is a "chance" (30% or more) of rain within the next 24 hours.
- c. No placement or burning of burn piles (as defined in Attachment A) within Waterbody Buffer Zones (as defined in Attachment B), Stream Environment Zones in the Lake Tahoe HU, or 100-year floodplains in the Little Truckee River, Truckee River or Lake Tahoe HUs except burn piles may be placed within Water Body Buffer Zones outside SEZs in the Tahoe HU under all of the following circumstances:
 - i. Piles must not be located within 100 year floodplain of any watercourse or within 25 feet of a watercourse.
 - ii. Piles must be limited in size to no more than 10 feet in diameter and 5 feet in height.
 - iii. No more than 10% of the area within the Water Body Buffer Zone shall be covered in piles

(Note: Prescribed fire within Waterbody Buffer Zones that do not meet the above conditions may be authorized pursuant to an activity-specific notification under Category 6. See General Provision 2.)

(16) Pursuant to Water Code section 13267, notify the Water Board, in writing, at least 30 days prior to the proposed application of herbicides (except for application of borax and/or sporax directly to tree stumps). The written notice must include the following:

- a. Type of herbicide
- b. Method and area of application
- c. Projected date of application
- d. Measures that will be employed to assure compliance with the Basin Plan. Subsequent changes to the proposal must be submitted in writing at least 14 days before the application, unless Water Board staff agrees in writing to a shorter notice period.

(17) Upon completion of timber harvest or vegetation management activities, dischargers must submit an Implementation Monitoring Form (Attachment G) and request termination of coverage under the Timber Waiver in accordance with Attachment M, Notice of Project Completion Form.

The discharger and the activities remain subject to all applicable Timber Waiver criteria and conditions (including required monitoring and reporting) until a Notice is

received from Water Board staff terminating coverage under the Timber Waiver. Prior to approving (or declining) termination, Water Board staff may inspect the project area.

- (18) All activities conducted under Category 4 must comply with the General Conditions of this Timber Waiver and meet the category-specific eligibility criteria listed above.

<p>Category 5: CAL FIRE approved Plans (including Timber Harvest Plans, Non-Industrial Timber Management Plans, other Plans, and Amendments)</p>

Eligibility Criteria:

Activities eligible under this category must meet the following criteria:

- (1) The Timber Harvest Plan or Nonindustrial Timber Management Plan (Plan) has been approved by CAL FIRE.
- (2) If recommendations have been made by Water Board staff during the CAL FIRE Review Team process, they have been incorporated into the approved Plan or the Timber Waiver application (if not, apply under Category 6, or submit individual Report of Waste Discharge).

Conditions:

Dischargers conducting activities meeting the eligibility criteria listed above must comply with the following conditions in order to proceed under this Timber Waiver category:

- (1) Submit a complete Category 5 Application Form (Attachment F). Activities may begin upon verification from Water Board staff that an application was received as determined by a notice of receipt from Water Board staff, or by confirmation of delivery by the United States Postal Service or other private carrier.
- (2) A Registered Professional Forester (RPF) has clearly indicated (within the approved Plan) whether the proposed activities could occur within or affect the following areas:
 - a. Aquatic or wetland habitat
 - b. Known landslides or unstable areas
 - c. Areas of high or extreme erosion hazard rating
- (3) An RPF has clearly indicated (within the approved Plan or as an addendum to the Timber Waiver application) whether the following conditions are present within the Plan area:
 - a. Overflow channels resulting from the obstruction of stream flow or stream diversions
 - b. Culverts showing evidence of inadequate flow capacity

- (4) An RPF has clearly indicated (within the approved Plan or as an addendum to the Timber Waiver application) whether the following activities will occur:
- a. Use of new or existing skid trails on slopes greater than 50% (or 30% in the Lake Tahoe HU). The identification of individual trails or the shading of areas planned for skid trail construction or reconstruction can satisfy this condition.
 - b. Construction of new watercourse crossings and/or the modification of existing watercourse crossings.
 - c. Landings or skid trails (including existing landings and skid trails and/or those to be constructed or reconstructed) proposed for use during timber harvest and vegetation management activities for which any portion of the landing or skid trail lies within a Waterbody Buffer Zone (as defined in Attachment B).
 - d. Equipment operations within Waterbody Buffer Zones, Lake Tahoe, Truckee River or Little Truckee River HUs 100 year floodplains, or Lake Tahoe HU SEZs.
 - e. Prescribed fire within Waterbody Buffer Zones, Lake Tahoe HU SEZs, or Lake Tahoe, Truckee River or Little Truckee River HUs 100 year floodplains.

- (5) If any of the activities or conditions listed above (in conditions 2 through 4) exist or are proposed, an RPF must provide within the approved Plan or Timber Waiver application, project modifications and/or mitigation measures to avoid any adverse impact(s) to water quality. The project must be conducted in accordance with the Plan and waiver application.

Within the Lake Tahoe, Little Truckee River and Truckee River HUs, Basin Plan prohibitions may apply (see Attachment N). If an exemption is required, the Discharger must request an exemption and provide additional information in the Plan or as an addendum to the Waiver application to address the required basin plan findings and criteria. The Executive Officer must grant an exemption before activities subject to the prohibitions may occur.

- (6) Facilities that cross watercourses that support fish must be installed and maintained so as to allow for unrestricted passage of fish during all life stages.
- (7) Culverts at watercourse crossings in which water is flowing at the time of installation shall be installed using methods to temporarily isolate or divert stream flows from the culvert installation area.
- (8) Permanent watercourse crossings and approaches shall be installed and maintained to accommodate 100-year flood flows and associated debris.
- (9) Vegetation, other than target species (as defined in Attachment A), that is found along waterbodies, or within or bordering meadows and wet areas, must be retained and protected during timber harvest and vegetation management activities, unless they have been marked or designated by written prescription for

removal by an RPF or supervised designee to achieve fuel reduction goals or riparian forest health.

- (10) Pursuant to Water Code section 13267, comply with the **Monitoring and Reporting Program** described in the Category 5 Application Form (Attachment F), or as directed by the Executive Officer.
- (11) Pursuant to Water Code section 13267, notify the Water Board, in writing, at least 30 days prior to the proposed application of herbicides (except for application of borax and/or sporax directly to tree stumps). The written notice must include the following:
- Type of herbicide
 - Method and area of application
 - Projected date of application
 - Measures that will be employed to assure compliance with the Basin Plan

Subsequent changes to the proposal must be submitted in writing at least 14 days before the application, unless Water Board staff agrees in writing to a shorter notice period.

- (12) Pursuant to Water Code section 13267, upon completion of timber harvest activities dischargers must request termination of coverage under the Timber Waiver in accordance with Attachment M, Notice of Project Completion Form.
- The project and the discharger remain subject to all applicable Timber Waiver criteria and conditions (including required monitoring and reporting) until a Notice is received from Water Board staff terminating coverage under the Timber Waiver.
- (13) Activities conducted under Category 5 must comply with the General Conditions of this Timber Waiver and meet the category-specific eligibility criteria listed above.

Category 6: Activities that do not qualify for categories 1 – 5, and may include burning or equipment operations within Water Body Buffer Zones, 100-year floodplains or Stream Environment Zones.

Eligibility Criteria:

Activities that do not qualify under categories 1 – 5 may be eligible under this category if the discharger adheres to the following conditions.

Conditions:

Dischargers conducting activities meeting the eligibility criteria listed above must comply with the following conditions in order to proceed under this Timber Waiver category:

- (1) Submit a complete Category 6 Application Form (Attachment K). Activities may begin once Water Board staff has notified the discharger that their application is complete, or **30 days** following receipt of an application by Water Board staff as

determined by a notice of receipt from Water Board staff, or by confirmation of delivery by the United States Postal Service or other private carrier.

- (2) A Registered Professional Forester (RPF), Federal Forestry Professional, or Natural Resource Professional, has clearly indicated (within certified environmental documents completed in compliance with the California Environmental Quality Act (CEQA) and/or the National Environmental Policy Act (NEPA), or within the Timber Waiver Application submitted to the Water Board) whether proposed activities could occur within or affect the following:
 - a. Aquatic or wetland habitat
 - b. Known landslides or unstable areas
 - c. Areas of high or extreme erosion hazard rating
 - d. Overflow channels, flood prone areas, and riparian areas
- (3) An RPF, Federal Forestry Professional, or Natural Resource Professional, has clearly indicated (within certified CEQA and/or NEPA document(s), or within the Timber Waiver Application) whether the following conditions are present within the project area:
 - a. Overflow channels resulting from the obstruction of stream flow or stream diversions
 - b. Culverts showing evidence of inadequate flow capacity
 - c. Migrating channels or erodible watercourse banks
- (4) An RPF, Federal Forestry Professional, or Natural Resource Professional, has clearly indicated (within certified CEQA and/or NEPA document(s), or within the Timber Waiver Application) whether the following activities are included within the proposed project:
 - d. Skid trails on slopes greater than 50% (greater than 30% in Lake Tahoe HU)
 - e. Construction of new watercourse crossings and/or modification of existing watercourse crossings
 - f. Landings and skid trails (including existing landings and skid trails and/or those to be constructed or reconstructed) proposed for use during timber harvest and vegetation management activities for which any portion of the landing or skid trail lies within a Waterbody Buffer Zone (as defined in Attachment B)
 - g. Equipment operations within Waterbody Buffer Zones or Lake Tahoe HU SEZs or Lake Tahoe, Truckee River or Little Truckee River HU 100 year floodplains.
 - h. Prescribed fire within Waterbody Buffer Zones, Lake Tahoe HU SEZs, or Truckee River or Little Truckee River HUs 100 year floodplains.
 - i. New roads within the Tahoe HU.
- (5) If any of the activities or conditions listed above (in conditions 2 through 4) exist or are proposed, the discharger must provide in the application, NEPA, and/or CEQA

document, project modifications and/or mitigation measures to avoid any adverse impact(s) to water quality. The project must be conducted in accordance with environmental documents and the waiver application (including implementation of design features and mitigation measures).

Within the Lake Tahoe, Little Truckee River and Truckee River HUs, Basin Plan prohibitions may apply (see Attachment N). If an exemption is required, the Discharger must request an exemption and provide additional information in the Plan or as an addendum to the Waiver application to address the required basin plan findings and criteria including additional project specific monitoring to evaluate effects. The discharger may also include project triggers or thresholds where activities will stop if threshold is reached. The Executive Officer must grant an exemption before activities subject to the prohibitions may occur.

- (6) Pursuant to Water Code section 13267, comply with the **Monitoring and Reporting Program** described in the Category 6 Application Form (Attachment K) or as directed by the Executive Officer.
- (7) Pursuant to Water Code section 13267, if tractor, vehicle, or equipment operations occur in the winter period (as defined in Attachment A), the discharger must comply with the Category 6 **Daily Winter-Period Monitoring Program** (Attachment E). Data accumulated during this monitoring must be retained by the discharger and submitted July 15 of every year.
- (8) Over-snow watercourse crossings may be constructed as long as they are removed at the conclusion of operations or before a rain event if there is a risk of diversion or obstruction of the natural flow of water within the channel. Removal of such watercourse crossings must be done without disturbing watercourse bed or banks.
- (9) Tractor, vehicle, or equipment operations on existing roads anywhere and off roads outside Waterbody Buffer Zones must be limited to times of the years when soils are not saturated.
- (10) Tractor, vehicle, or equipment operations can occur anywhere when over hard-frozen soil conditions (as defined in Attachment A), or when snow depth is sufficient to not allow visible disturbance of soils.
- (11) If condition 10 cannot be met, tractor, vehicle, or equipment operations off road within Waterbody Buffer Zones must be limited to when soils are dry (as defined in Attachment A) to a minimum depth of 12 inches and equilibrated groundwater levels are at least 2 feet below the soil surface.
- (12) Within SEZs in the Lake Tahoe HU and 100 year floodplains of the Truckee River and Little Truckee River HUs, only 13 psi cut-to-length equipment on slash mats on granitic soils may be used provided conditions 8, 9, or 10 can be met without need for a Basin Plan prohibition exemption.

- (13) Within 100 year floodplains of Lake Tahoe, Truckee River and Little Truckee River HUs, and Lake Tahoe HU SEZs, other equipment may be used provided the Executive Officer has granted an exemption to the basin plan prohibition (see Attachment N).
- (14) All areas disturbed by timber harvest and vegetation management activities must be stabilized at the conclusion of operations or before the winter period as defined in Attachment A (whichever is sooner).
- (15) Facilities that cross watercourses that support fish must be installed and maintained so as to allow for unrestricted passage of fish during all life stages.
- (16) Culverts at watercourse crossings in which water is flowing at the time of installation shall be installed using methods to temporarily isolate or divert stream flows from the installation area.
- (17) Permanent watercourse crossings and approaches shall be installed and maintained to accommodate 100-year flood flows and associated debris.
- (18) Prior to the commencement of timber harvest and vegetation management activities within Waterbody Buffer Zones (as defined in Attachment B), trees with a DBH³ greater than 3 inches planned for removal, or trees designated for retention, must be marked (including a base mark below the cutline) or designated by written prescription and/or sample mark by either a:
 - a. Registered Professional Forester or supervised designee,
 - b. Federal Forestry Professional (as defined in Attachment A) or supervised designee, or
 - c. Natural Resource Professional, or supervised designee.
- (19) Vegetation, other than target species (as defined in Attachment A), that is found along waterbodies, or within or bordering meadows and wet areas, must be retained and protected during timber harvest and vegetation management activities.
- (20) The following conditions apply to prescribed fire:
 - a. Unless authorized by the Executive Officer under this Category, no placement or burning of burn piles (as defined in Attachment A) within Waterbody Buffer Zones (as defined in Attachment B), Stream Environment Zones in the Lake Tahoe HU, or 100-year floodplains in the Little Truckee River, Truckee River or Lake Tahoe HUs except burn piles may be placed within Water Body

³ DBH (Diameter at Breast Height) means the diameter of the tree measured outside bark, at breast height, a point 4.5 feet (1.37 m) above ground level.

Buffer Zones outside SEZs in the Tahoe HU under all of the following circumstances:

- i. Piles must not be located within 100 year floodplain of any watercourse or within 25 feet of a watercourse.
 - ii. Piles must be limited in size to no more than 10 feet in diameter and 5 feet in height.
 - iii. No more than 10% of the area within the Water Body Buffer Zone shall be covered in piles
- b. Authorization for burn piles not meeting the conditions in a. above will be considered by the Executive Officer following Water Board staff review of burn plan(s) or supplemental information submitted with the Timber Waiver Category 6 Application that includes site specific information such as, but not limited to:
- i. Soil type(s)
 - ii. Vegetative cover
 - iii. Minimum distances from waterbodies
 - iv. Topography
 - v. Percent of area to be burned within the Waterbody Buffer Zone
 - vi. Explanation why burn piles within the Waterbody Buffer Zone is proposed.
 - vii. Mitigation measures or project design features to be implemented to ensure no significant adverse environmental effects will occur (See Attachment Q for example design features)

These activities will be subject to additional monitoring and reporting requirements pursuant to Water Code section 13267 (e.g. vegetation recovery, evidence of erosion or transport of ash).

- c. Areas burned within Waterbody Buffer Zones must be left in a condition such that ash, soils, and/or debris will not discharge to a waterbody.
 - d. If fuel breaks are constructed, effective waterbreaks must be constructed at the end of burning operations or prior to sunset if the National Weather Service forecast is a "chance" (30% or more) of rain within the next 24 hours.
- (21) Pursuant to Water Code section 13267, notify the Water Board, in writing, at least 30 days prior to the proposed application of herbicides (except for application of borax and/or sporax directly to tree stumps). The written notice must include the following:
- a. Type of herbicide
 - b. Method and area of application
 - c. Projected date of application
 - d. Measures that will be employed to assure compliance with the Basin Plan
Subsequent changes to the proposal must be submitted in writing at least 14 days before the application, unless Water Board staff agrees in writing to a shorter notice period.

- (22) Pursuant to Water Code section 13267, upon completion of activities dischargers must request termination of coverage under the Timber Waiver in accordance with Attachment M, Notice of Project Completion Form.

The project and the discharger remain subject to all applicable Timber Waiver criteria and conditions (including required monitoring and reporting) until a Notice is received from Water Board staff terminating coverage under the Timber Waiver. Prior to approving (or declining) termination, Water Board staff may inspect the project area.

- (23) Activities conducted under Category 6 must comply with the General Conditions of this Timber Waiver and meet the category-specific eligibility criteria listed above.

E. CERTIFICATION

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on May 13-14, 2009.

HAROLD J. SINGER
EXECUTIVE OFFICER

- Attachments:
- A: Definitions and List of Acronyms
 - B: Waterbody Buffer Zones
 - C: Category 4 Application Form
 - D: Category 4 Implementation Monitoring Form
 - E: Category 4 and 6 Daily Winter Period Monitoring Program
 - F: Category 5 Application Form and Monitoring and Reporting Program
 - G: Fall Implementation Monitoring Form (Category 5 & 6)
 - H: Winter Implementation Monitoring Form (Category 5 & 6)
 - I: Forensic Monitoring Form (Category 5 & 6)
 - J: Effectiveness Monitoring Form (Category 5 & 6)
 - K: Category 6 Application Form and Monitoring and Reporting Program
 - L: Photo-Point Monitoring Form
 - M: Notice of Project Completion Form
 - N: Waste Discharge Prohibition and Exemption Information for the Little Truckee, Truckee River and Lake Tahoe Hydrologic Units
 - O: USFS Monitoring and Reporting Program
 - P: Summary of Monitoring and Reporting Required for Categories 4, 5, and 6
 - Q: Example Design Features for Pile Burning within Waterbody Buffer Zones

Attachment A
California Regional Water Quality Control Board
Lahontan Region

Definitions and List of Acronyms

Conditional Waiver of Waste Discharge Requirements for Timber Harvest and Vegetation Management Activities

<p>100-YEAR FLOODPLAIN (A term only used within the Truckee and Lake Tahoe Hydrologic Units)</p>	<p>for the purposes of this Timber Waiver this term is specific to the Truckee and Lake Tahoe Hydrologic Units. These areas must be determined based on delineations completed or approved by the U.S. Army Corps of Engineers, the Federal Emergency Management Agency, or a local government qualified to make floodplain delineations. If these agencies have not completed formal delineations the Water Board staff may agree to the use of best professional judgment. Field verification by staff will be needed. These areas include land adjacent to waterbodies that extend to the outer perimeter of lands which experience flooding or are inundated with water during 100-year flood events. At a minimum, dischargers shall designate the 100-year floodplain area to encompass the bed and bank of any ephemeral drainage course. If other indicators are present such as wet vegetation on terraces, or other high water indicators, such as stranded debris, these should also be taken into consideration. For cases of unconfined channels, other indicators may need to be considered.</p> <p>Within the Lake Tahoe Hydrologic Unit 100-year floodplains are sometimes, but not always, included within Stream Environment Zones (SEZs), as defined below. A floodplain only qualifies as SEZ if other secondary indicators of a SEZ are present. If a 100-year floodplain is considered a SEZ, the SEZ prohibitions and exemption criteria apply. (Basin Plan Section 5.7).</p>
<p>BROADCAST BURNING</p>	<p>means the use of fire to achieve ecological or fuel reduction benefits. It does not include burning of organic matter which is piled during mechanical site preparation or the ignition of ‘burn piles’ as defined below.</p>
<p>BURN PILE</p>	<p>means hand and machine constructed piles of organic materials (e.g., slash, branches, limbs, stumps, biomass) intended for burning.</p>
<p>CRITICAL DIP</p>	<p>means a low point, or overflow structure, in the road near or at a watercourse crossing designed to prevent the diversion of high flows in the event that the crossing or culvert becomes plugged or flow capacity is exceeded. To be properly installed, critical dips should be on the downhill side of a crossing.</p>
<p>DISCHARGER(S)</p>	<p>means the landowner(s), duly authorized representative of the landowner, and anyone working on behalf of the landowner in the conduct of timber harvest and vegetation management; includes</p>

	any city, county, district, the state, and the United States, to the extent authorized by federal law (Water Code section 13050, subdivision c).
DRY SOILS	means soils are dry, loose, and will not form a ball with pressure (i.e., squeezed into a ball by hand).
EFFECTIVENESS MONITORING	means visual evaluation of management measures (e.g., erosion control, water body buffer zones, waterbreaks, critical dips) following the winter period (between March 15 and June 15) to determine the effectiveness of the measures in preventing sediment discharge to waterbodies.
FEDERAL FORESTRY PROFESSIONAL	means a person employed by the federal government meeting the requirements of the Federal Forestry Series (GS-460) of the U.S. Office of Personnel Management.
FORENSIC MONITORING	means visual monitoring of surface waters (e.g., lakes and streams) and Waterbody Buffer Zones to identify evidence of sediment delivery and/or locate sources of sediment delivery (or potential delivery) to a waterbody so that corrective actions may be taken to prevent or reduce sediment discharges to waterbodies.
FUEL BREAK	A strip of hand or machine modified land surface designed to stop the progress of a prescribed fire or wildfire.
GROUND-BASED EQUIPMENT OPERATIONS	includes tractor, vehicle, equipment, and heavy equipment operations. Does not include work conducted by hand crews, helicopter, or cable yarding.
HAND CREW OPERATIONS	means cutting vegetation with a chainsaw or hand saw and manually piling material onsite or removing material with the use of motorized equipment limited to existing roads (except chippers and/or brush mowers). Includes prescribed burning and the construction of fuel breaks.
HARD-FROZEN SOIL CONDITIONS	means frozen soil conditions where operated vehicles, tractors, and equipment can travel without sinking into soil, road, or landing surfaces to a depth of more than two inches for a distance of more than 25 feet. Temperatures must also remain low enough to preclude thawing of the soil surface.
HERBICIDES	means, for the purposes of this Timber Waiver, to include pesticides, insecticides, fungicides, and all other economic poisons. An economic poison is any substance intended to prevent, repel, destroy, or mitigate the damage from insects, rodents, predatory animals, bacteria, fungi, or weeds capable of infesting or harming vegetation, humans, or animals (CA Agriculture Code section 12753, and Basin Plan Chapter 3).
IMPLEMENTATION MONITORING	means visual monitoring of project areas (including roads, stream crossings, landings) to ensure all management practices designed to prevent sediment delivery and protect water quality (e.g., erosion control measures, riparian buffers, waterbreaks,

	critical dips) are in place and secure prior to the winter period, and at the conclusion of winter operations if winter operations occur.
LANDING	means that area where forest products are concentrated prior to additional processing or removal from site.
PRESCRIBED FIRE	means the implementation of a written prescription to burn a designated area under specified environmental conditions. May include broadcast burning or pile burning.
PROJECT	means any “timber harvest and/or vegetation management activity” (as defined below).
NATURAL RESOURCE PROFESSIONAL	means a person with a bachelor’s degree or higher in a biological, ecological, or other relevant science (e.g., soils, hydrology, botany, fisheries) and at least six months of relevant experience. This person is not a substitute for a Registered Professional Forester when one is required by state or federal code or regulation.
SATURATED SOIL CONDITIONS	<p>means that site conditions are sufficiently wet that timber operations displace soils in yarding or mechanical site preparation areas or displace road and landing surface materials in amounts sufficient to cause a turbidity increase in drainage facilities that discharge into Class I, II, III, or IV waters (as defined in the Forest Practice Rules), or in downstream Class I, II, III, or IV waters that is visible or would violate applicable water quality requirements.</p> <p>In yarding and site preparation areas, this condition may be evidenced by: (a) reduced traction by equipment as indicated by spinning or churning of wheels or tracks in excess of normal performance, (b) inadequate traction without blading wet soil, (c) soil displacement in amounts that cause visible increase in turbidity of the downstream waters in a receiving Class I, II, III, or IV waters, or in amounts sufficient to cause a turbidity increase in drainage facilities that discharge into Class I, II, III, or IV waters, or (d) creation of ruts greater than would be normal following a light rainfall.</p> <p>On logging roads and landing surfaces, this condition may be evidenced by (a) reduced traction by equipment as indicated by spinning or churning of wheels or tracks in excess of normal performance, (b) inadequate traction without blading wet soil, (c) soil displacement in amounts that cause visible increase in turbidity of the downstream waters in receiving Class I, II, III, or IV waters, or in amounts sufficient to cause a turbidity increase in drainage facilities that discharge into Class I, II, III, or IV waters, (d) pumping of road surface materials by traffic, or (e) creation of ruts greater than would be created by traffic following normal road watering, which transports surface material to a drainage</p>

	<p>facility that discharges directly into a watercourse.</p> <p>Soils or road and landing surfaces that are hard frozen are excluded from this definition. (California Code of Regulations, title 14, section 895.1.).</p>
SITE PREPARATION	means any activity involving mechanical disturbance of soils or burning of vegetation which is performed during or after completion of timber harvesting and is associated with preparation of any portion of a logging area for artificial or natural regeneration. (California Code of Regulations, title 14, section 895.1.)
SKID TRAIL	means constructed trails or established paths used by tractors or other vehicles for skidding logs. Also known as tractor roads. (California Code of Regulations, title 14, section 895.1.)
STABILIZED	<p>means exposed soils and unstable areas have been treated in such a manner that there is low risk of such soils discharging to a waterbody via runoff, slumping, or wind erosion. Appropriate treatment can vary and can include, but is not limited to:</p> <ul style="list-style-type: none"> • cover with mulch (weed free straw, slash, etc.), rocks, tarp, etc. • relocation of excess material to an area that is stable, well drained, isolated from wet areas or watercourses, and where wind exposure is limited • sloping back excess material to a stable angle • hydroseeding, seeding and/or planting • temporary construction erosion control measures (e.g., fiber rolls, silt fences, erosion control blankets, tarps) <p>Note: Minimization of soil disturbance and soil stabilization (as described above) are the best and most cost-effective method of preventing sediment delivery. Trying to capture sediment once it is dislodged is much more difficult, costly, and is less likely to succeed.</p>
<p>STREAM ENVIRONMENT ZONE (SEZ) (A term only used within the Lake Tahoe Hydrologic Unit)</p>	<p>means biological communities that owe their characteristics to the presence of surface waters or a seasonal high groundwater table. The criteria used for field identification and delineation of SEZs are unique to the Lake Tahoe Hydrologic Unit and are described below.</p> <p>The following criteria are used by both the Water Board and the Tahoe Regional Planning Agency (TRPA). A Stream Environment Zone is determined to be present if any one of the following key indicators is present, or in the absence of a key indicator, if any three of the following secondary indicators are present. Soil types are discussed in Volume I of the TRPA's Water Quality Management Plan for the Lake Tahoe Region. Plant communities are identified in accordance with the definitions and procedures contained in the report entitled</p>

Vegetation of the Lake Tahoe Region, A Guide for Planning (TRPA 1971).

1. Key Indicators:

- (a) Evidence of surface water flow, including perennial, ephemeral, and intermittent streams, but not including rills or man-made channels; or
- (b) Primary riparian vegetation; or
- (c) Near surface groundwater; or
- (d) Lakes or ponds; or
- (e) Beach (Be) soils; or
- (f) One of the following alluvial soils:
 - (i) Elmira loamy coarse sand, wet variant (Ev)
 - (ii) Marsh (Mh).

2. Secondary Indicators:

- (a) Designated floodplain
- (b) Groundwater between 20-40 inches
- (c) Secondary riparian vegetation
- (d) One of the following alluvial soils:
 - (i) Loamy alluvial land (Lo), or
 - (ii) Celio gravelly loamy coarse sand (Co), or
 - (iii) Gravelly alluvial land (Gr).

TRPA's official land capability maps shall be used to identify SEZs initially, but are subject to field verification in every instance.

The boundary of a SEZ is the outermost limit of the key indicators; the outermost limit where three secondary indicators coincide; or if Lo, Co or Gr soils are present, the outermost limit where two secondary indicators coincide, whichever establishes the widest SEZ at any point. The outermost boundaries of a stream are the bank-full width of such stream which is defined as the level of frequent high flow, i.e., the level of flood with a recurrence interval of approximately 1.5 years. Other definitions of terms used in the criteria above are given in Table 5.7-1 of the Water Board's Basin Plan, and pages 10 – 12 of the TRPA Water Quality Management Plan for the Lake Tahoe Region.

Note that SEZs can include bodies of open water as well as wet meadows without defined stream channels. SEZs are generally identical with Bailey land capability Class 1b lands (See TRPA Water Quality Management Plan for the Lake Tahoe Region).

This definition is subject to change if the TRPA amends the definition or criteria for SEZs and such changes or amendments are approved by the California State Water Resources Control

	Board. (Basin Plan Section 5.7)
STRUCTURE	means an approved and legally permitted existing structure (such as residential or commercial building) that complies with the California Building Code (or which pre-dates the building code). Does not include existing roads, power lines, or trails.
TARGET SPECIES	means vegetation and/or tree species that are deliberately selected for removal, reduction, or management to accomplish the project's intended purpose, as specified in the project application, Plan or other submittal.
TIMBER HARVEST AND VEGETATION MANAGEMENT ACTIVITIES	means all activities related to the management of vegetation for the purposes of fuel reduction; forest thinning; and/or environmental improvement (such as forest enhancement, riparian enhancement, and aspen stand enhancement); prescribed burning; cutting or removal of trees and vegetation, together with all the work incidental thereto, including, but not limited to, construction, reconstruction, maintenance, and decommissioning of roads, fuel breaks, stream crossings, landings, skid trails, or beds for the falling of trees; burned area rehabilitation, hazard tree removal; site preparation that involves disturbance of soil, burning of vegetation, or herbicide/pesticide application. Activities do not include aquatic vegetation management, preparatory tree marking, surveying, or road flagging.
UNDEVELOPED LOT	means parcels without buildings or structures, up to three acres in size, that are interspersed in areas of <u>existing</u> urban land uses (e.g., residential, commercial or industrial uses). Undeveloped lots include such parcels owned by public agencies within a recognized urban or community boundary.
UNSTABLE AREAS	are characterized by slide areas or unstable soils or by some or all of the following: hummocky topography consisting of rolling bumpy ground, frequent benches, and depressions; short irregular surface drainages begin and end on the slope; tension cracks and head wall scarps indicating slumping are visible; slopes are irregular and may be slightly concave in upper half and convex in lower half as a result of previous slope failure; there may be evidence of impaired ground water movement resulting in local zones of saturation within the soil mass which is indicated at the surface by sag ponds with standing water, springs, or patches of wet ground. Some or all of the following may be present: hydrophytic (wet site) vegetation prevalent; leaning, jackstrawed or split trees are common; pistol-butted trees with excessive sweep may occur in areas of hummocky topography (note: leaning and pistol butted trees should be used as indicators of slope failure only in the presence of other indicators). (California Code of Regulations, title 14, section 895.1.)

WATERBODY	means “waters of the state” as defined in Water Code section 13050 and includes any surface water and ground water, including, but not limited to, any natural or manmade waterbody, including lakes, ponds, springs, and watercourses. Class I, Class II, Class III, Class IV, and Unclassified Waterbodies are defined in Attachment B.
WATERBODY BUFFER ZONE	means a strip of land, along all sides of a waterbody, where additional avoidance measures and management practices are required for protection of the quality and beneficial uses of water, fish and riparian wildlife habitat, other forest resources, and for controlling erosion. Please refer to Attachment B for further explanation.
WATERBREAK	Means a ditch, dike, or dip, or a combination thereof, constructed diagonally across logging roads, skid trails, and fuel breaks so that runoff flow is interrupted and effectively diverted to discharge to non-erodible or vegetated areas that will not result in delivery of sediment to a waterbody. Also known as waterbars.
WATERCOURSE	means any well-defined channel with distinguishable bed and bank showing evidence of having contained flowing water indicated by deposit of rock, sand, gravel, or soil. Watercourse also includes manmade watercourses (California Code of Regulations, title 14, section 895.1.).
WINTER PERIOD	means the period between November 15 and ends April 1. Within the Lake Tahoe, Little Truckee River and Truckee River Hydrologic Units, the winter period is between October 15 and May 1.

All other terms shall have the same definitions as prescribed by the California Forest Practice Rules (California Code of Regulations, title 14, section 895.1 et seq.), Public Resources Code section 4528, subdivision (f), and the Porter-Cologne Water Quality Control Act (Water Code section 13000 et seq.), unless specified otherwise. Definitions contained in Water Code Section 13050(d) controls for the purpose of the Timber Waiver.

LIST OF ACRONYMS

BMPEP..... Best Management Practices Evaluation Program (U.S. Forest Service)
CAL FIRE California Department of Forestry and Fire Protection
CEQA California Environmental Quality Act

CWPP	Community Wildfire Protection Plan
ELZ.....	Equipment Limitation Zone
NPDES	National Pollutant Discharge Elimination System
NTHP	Nonindustrial Timber Management Plan
PRC	Public Resources Code
RPF	Registered Professional Forester
SEZ	Stream Environment Zone (Lake Tahoe Hydrologic Unit Only)
SMZ	Streamside Management Zone
THP.....	Timber Harvest Plan
TRPA	Tahoe Regional Planning Agency

Attachment B
California Regional Water Quality Control Board
Lahontan Region

Determining Width of
Waterbody Buffer Zones

**Conditional Waiver of Waste Discharge Requirements
for Timber Harvest and Vegetation Management Activities**

The Timber Waiver contains conditions with specific equipment operation limitations and protections near waterbodies. Areas subject to these limitations and protections are called "Waterbody Buffer Zones."

One way to classify waterbodies is to categorize them as watercourses which tend to have permeable beds which connect surface waters to groundwater. A perennial stream is expected to flow throughout the year, albeit with only small dry-weather flows in some cases. An intermittent stream ceases to flow in dry periods. The flow may occur when the groundwater table is seasonally high, but there will not be flow when the groundwater table is significantly below the stream channel bed level. An ephemeral stream flows only after rain or snow-melt and has no base flow component. Because it may be difficult at times to determine when a watercourse is responding to specific groundwater conditions, this Timber Waiver classifies waterbodies by biological habitat and ability to transport sediment, as defined in the California Code of Regulations, title 14 (2009 Forest Practice Rules) Watercourse and Lake Protection Zones (WLPZs). See Table B1, below.

Waterbody Buffer Zones are similar to the U.S. Forest Service concept of a "Streamside Management Zone" (SMZ), which is a zone adjacent to waterbodies designated for special management controls aimed at protection and improvement of water quality. Unlike WLPZs, universal widths for SMZs are not specified, but developed on a project-specific basis taking into account factors such as stream class, channel aspect and stability, sideslope steepness, and slope stability. For clarity and conciseness, this Waiver uses the generic term Waterbody Buffer Zone (instead of WLPZ or SMZ) to identify Waiver-specific setback distances and to recognize that not all timber harvest and vegetation management activities regulated by this Timber Waiver are subject to the Forest Practice rules, or conducted by the U.S. Forest Service on U.S. Forest Service Lands.

Water Board staff will accept documents and timber waiver applications that use terminology other than "Waterbody Buffer Zones" as long as such zones or areas will not be smaller than the Waterbody Buffer Zones defined in Table B1, Waterbody Buffer Zone Widths. Such terminology may include Streamside Management Zone (SMZ), Riparian Conservation Area (RCA), and Watercourse and Lake Protection Zone (WLPZ).

Buffer Zone Designations for Class I and II Waters

Buffer Zone widths for Class I and II waters are equivalent to those in the 2009 California Forest Practice Rules, California Code of Regulations, title 14, section 916.5, Table 1, "Procedures for Determining Watercourse and Lake Protection Zone Widths and Protective Measures [All Districts]."

Buffer Zone Designations for Class III and IV Waters

This waiver specifies the Water Body Buffer Zones for Class III and IV Waters in Table B1, below.

Measuring Buffer Zone Widths

Waterbody Buffer Zones must be measured along the surface of the ground from the watercourse or lake transition line (as defined in the 2009 Forest Practice Rules) or in the absence of riparian vegetation from the top edge of the watercourse bank (2009 Forest Practice Rules, California Code of Regulations, title 14, section 916.4, subdivision (b)(3)). The slope of the land adjacent to the waterbody must be measured from the watercourse or lake transition line to a point 100 feet upslope, or, in the absence of riparian vegetation, from the top of the waterbody bank. Where slope steepness varies along a slope, a weighted average method shall be used to determine the sideslope percent (2009 Forest Practice Rules, California Code of Regulations, title 14, section 916.5, subdivision (a)(3)).

Table B1. Waterbody Buffer Zone Widths

<u>TYPE OF WATERBODY:</u>	<u>DEFINITION:</u>								
Class I	(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. Reference: 2009 California Forest Practice Rules, California Code of Regulations, title 14, section 916.5, table 1								
<table border="1" data-bbox="516 1073 1232 1293"> <thead> <tr> <th data-bbox="516 1073 922 1150">Slope of land adjacent to watercourse or lake:</th> <th data-bbox="922 1073 1232 1150">Buffer Zone width:</th> </tr> </thead> <tbody> <tr> <td data-bbox="516 1150 922 1199">< 30%</td> <td data-bbox="922 1150 1232 1199">75 feet</td> </tr> <tr> <td data-bbox="516 1199 922 1247">30 – 50 %</td> <td data-bbox="922 1199 1232 1247">100 feet</td> </tr> <tr> <td data-bbox="516 1247 922 1293">> 50 %</td> <td data-bbox="922 1247 1232 1293">150 feet¹</td> </tr> </tbody> </table> <p data-bbox="894 1297 1390 1360">¹ Subtract 50 feet width for cable yarding operations</p> <p data-bbox="155 1396 1382 1457">Reference: 2009 California Forest Practice Rules, California Code of Regulations, title 14, section 916.5, table 1</p>		Slope of land adjacent to watercourse or lake:	Buffer Zone width:	< 30%	75 feet	30 – 50 %	100 feet	> 50 %	150 feet ¹
Slope of land adjacent to watercourse or lake:	Buffer Zone width:								
< 30%	75 feet								
30 – 50 %	100 feet								
> 50 %	150 feet ¹								
Class II	(1) Fish always or seasonally present offsite within 1000 feet downstream, and/or (2) Aquatic habitat for nonfish aquatic species. (3) Excludes Class III waters that are tributary to Class I waters. Reference: 2009 California Forest Practice Rules, California Code of Regulations, title 14, section 916.5, table 1								

Slope of land adjacent to watercourse or lake:	Buffer Zone width:
< 30%	50 feet
30 – 50 %	75 feet
> 50 %	100 feet ²

² Subtract 25 feet width for cable yarding operations

Reference: 2009 California Forest Practice Rules, California Code of Regulations, title 14, section 916.5, table 1

<u>TYPE OF WATERBODY:</u>	<u>DEFINITION:</u>
---------------------------	--------------------

Class III	No aquatic life present, waterbody showing evidence of being capable of sediment transport to Class I and II waters under normal high water flow conditions. Reference: 2009 California Forest Practice Rules, California Code of Regulations, title 14, section 916.5, table 1
------------------	--

Slope of land adjacent to watercourse or lake:	Buffer Zone width:
< 30 %	25 feet
≥ 30 %	50 feet

Class IV	Man-made waterbodies, usually downstream, established domestic, agricultural, hydroelectric supply, or other beneficial use. Reference: 2009 California Forest Practice Rules, California Code of Regulations, title 14, section 916.5, table 1
-----------------	--

Slope of land adjacent to watercourse or lake:	Buffer Zone width:
< 30 %	25 feet
≥ 30 %	50 feet

Unclassified	<p>Has channel with evidence of having concentrated flowing water indicated by deposit of rock, sand, gravel, or soil. No aquatic life is present, shows no evidence of being capable of sediment transport to a higher order waterbody (Class I, II, or III). These features may have riparian plant communities present.</p> <p>No standard buffer zone width is designated. However timber harvest and vegetation management activities must be excluded from within the channel zone, except for use and maintenance of existing roads and crossings.</p>
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Attachment C
California Regional Water Quality Control Board
Lahontan Region

Category 4 Application Form
for
**Timber Harvest and Vegetation Management Activities which
Rely on Existing Roads,
Meet 10 Criteria, and May Include Winter Period Operations**

For Water Board staff use only;
WDID # _____
Date of Receipt: _____
Lead Water Board Staff: _____
Contact #: _____

**Conditional Waiver of Waste Discharge Requirements
for Timber Harvest and Vegetation Management Activities**
Please type or print clearly in ink

1. Activity Name: (Enter name given, if any)

Plan Number: (If regulated by CAL FIRE, enter the number of the plan or exemption/emergency notice assigned to the activity if available. If a CAL FIRE number is not available, but the activity will proceed under an exemption or emergency, please state "CAL FIRE Exemption" or "CAL FIRE Emergency" in this box.)

County:

2. Landowner's Contact Information: (If there is more than one landowner, list their contact information in an addendum to this form.)

Name of individual, company, or agency:		
Company or agency contact:		
Address:		
City:	State:	Zip Code:
Phone:	E-mail address (optional):	

3. Name and Phone Number of Contact Person(s): (List the primary person(s) supervising/implementing on-site operations.)

Name:	Phone:
Name:	Phone:

If information requested in this form is included in existing documents or plans those documents may be used to substitute for information specifically requested in this form. These documents must be submitted to the Water Board and specifically referenced (by page number) within this application.

4. Summary of Activity Information:

Total Activity Area Size (in acres):	Silvicultural prescription(s) or activity purpose:
--------------------------------------	--

Indicate type of yarding system(s) and equipment proposed for use (if any):

<u>Ground Based:</u>	<u>Cable:</u>	<u>Special:</u>
<input type="checkbox"/> Tractor, including end/long lining	<input type="checkbox"/> Cable, ground lead	<input type="checkbox"/> Hand crew
<input type="checkbox"/> Rubber tired skidder, Forwarder	<input type="checkbox"/> Cable, high lead	<input type="checkbox"/> Masticator
<input type="checkbox"/> Feller buncher	<input type="checkbox"/> Cable, skyline	<input type="checkbox"/> Chipper
		<input type="checkbox"/> Other: _____

5. Waterbody Classification: What types of waterbodies exist within the activity area? (Information on waterbody classification is provided in Attachment B.) Check all that apply:

<input type="checkbox"/> Class I	<input type="checkbox"/> Class II	<input type="checkbox"/> Class III
<input type="checkbox"/> Class IV	<input type="checkbox"/> Unclassified	<input type="checkbox"/> None within activity area

6. Specific Activity Information:

Yes*	No	Do existing roads and landings proposed for use exhibit signs of erosion or instability, including rills, gullies, or tension cracking?
*If you answered yes to the above question, answer the following:		
	Yes No	Could this erosion or instability result in sediment delivery to a waterbody? If yes, describe mitigation measures that will be implemented to stop the delivery of sediment to waterbodies, or drainage structures that drain to waterbodies:
(attach additional pages if necessary)		
Yes	No	Do the activities include the repair or reconstruction of watercourse crossings? If yes, briefly explain what work is planned and where:
Yes	No	Do the activities include the repair or reconstruction of roads? If yes, briefly explain what work is planned and where:
Yes	No	Are equipment operations within the winter period anticipated?
Yes	No	Do the proposed timber harvest and vegetation management activities include prescribed fire?

7. Timber Harvest and Vegetation Management Activities within Waterbody Buffer Zones:

Describe what activities (e.g., timber removal, operation of equipment, chipping, prescribed fire) are planned within Waterbody Buffer Zones:

(attach additional pages if necessary)

8. Yes No
 or
 Unknown **Do you anticipate the need to apply herbicides to the activity area?**
If yes, please notify the Water Board staff in an addendum to this form, or in a separate notice, at least 30 days prior to the proposed application. See Condition 16 of the Timber Waiver on page 19.

9. **Map of Activity Area:** To complete your application, include a USGS 7.5 minute topographic (or equivalent or greater scale) map that clearly indicates the information listed below. Map(s) that have been created as part of a CEQA, or other planning document, may substitute for creating an individual map for this application provided they meet the above scale requirements and include the information listed below.

- The activity area boundary.
- The relative location of the activity to a nearby city, town, or landmark.
- Location of private and public roads to be used within the activity area. Include the location of private and public roads that will be used to access the activity areas from a paved county, state, municipal, or federal road. Label the name or number of each road and indicate if such roads are under the ownership or control of the land owner or manager. (The appurtenant roads may be shown on a separate map which may be planimetric with a smaller scale.)
- Location of proposed timber harvest and vegetation management activities (including skid trails) within Waterbody Buffer Zones.
- Identify areas for possible landing construction.
- Location of all existing watercourse crossings and any temporary Class III watercourse crossings.
- Location of proposed temporary over-snow skid trail watercourse crossings (if known).
- Location, classification, and name (if applicable) of all waterbodies within the activity area. (Information on waterbody classification is provided in Attachment B.) Complete the following if the activity area does not include a waterbody:

Name of nearest downstream waterbody:
Classification:
Distance from activity boundary:
Where is the downstream waterbody located relative to the activity area? (e.g., southwest, etc.)

10. Request for modified monitoring and reporting program: Subject to approval by the Executive Officer, you may request to modify, reduce, or remove monitoring and/or reporting conditions for your activity. Your request must include a description of what you are proposing and why it is warranted for your activity.

You are required to monitor and report according to the standard conditions and forms of this Timber Waiver until you receive approval for your modified plan by the Executive Officer.

If requesting modified monitoring and reporting, provide description and justification here or in an addendum.

--

For Water Board staff use only:
Executive Officer Approval with signature:

11. Certification:

I, the Landowner, agent thereof, or Land Manager, hereby certify under penalty of perjury that this application and all submittals to the Water Board accurately represent site conditions. I hereby agree to meet the conditions and eligibility criteria of Category 4 of the Conditional Waiver of Waste Discharge Requirements for Discharges Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region (Timber Waiver), Resolution R6T-2009- (TENTATIVE).

Signature:

Date:

Printed name & title:

Attachment D
California Regional Water Quality Control Board
Lahontan Region

Category 4 Implementation Monitoring Form

**This form and associated monitoring must be completed
before the winter period and submitted to the Water Board by January 15 as long as the
project is covered under the Timber Waiver**

and

**at the conclusion of operations and submitted to the Water Board with the required Notice of
Completion Form (Attachment M)**

Please type or print clearly in ink

Implementation monitoring consists of visual monitoring of activity areas, roads, stream crossings, landings, etc., to ensure all management practices designed to prevent sediment delivery and protect water quality (e.g., erosion control measures, riparian buffers, waterbreaks, critical dips) are in place and secure. Pursuant to Water Code section 13267, this form, or an alternate form or report containing equivalent information, must be submitted by **January 15**.

1. **Activity Name:**

2. **WDID Number:**

3. This monitoring is being completed because:

Timber harvest and vegetation management activities have been completed and this monitoring is being conducted to satisfy the monitoring required for termination of Timber Waiver Coverage. Operations were completed on: _____

Timber harvest and vegetation management activities have commenced prior to the winter period of this year and monitoring is required to ensure necessary management measures have been implemented prior to the onset of winter weather.

4. **Inspector's name and title:**

Date of inspection:

5. **All landings within the activity area:** Inspected: None within plan area:

Yes No **Are all landings adequately stabilized to prevent sediment delivery to a surface water?** (e.g., are all waterbreaks properly installed)

Additional notes:

6. **All skid trails:** Inspected: None within plan area:

Yes No **Are all skid trails adequately stabilized to prevent sediment delivery to a surface water?** (e.g., are all waterbreaks properly installed)

Additional notes:

7. All roads:

Inspected:

None within plan area:

Yes No

Are all roads segments (including those used for timber operations within the plan area, and roads appurtenant to operations where such roads are under the ownership or control of the landowner or manager) **adequately stabilized to prevent sediment delivery to a surface water?**

Additional notes:

8. All Watercourse Crossings:

Inspected:

None within plan area:

Yes No

Have all watercourse crossings and associated fills and approaches been stabilized to prevent diversion of stream overflow down the road and to minimize fill erosion and delivery to a waterbody if the drainage structure became plugged?

Yes No

Are all necessary critical dips properly installed? (A properly installed critical dip, or other overflow structure, should be on the downhill side of all crossings.)

Yes No

Is there any risk of stream diversion during a high runoff event?

Yes No

Is road runoff disconnected before it reaches the watercourse crossing? (For example, are waterbreaks (i.e., rolling dips or waterbars) placed on the approaches to the crossing so that runoff and sediment is filtered prior to potential discharge to a waterbody? It may be impossible to disconnect all of the road drainage from the watercourse. However, the length of road draining to the stream should be kept to a minimum.)

Yes No

Are all fill slopes adequately armored or stabilized?

Yes No

Are all watercourse crossings (including culverts) **clear of debris** (so as to prevent plugging or diversion)?

Yes No

N/A Have all over-snow skid trail watercourse crossings been removed such that the natural flow of water within the watercourse channel will not be obstructed or diverted? (All temporary fills should be excavated to form a channel that is as close as feasible to the natural watercourse grade and width without disturbing watercourse bed or banks)

Additional notes on watercourse crossings within the plan area:

(attach additional pages if necessary)

9. Yes No

Does chipped material exceed an average depth of two inches, with a maximum depth of four inches, within Waterbody Buffer Zones?

10. Yes No

Have constructed fuel breaks been adequately stabilized (i.e., have effective waterbreaks been constructed)?

11. Yes No Did you observe any signs of sediment delivery or potential sediment delivery (e.g., failed stream banks, rills, gullies, unstabilized spoils, tension cracks) within the activity area?

If yes, please describe the sediment sources (and their location) and what corrective measures have been taken, or are planned, to prevent impacts to water quality and to maintain compliance with the Timber Waiver:

(attach additional pages if necessary)

12. Any other additional notes regarding implementation monitoring, or the activity area in general:

(attach additional pages if necessary)

I, the Landowner, agent thereof, or Land Manager, hereby certify under penalty of perjury that all information contained in this monitoring report is true, accurately represents site conditions, and is complete. I also certify that all timber harvest and vegetation management activities conducted have been in conformance with all the general conditions of the Conditional Waiver of Waste Discharge Requirements for Discharges Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region (Timber Waiver), Resolution R6T-2009- (PROPOSED), and all eligibility criteria and conditions for Category 4 of the Timber Waiver. If any deviation from the submittals to the Water Board, and/or the Timber Waiver eligibility criteria and conditions has been identified I have disclosed such deviations in this form along with corrective actions that will be taken to resolve the problem.

Signature: _____ Date: _____

Name: _____ Title: _____

Invitation for feedback: Water Board staff respectfully request any constructive feedback regarding the monitoring program with regard to your timber harvest and vegetation management activities. Completing this section is not a requirement. Water Board staff may use your comments and suggestions to improve this program for future activities. Comments may include:

- perceived effectiveness of the program in protecting water quality
- recommendations on how to make the monitoring program more efficient, reliable, or effective
- impressions of recommendations made by Water Board staff regarding your activities (e.g., Do they appear to be effective, is there a practice or a performance standard that would have been more cost-effective at protecting water quality?)

Attachment E
California Regional Water Quality Control Board
Lahontan Region

Categories 4 and 6 Daily Winter Period Monitoring Program

*Daily Monitoring only required during days of equipment operation
during the winter period*

Pursuant to 13267 of the California Water Code, daily monitoring is required for all activities covered under Category 4 or 6 of the Timber Waiver for days of tractor, vehicle, or equipment operation within the winter period (as defined in Attachment A).

This monitoring program consists of daily completion of the following checklist, and has been developed to assure compliance with the Water Quality Control Plan for the Lahontan Region (Basin Plan) and to verify the adequacy and effectiveness of the Timber Waiver conditions and eligibility criteria pursuant to Water Code section 13269, subdivision (a)(2).

In the interest of not requiring redundant monitoring during extended dry periods, daily monitoring is only required beginning with the first National Weather Service forecast of 30% chance of precipitation (<http://www.nws.noaa.gov/>). If 7 days of dry weather persists after a precipitation event you may cease monitoring until next time National Weather Service forecasts a 30% chance of precipitation.

Accumulated monitoring data must be retained by the discharger and submitted **July 15** of every year.

Category 4 and 6 Daily Winter Operations Monitoring Checklist

This checklist must be completed daily when equipment is operated during the winter period

Example

WDID Number: _____

Inspector's name & Title: _____

Signature: _____

Day of operation:	10/17											
Field condition: dry soil ¹ , hard-frozen ² , or over snow ³ :	Dry											
Is any precipitation forecasted within the next 36 hours? (Y/N)	N											
Average depth of accumulated or machine compacted snow in area of operations:	N/A											
If operating over the snow or over hard-frozen soil conditions: Was soil disturbance observed today? ⁴	N/A											
Inspector's Initials	JD											

¹ **Over dry soil conditions:** There has been no precipitation within the last two weeks and/or soils are dry (i.e., loose and will not form a ball when squeezed by hand) to a depth of one foot.

² **Over hard-frozen soil conditions:** soils and road surfaces in areas of equipment operations are solidly frozen to a depth sufficient to support the weight of operating equipment.

³ **Over snow:** Snow depth is sufficient to allow the operation of equipment without resulting in visible disturbance of soils.

⁴ If soil disturbance is observed: Detail when, where, and why these disturbances occurred and what corrective actions were taken to prevent impacts to water quality. **Retain this information within the monitoring file. If a discharge of sediment to a waterbody has occurred you must contact Water Board staff within 24 hours of detection at (530)542-5400.**

Category 5 Application Form and Monitoring and Reporting Program

for
CAL FIRE – Approved Plans

Conditional Waiver of Waste Discharge Requirements for Timber Harvest and Vegetation Management Activities

Please type or print clearly in ink

For Water Board staff use only;
WDID # _____
Date of Receipt: _____
Lead Water Board Staff: _____
Contact #: _____

1. **Plan Name:**

CAL FIRE Issued Plan Number:

2. **Name and Phone Number of Contact Person(s):** (List the primary person(s) supervising/implementing on-site operations.)

Name:	Phone:
Name:	Phone:

I, the Landowner, or agent thereof, hereby agree to meet the conditions and eligibility criteria of Category 5 of the Conditional Waiver of Waste Discharge Requirements for Discharges Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region (Timber Waiver), Resolution R6T-2009- (PROPOSED).

Signature:	Date:
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Plans located in the Lake Tahoe or Truckee River Hydrologic Units Only:

If your plan includes any of the following activities within the 100-year floodplain and/or stream environment zone, please contact Water Board staff immediately to discuss required submittals and to initiate the public announcement/review (10 days) required prior to Water Board staff review and approval:

- enlargement of existing permanent watercourse crossings on existing roads
- construction of temporary roads
- construction of temporary watercourse crossings to remain in place longer than one season
- construction of skid trails
- pile burning
- conventional equipment operated off-road in SEZs or floodplains

Review Attachment N for more information on how Water Board policies may apply to your proposed activities. Please contact Water Board staff as soon as possible if you are planning any timber harvest or vegetation management activities within the 100-year floodplain or stream environment zone within the Lake Tahoe or Truckee River Hydrologic Units.

Monitoring and Reporting Program

Pursuant to Water Code section 13267 visual monitoring and semi-annual reporting are required for all activities that proceed under Category 5 of the Timber Waiver.

Implementation Monitoring:

Fall Implementation Monitoring: Review Attachment G for monitoring required before the winter period of each year. This monitoring must be reported to the Water Board by **January 15**. A “final compliance report” or “work completion report” inspection, conducted by the California Department of Forestry and Fire Protection (CAL FIRE) prior to the winter period and after cessation of active harvesting and road construction, may be substituted for fall implementation monitoring if the inspection covers the entire plan area and the report is submitted to the Water Board by January 15.

Winter Implementation Monitoring: Review Attachment H for monitoring required at the conclusion of winter operations each year. This monitoring must be reported to the Water Board by **July 15**.

Forensic and Effectiveness Monitoring:

Forensic and effectiveness monitoring is required if **any** of the following conditions exist within the plan. If none of these conditions exist, then only Implementation monitoring is required.

- Construction or re-construction of watercourse crossings over Class I, II or Class IV (with domestic use) watercourses
- Ground based equipment operations within waterbody buffer zone(s) beyond an existing road prism
- Winter operations
- Road construction or re-construction within 150 feet of a Class I, II or IV (with domestic use) waterbody
- Landing construction or re-construction within waterbody buffer zone(s)
- Ground-based equipment operations in areas classified High or Extreme Erosion Hazard Rating
- Ground-based equipment operations on slopes over 50 percent
- Ground-based equipment operations on slopes over 30 percent in the Lake Tahoe Basin

Forensic Monitoring: Review Attachment I for monitoring required after significant rain events. This monitoring must be reported to the Water Board by **July 15** of each year.

Effectiveness Monitoring: Review Attachment J for monitoring required at the end of the winter period each year. This monitoring must be reported to the Water Board by **July 15**.

Photo-Point Monitoring:

Photo-point monitoring (as described in Attachment L) is required if **any** of the following conditions exist within the plan or if Water Board staff specifically requests photo-point monitoring for particular areas of your plan (e.g., during the interdisciplinary review team process or site visit).

- Construction or reconstruction of a bridge crossing over a watercourse
- Construction or reconstruction of a watercourse crossing using a culvert that is 24 inches or greater in diameter

Request for modified monitoring and reporting program:

Subject to approval by the Executive Officer, you may request to modify, reduce, or remove monitoring and/or reporting conditions for your plan. Your request must include a description of what you are proposing and why it is warranted for your plan.

Attachment G
California Regional Water Quality Control Board
Lahontan Region

Fall Implementation Monitoring Form

Categories 5, and 6

**This form and associated monitoring must be completed
before the winter period (as defined in Attachment A)
and submitted to the Water Board by January 15**

Please type or print clearly in ink

Fall implementation monitoring is visual monitoring of timber harvest and vegetation management areas, roads, stream crossings, landings, etc., to ensure all management practices designed to prevent sediment delivery and protect water quality (such as erosion control measures, riparian buffers, water bars, critical dips) are in place and secure prior to the winter period (as defined in Attachment A). Fall implementation monitoring and reporting is required every year for the duration of the activity and until a Notice of Termination of Timber Waiver Coverage is issued by Water Board staff. This complete form or report containing equivalent information must be submitted in accordance with the requirements of this monitoring and reporting program.

Fall implementation monitoring is required for activities that proceed under Category 5 or 6 until a Notice of Termination of Timber Waiver Coverage is issued by Water Board staff.

1. **Activity/Plan Name:**

2. **WDID Number:**

3.

Yes	No
-----	----

 Have timber harvest and vegetation management activities under this activity/plan commenced?

If **yes**, please complete this form and associated monitoring.

If **no**, when are operations anticipated to begin (if known)? _____

If operations have not commenced by November 15, you are not required to complete the remainder of this form, please sign the landowner signature box at the bottom of page 5, and submit to the Water Board by January 15.

4. **Inspector's name and title:**

Date of inspection:

All of the following sites (sections 5 – 16) must be inspected before the Winter Period, or indicated as not present within the activity area:

5. **Watercourse crossings:** Inspected: None within area:

Yes No **Have all watercourse crossings and associated fills and approaches been constructed or reconstructed to prevent diversion of stream overflow down the road and to minimize fill erosion and delivery to a waterbody if the drainage structure became plugged?**

Yes No **Are all necessary critical dips properly installed?** (A properly installed critical dip, or other overflow structure, should be on the downhill side of all crossings.)

Yes No **Is there any risk of stream diversion during a high runoff event?**

- Yes No **Is road runoff disconnected before it reaches the watercourse crossing?**
(For example, are waterbreaks (i.e., rolling dips or waterbars) placed on the approaches to the crossing so that runoff and sediment is filtered prior to potential discharge to a waterbody? It may be impossible to disconnect all of the road drainage from the watercourse. However, the length of road draining to the stream should be kept to a minimum.)
- Yes No **Are all fill slopes adequately armored?**
- Yes No **If road surfacing (e.g., rock aggregate) is to be used near or at the watercourse crossing, is it done to the specification listed in the approved plan?** (At the minimum, rocking should be done at the size, depth, and extent listed in the approved plan.)
- Yes No **Are culverts clear of debris?**
- Yes No **Have all constructed or reconstructed watercourse crossings been installed and armored to prevent sediment discharge?** (e.g., by channel erosion, inlet scour, and road fill erosion)
- Yes No **Do all Class I watercourse crossings allow for fish passage?**
- Yes No **Have all temporary (seasonal) watercourse crossings been removed?** (All temporary fill should be excavated to form a channel that is as close as feasible to the natural watercourse grade and orientation, and that is wider than the natural channel.)

Additional notes on watercourse crossings within the activity area:

6. **Water diversions and watering holes:** Inspected: None within area:

Additional notes on water diversions and watering holes within the activity area:

7. **All roads:** Inspected: None within area:

- Yes No **Are all roads** (permanent, seasonal, or temporary road segments used for timber operations within the activity area, and roads appurtenant to operations where such roads are under the ownership or control of the landowner or manager) **adequately stabilized to prevent sediment delivery to a waterbody?**

Additional notes on road segments within the activity area:

8. All existing and constructed landings:

Inspected:

None within area:

Yes	No	Are all landings adequately stabilized (as defined in Attachment A) to prevent sediment delivery to a waterbody?
Additional notes on existing and constructed landings within the activity area:		

9. All existing and constructed skid trails:

Inspected:

None within area:

Yes No **Are all skid trails adequately stabilized to prevent sediment delivery to a waterbody? (e.g., are all water bars properly installed)**

Additional notes on existing and constructed skid trails within the activity area:
--

10. Status of all known or suspected landslides near roads, streams, or ground-based equipment operations:

Inspected:

None within area:

Additional notes landslides within the activity area:

Additional notes landslides within the activity area:

11. All unstable areas:

Inspected:

None within area:

Yes No **Were unstable areas avoided during timber harvest and vegetation management activities? (Unless allowed in the approved plan, make sure that timber harvest and vegetation management activities did not occur in unstable areas.)**

Yes No **If timber harvest and vegetation management activities are permitted within unstable areas, have all site-specific mitigations listed within the approved plan been implemented?**

Additional notes on unstable areas within the activity area:

Additional notes on unstable areas within the activity area:
--

12. Recommendations made by Water Board staff during the pre-harvest inspection: (if not covered elsewhere in this report)

Inspected: None within area:

Yes No **Were all written recommendations made by Water Board staff in the pre-harvest inspection report implemented?**

Additional notes on recommendations made by Water Board staff:

13. Yes No Have all management practices (e.g., riparian buffers, erosion control measures, water bars, critical dips) **been implemented to prevent sediment delivery to surface waters?**

If not, please explain what corrective measures will be taken to maintain compliance with the Timber Waiver and to prevent impacts to water quality:

(attach additional pages if necessary)

14. Yes No Did you observe any signs of sediment delivery or potential sediment delivery (e.g., failed stream banks, rills, gullies, unstabilized spoils) **within the activity area?**

If so, please describe the sediment sources, and what corrective measures will be taken to maintain compliance with the Timber Waiver and to prevent impacts to water quality:

(attach additional pages if necessary)

I, the Landowner, agent thereof, or Land Manager, hereby certify under penalty of perjury that all information contained in this monitoring report is true, accurately represents site conditions, and complete. I also certify that all timber harvest and vegetation management activities conducted have been in conformance with all the general conditions of the Conditional Waiver of Waste Discharge Requirements for Discharges Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region (Timber Waiver), Resolution R6T-2009- (PROPOSED), and all eligibility criteria and conditions for Category 5 or 6 of the Timber Waiver. If any deviation from the approved plan, and/or the Timber Waiver eligibility criteria and conditions has been identified I have disclosed such deviations in this form along with corrective actions that will be taken to resolve the problem.

Signature: _____ Date: _____

Name: _____ Title: _____

Invitation for feedback: Water Board staff respectfully request any constructive feedback regarding the monitoring program with regard to your timber harvest and vegetation management activities. Completing this section is not a requirement. Water Board staff may use your comments and suggestions to improve this program for future activities. Comments may include:

- perceived effectiveness of the program in protecting water quality
- recommendations on how to make the monitoring program more efficient, reliable, or effective
- impressions of recommendations made by Water Board staff regarding your activities (e.g., Do they appear to be effective, is there a practice or a performance standard that would have been more cost-effective at protecting water quality?)

Attachment H
California Regional Water Quality Control Board
Lahontan Region

Winter Implementation Monitoring Form

Categories 5 and 6

This form and associated monitoring must be completed at the conclusion of winter operations, or by April 1, whichever is sooner, and submitted to the Water Board by July 15
Please type or print clearly in ink

Winter implementation monitoring is only required if you conducted winter period operations, and consists of visual monitoring of areas where winter operations have occurred. This inspection should verify all management measures designed to prevent sediment delivery and protect water quality are in place and secure at the conclusion of winter operations.

1. **Activity/Plan Name:**

2. **WDID Number:**

3. **Inspector's name and title:**

Date of inspection:

4. Yes No **Have all watercourse crossings and associated fills and approaches been constructed or reconstructed to prevent diversion of stream overflow and to minimize fill erosion and delivery to a waterbody if the drainage structure becomes plugged?** If no, please explain in an addendum to this form how stream diversion or obstruction and/or sediment delivery to a watercourse will be prevented.

5. Yes No **Have all necessary critical dips been properly installed?** If no, please explain in an addendum to this form why they have not been installed and/or when they will be installed.

6. Yes No Not applicable to this activity **Have all temporary over-snow skid trail watercourse crossings been removed without disturbing soils or damaging watercourse bed or banks?** If no, please explain in an addendum to this form what actions have been taken to resolve watercourse bed or bank disturbance, or when temporary crossings will be removed.

7. Yes No Not applicable to this activity **Has all snow movement, plowing, packing, and/or cutting associated with timber harvest and vegetation management activities allowed for adequate road drainage and dissipation of snowmelt or runoff?** If no, please explain in an addendum to this form why road drainage and runoff dissipation is inadequate, and when it will be resolved.

8. Yes No Not applicable to this activity **Have all culverts and drainage structures been cleared of debris, packed snow, and ice?** If no, please explain in an addendum to this form why, and when this work will be implemented.

I, the Landowner, agent thereof, or Land Manager, hereby certify under penalty of perjury that all information contained in this monitoring report is true, accurately represents site conditions, and complete. I also certify that all timber harvest and vegetation management activities conducted have been in conformance with all the general conditions of the Conditional Waiver of Waste Discharge Requirements for Discharges Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region (Timber Waiver), Resolution R6T-2009- (PROPOSED), and all eligibility criteria and conditions for Category 5 or 6 of the Timber Waiver. If any deviation from the submittals to the Water Board, and/or the Timber Waiver eligibility criteria and conditions has been identified I have disclosed such deviations in this form along with corrective actions that will be taken to resolve the problem.

Signature: _____

Date: _____

Name: _____

Title: _____

Invitation for feedback: Water Board staff respectfully request any constructive feedback regarding the monitoring program with regard to your timber harvest and vegetation management activities. Completing this section is not a requirement. Water Board staff may use your comments and suggestions to improve this program for future activities. Comments may include:

- perceived effectiveness of the program in protecting water quality
- recommendations on how to make the monitoring program more efficient, reliable, or effective
- impressions of recommendations made by Water Board staff regarding your activities (e.g., Do they appear to be effective, is there a practice or a performance standard that would have been more cost-effective at protecting water quality?)

Attachment I
California Regional Water Quality Control Board
Lahontan Region

Forensic Monitoring Form

Categories 5 and 6

This form and associated monitoring must be completed soon after two significant rain (> 2 inches) and/or snow-melt events and submitted annually to Water Board by July 15

Please type or print clearly in ink

Forensic monitoring: is conducted soon after significant rain or snow-melt events and consists of visual monitoring of:

- surface waters
- watercourse crossings
- landings
- unstable areas
- roads
- waterbody buffer zones
- skid trails

The purpose of this monitoring is to:

- (1) detect elevated turbidity levels in surface waters, and locate sources of sediment discharges;
- (2) determine the condition of installed management measures,
- (3) detect failure to implement necessary management measures,
- (4) detect water quality impacts caused by failed management measures,
- (5) detect water quality impacts related to legacy timber activities and general timber harvest and vegetation management activities; and
- (6) identify sources of potential sediment delivery in a timely manner so that corrective action may be taken to avoid sediment discharges to water bodies.

This monitoring must be conducted at least twice each year and reported on July 15 for the duration of timber harvest and vegetation management activities and until a Notice of Termination of Timber Waiver Coverage is issued by Water Board staff. This form or report containing equivalent information must be completed and signed.

Forensic monitoring is required for activities that proceed under Category 5 or 6 until a Notice of Termination of Timber Waiver Coverage is issued by Water Board staff.

Activity Name:

WDID Number:

Yes No Have timber harvest and vegetation management activities commenced?

If **yes**, please complete this form and associated monitoring.

If **no**, when are operations anticipated to begin (if known)? _____

If operations have not commenced by May 1, you are not required to complete the remainder of this form, please sign the landowner signature box at the bottom of page 8 and submit to the Water Board by July 15th.

Inspection #1

Within 36 hours of a significant rain (>2 inches in 24 hours) or snow-melt event inspect accessible areas and waterbodies immediately downstream of operations and complete the following:

1. **Inspector's name and title:**

2. **Date of inspection:**

3. **Weather Observations and Precipitation Levels:**

(Some of this information may be obtained at the following webpage: <http://water.weather.gov/>)

Stream Stage (select one):	<input type="checkbox"/> Dry	<input type="checkbox"/> Low	<input type="checkbox"/> Moderate	<input type="checkbox"/> High	<input type="checkbox"/> Flooding
Precipitation (select one):	<input type="checkbox"/> None	<input type="checkbox"/> Drizzle	<input type="checkbox"/> Rain	<input type="checkbox"/> Snow	
Date of and approximate amount of last precipitation:	(This information may be obtained at the following webpage: http://water.weather.gov/)				
Accumulated precipitation this season:	_____ inches of		<input type="checkbox"/> Rain	<input type="checkbox"/> Snow	
(This information may be obtained at the following webpage: http://water.weather.gov/)					
Additional notes on weather and precipitation:					

Inspect all the following areas and infrastructure (sections 4-10) within the activity area if accessible.

Use the space following each area listed below to indicate whether such areas exist within the activity area, if they were inspected, or if they were not accessible for inspection.

Look for signs of erosion and transport of sediment to a waterbody. These signs may include:

- landsliding
- erosion voids
- tension cracking or settling of road fill or sidecast
- rilling or gullying of road surfaces, road fills, landings, cutbanks, etc.
- increased levels of sediment/turbidity in waterbodies immediately downstream of operations

Use the space following each area listed below to indicate if evidence of sediment erosion or delivery to a waterbody are observed.

If evidence of sediment erosion and delivery are observed:

- Identify the waterbody and describe specific locations within or adjacent to the waterbody.
- Photograph the source of sediment and point of delivery to the waterbody and record photo monitoring using the Photo-Point Monitoring Form (Attachment L).
- Describe what and when corrective measures will be taken to stop sediment delivery and protect water quality.

If increased levels of sediment/turbidity are observed in neighboring waterbodies:

- Describe where and in which waterbody.
- Explain if this turbidity is a result of sediment discharges from within the activity area. Is the sediment coming from a hillslope feature such as a stream crossing or unstable area? Cause-and-effect can be determined if the water becomes noticeably muddy below a hillslope feature.
- Describe what and when corrective measures will be taken to stop sediment delivery and protect water quality.

If any erosion or failed management measures cause, or may cause, one or more cubic yards of sediment delivery to a waterbody, then photo-point monitoring is required using the Photo-Point Monitoring Form (Attachment L).

Forensic monitoring requirements are waived if significant environmental impacts would result from road system use to access the activity area, or if worker safety would be compromised. If these areas are not accessible for monitoring, please indicate why. Acceptable reasons may include:

- Significant environmental impacts would result from road system use to access the activity area or waterbodies immediately downstream of operations.
- Worker safety would be compromised.

4. Areas where timber harvest and vegetation management activities have been conducted within or near unstable areas.

<input type="checkbox"/> none exist
(attach additional pages if necessary)

5. Constructed or re-constructed watercourse crossings.

<input type="checkbox"/> none exist
(attach additional pages if necessary)

6. Waterbody Buffer Zones where ground based equipment operations have occurred (e.g., skid trail crossings).

<input type="checkbox"/> none exist
(attach additional pages if necessary)

7. Road construction or reconstruction within 150 feet of a Class I, II, or IV (with domestic use) watercourse.

none exist

(attach additional pages if necessary)

8. Landing construction or reconstruction within waterbody buffer zone(s).

none exist

(attach additional pages if necessary)

9. Areas classified as high or extreme erosion hazard rating where ground-based equipment has been operated and there is potential for water quality impacts.

none exist

(attach additional pages if necessary)

10. Areas of in-lieu practices that have the potential to impact water quality.

none exist

(attach additional pages if necessary)

I, the Landowner, agent thereof, or Land Manager, hereby certify under penalty of perjury that all information contained in this monitoring report is true, accurately represents site conditions, and is complete. I also certify that all timber harvest and vegetation management activities conducted have been in conformance with all the general conditions of the Conditional Waiver of Waste Discharge Requirements for Discharges Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region (Timber Waiver), Resolution R6T-2009- (PROPOSED), and all eligibility criteria and conditions for Category 5 or 6 of the Timber Waiver. If any deviation from the approved plan, and/or the Timber Waiver eligibility criteria and conditions has been identified I have disclosed such deviations in this form along with corrective actions that will be taken to resolve the problem.

Signature: _____

Date: _____

Name: _____

Title: _____

Inspection #2

Within 36 hours of a significant rain (>2 inches in 24 hours) or snow-melt event inspect accessible areas and waterbodies immediately downstream of operations and complete the following:

1. **Inspector's name and title:**

2. **Date of inspection:**

3. **Weather Observations and Precipitation Levels:**

(Some of this information may be obtained at the following webpage: <http://water.weather.gov/>)

Stream Stage (select one):	<input type="checkbox"/> Dry	<input type="checkbox"/> Low	<input type="checkbox"/> Moderate	<input type="checkbox"/> High	<input type="checkbox"/> Flooding
Precipitation (select one):	<input type="checkbox"/> None	<input type="checkbox"/> Drizzle	<input type="checkbox"/> Rain	<input type="checkbox"/> Snow	
Date of and approximate amount of last precipitation:	(This information may be obtained at the following webpage: http://water.weather.gov/)				
Accumulated precipitation this season:	_____ inches of	<input type="checkbox"/> Rain	<input type="checkbox"/> Snow	(This information may be obtained at the following webpage: http://water.weather.gov/)	
Additional notes on weather and precipitation:					

Inspect all the following areas and infrastructure (sections 4-10) within the activity area if accessible.

Use the space following each area listed below to indicate whether such areas exist within the activity area, if they were inspected, or if they were not accessible for inspection.

Look for signs of erosion and transport of sediment to a waterbody. These signs may include:

- landsliding
- erosion voids
- tension cracking or settling of road fill or sidecast
- rilling or gullying of road surfaces, road fills, landings, cutbanks, etc.
- increased levels of sediment/turbidity in waterbodies immediately downstream of operations

Use the space following each area listed below to indicate if evidence of sediment erosion or delivery to a waterbody are observed.

If evidence of sediment erosion and delivery are observed:

- Identify the waterbody and describe specific locations within or adjacent to the waterbody.
- Photograph the source of sediment and point of delivery to the waterbody and record photo monitoring using the Photo-Point Monitoring Form (Attachment L).
- Describe what and when corrective measures will be taken to stop sediment delivery and protect water quality.

If increased levels of sediment/turbidity are observed in neighboring waterbodies:

- Describe where and in which waterbody.
- Explain if this turbidity is a result of sediment discharges from within the activity area. Is the sediment coming from a hillslope feature such as a stream crossing or unstable area? Cause-and-effect can be determined if the water becomes noticeably muddy below a hillslope feature.
- Describe what and when corrective measures will be taken to stop sediment delivery and protect water quality.

If any erosion or failed management measures cause, or may cause, one or more cubic yards of sediment delivery to a waterbody, then photo-point monitoring is required using the Photo-Point Monitoring Form (Attachment L).

Forensic monitoring requirements are waived if significant environmental impacts would result from road system use to access the activity area, or if worker safety would be compromised. If these areas are not accessible for monitoring, please indicate why. Acceptable reasons may include:

- Significant environmental impacts would result from road system use to access the activity area or waterbodies immediately downstream of operations.
- Worker safety would be compromised.

4. Areas where timber harvest and vegetation management activities have been conducted within or near unstable areas.

<input type="checkbox"/> none exist
(attach additional pages if necessary)

5. Constructed or re-constructed watercourse crossings.

<input type="checkbox"/> none exist
(attach additional pages if necessary)

6. Waterbody Buffer Zones where ground based equipment operations have occurred (e.g., skid trail crossings).

<input type="checkbox"/> none exist
(attach additional pages if necessary)

7. Road construction or reconstruction within 150 feet of a Class I, II, or IV (with domestic use) watercourse.

none exist

(attach additional pages if necessary)

8. Landing construction or reconstruction within waterbody buffer zone(s).

none exist

(attach additional pages if necessary)

9. Areas classified as high or extreme erosion hazard rating where ground-based equipment has been operated and there is potential for water quality impacts.

none exist

(attach additional pages if necessary)

10. Areas of in-lieu practices that have the potential to impact water quality.

none exist

(attach additional pages if necessary)

I, the Landowner, agent thereof, or Land Manager, hereby certify under penalty of perjury that all information contained in this monitoring report is true, accurately represents site conditions, and is complete. I also certify that all timber harvest and vegetation management activities conducted have been in conformance with all the general conditions of the Conditional Waiver of Waste Discharge Requirements for Discharges Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region (Timber Waiver), Resolution R6T-2009- (PROPOSED), and all eligibility criteria and conditions for Category 5 or 6 of the Timber Waiver. If any deviation from the approved plan, and/or the Timber Waiver eligibility criteria and conditions has been identified I have disclosed such deviations in this form along with corrective actions that will be taken to resolve the problem.

Signature: _____ Date: _____

Name: _____ Title: _____

Invitation for feedback: Water Board staff respectfully request any constructive feedback regarding the monitoring program with regard to your timber harvest and vegetation management activities. Completing this section is not a requirement. Water Board staff may use your comments and suggestions to improve this program for future activities. Comments may include:

- perceived effectiveness of the program in protecting water quality
- recommendations on how to make the monitoring program more efficient, reliable, or effective
- impressions of recommendations made by Water Board staff regarding your activities (e.g., Do they appear to be effective, is there a practice or a performance standard that would have been more cost-effective at protecting water quality?)

Attachment J
California Regional Water Quality Control Board
Lahontan Region

Effectiveness Monitoring Form

Categories 5 and 6

**This form and associated monitoring must be completed soon after
the winter period, between March 15 and June 15,
and submitted to Water Board by July 15**

Please type or print clearly in ink

Effectiveness monitoring: is a visual evaluation of management measures (e.g., erosion control structures) and infrastructure (e.g., roads and watercourse crossings) within the activity area following the winter period, typically between March 15 and June 15, to determine the effectiveness of implemented management measures in preventing sediment discharge to surface waters and protecting water quality, and to identify any points of sediment delivery that may have developed during the winter. Effectiveness monitoring and reporting is required annually for the duration of the timber harvest and vegetation management activities and one spring season following completion of timber harvest and vegetation management activities.

As soon as possible, following the winter period, inspect the activity area and complete this form or report containing equivalent information. However, do not access the site if soils are saturated, if significant environmental impacts would result from road system use, or if worker safety would be compromised.

Management measures are considered to be effective if they result in no significant pollution or have little risk of significant pollution. The landowner should focus on the following areas and inspect them for signs of sediment delivery to watercourses.

1. **Activity/Plan Name:**

WDID Number:

2. **Inspector's name and title:**

Date of inspection:

3. **Weather Observations and Precipitation Levels:** Complete the following based on site-specific observations and/or local weather data.

Accumulated precipitation this season: _____ inches of Rain Snow

(This information may be obtained at the following webpage: <http://water.weather.gov/>)

Additional notes on weather and precipitation:

Inspect all the following areas and infrastructure (sections 4-10) **within the activity area once conditions allow.**

Use the box spaces following each area listed below to indicate whether such areas exist within the activity area, if they were inspected, or if they were not accessible for inspection.

During your inspection look for signs of erosion and transport of sediment to a waterbody. These signs may include:

- Landsliding
- erosion voids
- tension cracking or settling of road fill or sidecast
- rilling or gullyng of road surfaces, road fills, landings, cutbanks, etc.
- increased levels of sediment in waterbodies immediately downstream of operations

Use the box spaces following each area listed below to indicate if evidence of sediment erosion or delivery to a waterbody are observed.

If evidence of significant ($> 1 \text{ yd}^3$) sediment erosion and delivery are observed:

- Describe where.
- Photograph the source of sediment and point of delivery to the waterbody and record photo monitoring using the Photo-Point Monitoring Form (Attachment L).
- Describe what and when corrective measures will be taken to stop sediment delivery and protect water quality.

If any evidence of failed management measure is observed:

- Describe what management practice failed and its location within the activity area.
- Describe what and when corrective measures will be taken to stop and/or prevent sediment delivery and protect water quality.

4. Constructed or re-constructed watercourse crossings.

(attach additional pages if necessary)

5. Landing management measures.

(attach additional pages if necessary)

6. Areas of in-lieu practices that have the potential to impact water quality.

(attach additional pages if necessary)

I, the Landowner, agent thereof, or Land Manager, hereby certify under penalty of perjury that all information contained in this monitoring report is true, accurately represents site conditions, and is complete. I also certify that all timber harvest and vegetation management activities conducted have been in conformance with all the general conditions of the Conditional Waiver of Waste Discharge Requirements for Discharges Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region (Timber Waiver), Resolution R6T-2009- (PROPOSED), and all eligibility criteria and conditions for Category 5 or 6 of the Timber Waiver. If any deviation from the approved plan, and/or the Timber Waiver eligibility criteria and conditions has been identified I have disclosed such deviations in this form along with corrective actions that will be taken to resolve the problem.

Signature: _____

Date: _____

Name: _____

Title: _____

Invitation for feedback: Water Board staff respectfully request any constructive feedback regarding the monitoring program with regard to your timber harvest and vegetation management activities. Completing this section is not a requirement. Water Board staff may use your comments and suggestions to improve this program for future activities. Comments may include:

- perceived effectiveness of the program in protecting water quality
- recommendations on how to make the monitoring program more efficient, reliable, or effective
- impressions of recommendations made by Water Board staff regarding your activities (e.g., Do they appear to be effective, is there a practice or a performance standard that would have been more cost-effective at protecting water quality?)

Category 6 Application Form and Monitoring and Reporting Program

Conditional Waiver for Timber Harvest and Vegetation Management Activities

Please type or print clearly in ink

For Water Board staff use only;
WDID # _____
Date of Receipt: _____
Lead Water Board Staff: _____
Contact #: _____

1. **Activity Name:** (Enter name given to activity, if any)

CAL FIRE Number: (If regulated by CAL FIRE, enter the number of the plan or exemption/emergency notice assigned to the activity if available. If a CAL FIRE number is not available, but the activities will proceed under an exemption or emergency, please state "CAL FIRE Exemption" or "CAL FIRE Emergency" in this box.)

County:

2. **Landowner's Contact Information:** (If there is more than one landowner, list their contact information in an addendum to this form.)

Name of individual, company, or agency:		
Company or agency contact:		
Address:		
City:	State:	Zip Code:
Phone:	E-mail address (optional):	

3. **RPF, Federal Forestry Professional, or Natural Resource Professional Contact Information:**

Name:	RPF License Number:	
Address:		
City:	State:	Zip Code:
Phone:	E-mail address (optional):	

4. **Name and Phone Number of Contact Person(s):** (List the primary person(s) supervising/implementing on-site operations.)

Name:	Phone:
-------	--------

Name:	Phone:
-------	--------

If information requested in this form is included in existing documents or plans those documents may be used to substitute for information specifically requested in this form. These documents must be submitted to the Water Board and specifically referenced (by page number) within this application.

5. Summary of Activity Information:

Total Activity Area Size (in acres):	Silvicultural prescription(s) or activity purpose:
--------------------------------------	--

Indicate type of yarding system(s) and equipment proposed for use (if any):

<u>Ground Based:</u> <input type="checkbox"/> Tractor, including end/long lining <input type="checkbox"/> Rubber tired skidder, Forwarder <input type="checkbox"/> Feller buncher	<u>Cable:</u> <input type="checkbox"/> Cable, ground lead <input type="checkbox"/> Cable, high lead <input type="checkbox"/> Cable, skyline	<u>Special:</u> <input type="checkbox"/> Hand crew <input type="checkbox"/> Masticator/Chipper <input type="checkbox"/> Helicopter <input type="checkbox"/> Other: _____ _____ _____
--	--	--

6. Waterbody Classification: What types of waterbodies exist within the activity area? (Information on waterbody classification is provided in Attachment B.) Check all that apply:

<input type="checkbox"/> Class I	<input type="checkbox"/> Class II	<input type="checkbox"/> Class III
<input type="checkbox"/> Class IV	<input type="checkbox"/> Unclassified	<input type="checkbox"/> None within activity area

7. Prescribed fire:

Yes No **Do the proposed activities include prescribed fire?**

If yes, summarize the purpose and method of the burn prescription, including design features or mitigation measures to reduce impacts to less than significant:

(attach burn plan or additional pages if necessary)

If the prescribed burning described above is the only reason why your planned activities are not eligible under Category 4, you do not need to proceed with the rest of this application.

8. Specific Activity Information:

Yes*	No	Do existing roads and landings proposed for use exhibit signs of erosion or instability, including rills, gullies, or tension cracking?
*If you answered yes to the above question, please answer the following:		
	Yes No	Could this erosion or instability result in sediment delivery to a waterbody? If yes, describe mitigation measures that will be implemented to stop the delivery of sediment to waterbodies, or drainage structures that drain to waterbodies:
(attach additional pages if necessary)		

9. Provide activity information below as required in condition 5 on page 24 of the Timber Waiver:

(attach additional pages if necessary)

Yes No **Are operations within the winter period (as defined in Attachment A) proposed?**

If yes, what management practices have been incorporated to prevent soil disturbance and sediment delivery to waterbodies?

(attach additional pages if necessary)

Yes No
or
Unknown **Do you anticipate the need to apply herbicides to the activity area?**
If yes, please notify the Water Board staff in an addendum to this form, or in a separate notice, at least 30 days prior to the proposed application. See Condition 21 of the Timber Waiver on page 26.

10. Map of Activity Area: To complete your application, include a USGS 7.5 minute topographic (or equivalent or greater scale) map that clearly indicates the information listed below. Map(s) that have been created as part of a CEQA or other planning document, may substitute for creating an individual map for this application provided they meet the above scale requirements and include the information listed below. Ensure these maps have been submitted to the Water Board and provide all the required information.

- The activity area boundary.
- The relative location of the activities to a nearby city, town, or landmark.
- Location of private and public roads to be used within the activity area. Include the location of private and public roads that will be used to access the activity areas from a paved county, state, municipal, or federal road. Label the name or number of each road and indicate if such roads are under the ownership or control of the land owner or manager. (The appurtenant roads may be shown on a separate map which may be planimetric with a smaller scale.)
- Location of road failures on existing roads proposed for reconstruction.
- Location of proposed operations within Waterbody Buffer Zones.
- Location of proposed landing construction or reconstruction where greater than ¼ acre of excavation, grading, or surface clearing will occur **or** identify areas of possible landing construction.
- Location of all existing and proposed watercourse crossings (including skid trail watercourse crossings).
- Location of erosion hazard rating areas, if more than one rating exists.
- Location of known unstable areas or slides.
- Boundaries of yarding (logging) systems, if more than one system is to be used.
- Location of proposed temporary over-snow skid trail watercourse crossings (if known).
- Location of marshes, meadows, springs, and other wet areas within the activity area.
- Location, classification, and name (if applicable) of all waterbodies within the activity area. (Information on waterbody classification is provided in Attachment B.) Complete the following if the activity area does not include a waterbody:

Name of nearest downstream waterbody:	
Classification:	
Distance from activity boundary:	

9. Certifications:

I, the Registered Professional Forester, Federal Forestry Professional, or Natural Resource Professional, hereby certify that the information in sections 7, 8, and 9 of this application accurately represents site conditions and that my assessments made above are true and correct.

Signature: _____ Date: _____

I, the Landowner, agent thereof, or Land Manager, hereby certify under penalty of perjury that this application and all submittals to the Water Board accurately represent site conditions. I hereby agree to meet the conditions and eligibility criteria of Category 6 of the Conditional Waiver of Waste Discharge Requirements for Discharges Resulting from Timber Harvest and Vegetation Management Activities in the Lahontan Region (Timber Waiver), Resolution R6T-2009- (PROPOSED).

Signature: _____ Date: _____

Printed name & title: _____

Monitoring and Reporting Program

Pursuant to Water Code section 13267, visual monitoring and semi-annual reporting are required for all activities that proceed under Category 6 of the Timber Waiver.

Implementation Monitoring:

Fall Implementation Monitoring: Review Attachment G for monitoring required before the winter period of each year. This monitoring must be reported to the Water Board by **January 15**. A “final compliance report” or “work completion report” inspection, conducted by the California Department of Forestry and Fire Protection (CAL FIRE) prior to the winter period and after cessation of active harvesting and road construction, may be substituted for fall implementation monitoring if the inspection covers the entire plan area and the report is submitted to the Water Board by January 15.

Winter Implementation Monitoring: Review Attachment H for monitoring required at the conclusion of winter operations each year. This monitoring must be reported to the Water Board by **July 15**.

Forensic and Effectiveness Monitoring:

Forensic and effectiveness monitoring is required if **any** of the following conditions exist within the plan. If none of these conditions exist, then only Implementation monitoring is required.

- Construction or re-construction of watercourse crossings over Class I, II or Class IV (with domestic use) watercourses
- Ground based equipment operations within waterbody buffer zone(s) beyond an existing road prism
- Winter operations
- Road construction or re-construction within 150 feet of a Class I, II or IV (with domestic use) waterbody
- Landing construction or re-construction within waterbody buffer zone(s)
- Ground-based equipment operations in areas classified High or Extreme Erosion Hazard Rating
- Ground-based equipment operations on slopes over 50 percent
- Ground-based equipment operations on slopes over 30 percent in the Lake Tahoe Basin

Forensic Monitoring: Review Attachment I for monitoring required after significant rain events. This monitoring must be reported to the Water Board by **July 15** of each year.

Effectiveness Monitoring: Review Attachment J for monitoring required at the end of the winter period each year. This monitoring must be reported to the Water Board by **July 15**.

Photo-Point Monitoring:

Photo-point monitoring (as described in Attachment L) is required if **any** of the following conditions exist within the plan or if Water Board staff specifically requests photo-point monitoring for particular areas of your plan (e.g., during application review, agency consultation, or site visit).

- Construction or reconstruction of a bridge crossing over a watercourse
- Construction or reconstruction of a watercourse crossing using a culvert that is 24 inches or greater in diameter

Attachment L
California Regional Water Quality Control Board
Lahontan Region

Photo-Point Monitoring Form

*To be included with either:
Fall Implementation,
Winter Implementation, or
Winter Forensic and Spring Effectiveness
Monitoring Submittal*

Please type or print clearly in ink, and attach all printed photos (labeled) or photos on CD (labeled)

If required, photo-point monitoring reports (with photos and data sheet) must be submitted with all monitoring reports submitted to the Water Board. Complete sections 1 and 2 of this form once, and submit with your Timber Waiver Application Form.

1. Identification of Photo-Point Monitoring Locations:

List all photo-point (PP) monitoring locations below with a brief description of what is located at that particular point (e.g., "Span crossing at Class I watercourse").

Photo-point monitoring locations must include all:

- Locations where span watercourse crossings will be constructed or reconstructed.
- Locations where watercourse crossings will be constructed or reconstructed using a 24-inch or greater diameter culvert.
- Points requested by Water Board staff.

PP #1:

PP #2:

PP #3:

PP #4:

(attach additional pages if necessary)

All photo-point monitoring locations must also be identified on a map that is included with this form and in the field with rebar, flagging, or other method that will last the duration of timber harvest and vegetation management activities.

2. Photo-Point Monitoring Purpose and Frequency:

To complete required photo-monitoring, photo-point monitoring must be completed for all points:

- prior to initiation of activities at the point
- during fall and winter implementation monitoring
- during forensic monitoring (if water quality problems are observed)
- during effectiveness monitoring.

Photo-Point Monitoring Data Sheet

1. **Activity Name:**
WDID Number:

Monitoring Type: Pre-Implementation Forensic Effectiveness
 Implementation

Inspector's name and title:

Date of inspection:

Point No. (as indicated on map) : _____ Reason point identified : _____
Date photo taken: _____ Time photo taken: _____
Observations/Notes:

Point No. (as indicated on map) : _____ Reason point identified : _____
Date photo taken: _____ Time photo taken: _____
Observations/Notes:

Point No. (as indicated on map) : _____ Reason point identified : _____
Date photo taken: _____ Time photo taken: _____
Observations/Notes:

Point No. (as indicated on map)	:	_____	Reason point identified	:	_____
Date photo taken:	_____	Time photo taken:	_____		
Observations/Notes:	_____				

Point No. (as indicated on map)	:	_____	Reason point identified	:	_____
Date photo taken:	_____	Time photo taken:	_____		
Observations/Notes:	_____				

Point No. (as indicated on map)	:	_____	Reason point identified	:	_____
Date photo taken:	_____	Time photo taken:	_____		
Observations/Notes:	_____				

Point No. (as indicated on map)	:	_____	Reason point identified	:	_____
Date photo taken:	_____	Time photo taken:	_____		
Observations/Notes:	_____				

Attachment M
California Regional Water Quality Control Board
Lahontan Region

Notice of Activity Completion Form

To Certify Completion and Compliance with the Conditional Waiver for Timber Harvest and Vegetation Management Activities and Apply for Termination of Coverage, Monitoring, and Reporting Requirements for All Activities Requiring Notification of Completion (Categories 4-6)

Please type or print clearly in ink

1. **Activity Name:** (Enter name given to the activity, if any)

WDID Number:

2. **Date Activities Completed:**

3. **Landowner:**

Name of individual, company, or agency:	
Phone:	E-mail address (optional):

4. **Name and Phone Number of Contact Person(s):** (List the primary person(s) supervising/implementing on-site operations.)

Name:	Phone:
Name:	Phone:

5. **Activity Waiver Category:** (under which category did the activities proceed?)

- Category 4: Timber harvest and vegetation management activities which rely on existing roads, meet 10 criteria, and may include winter-period operations
- Category 5: CAL FIRE – Approved Plans
- Category 6: Timber harvest and vegetation management activities that do not qualify under categories 1 – 5

6. Attach completed implementation monitoring form (Attachment D for Category 4 and Attachment G for Category 5 and 6).

I, the Landowner, agent thereof, or Land Manager, hereby certify under penalty of perjury that the timber harvest and/or vegetation management activities for the above-referenced activity (plan) were conducted in conformance with applications and submittals to the Water Board and all general conditions and category-specific conditions and criteria of the Conditional Waiver of Waste Discharge Requirements for Discharges from Timber Harvest and Vegetation Management Activities in the Lahontan Region (Timber Waiver), Resolution R6T-2009- (TENTATIVE), for which my project was enrolled.

Signature: _____

Date: _____

Upon receipt of this Notice of Completion, and prior to approving or declining termination, Water Board staff will review submittals and may inspect the project or plan area. All monitoring and reporting requirements for the project will remain in effect until Water Board staff formally acknowledge termination of Timber Waiver coverage with a Notice of Termination addressed to the landowner.

Note: Dischargers who completed timber harvest and vegetation management activities under Category 5 and 6 are required to complete effectiveness monitoring (Attachment J) between March 15 and June 15 the season following completion of timber harvest and vegetation management activities and submit a report of such monitoring to the Water Board by July 15 the following year.

DO NOT WRITE IN THIS BOX: For Water Board Staff Use Only.

Date Form Received: _____ | Lead Staff: _____

Site Inspection? No, Yes, date: _____

Staff Notes:

NOTICE OF TERMINATION:

This Notice of Project Completion Form has been reviewed, and I inspected did not inspect] the activity site. Based on my review, I am:

- terminating coverage under the Timber Waiver (Board Order No. R6T-2009-TENTATIVE) for this activity. All applicable monitoring and reporting requirements are complete for this activity.
- not terminating coverage and requiring further monitoring pursuant to Water Code section 13267.
- terminating coverage and requiring a Report of Waste Discharge pursuant to California Water Code section 13260.

Printed Name: _____

Signature: _____ Effective Date: ____/____/____

Entered into CIWQS

Attachment N
California Regional Water Quality Control Board
Lahontan Region

**WASTE DISCHARGE PROHIBITION INFORMATION FOR
ACTIVITIES IN
FLOODPLAINS OF THE LITTLE TRUCKEE OR TRUCKEE RIVER HYDROLOGIC UNITS,
OR
STREAM ENVIRONMENT ZONES AND FLOODPLAINS OF THE LAKE TAHOE
HYDROLOGIC UNIT**

**Conditional Waiver of Waste Discharge Requirements
for Timber Harvest and Vegetation Management Activities**

To protect beneficial uses and achieve water quality objectives, the Basin Plan contains prohibitions against waste discharges to lands within 100-year floodplains in the Little Truckee, Truckee River and Lake Tahoe Hydrologic Units (HUs), and prohibitions against "permanent disturbance" in Stream Environment Zones (SEZs) in the Lake Tahoe HU. These prohibitions may apply to certain timber harvest and vegetation management activities conducted in these areas.

The information in this attachment:

1. Summarizes discharge prohibitions and available exemptions.
2. Outlines the types of activities that may require an exemption, and describes the general procedure for obtaining an exemption.
3. Specifies the types of activities and conditions that may proceed in 100-year floodplains and SEZs without triggering the need to obtain an exemption.

1. Waste Discharge Prohibitions and Exemptions

Little Truckee and Truckee River HU

100-year Floodplains

Chapter 4 (pages 4.1-4 and 4.1-7) of the Basin Plan specifies the following **discharge prohibitions**:

Page 4.1-4 4(c). "The discharge or threatened discharge, attributable to human activities, of solid or liquid waste materials including soil, silt, clay, sand, and other organic or earthen materials to lands within the 100-year floodplain of the Little Truckee River or any tributary to the Little Truckee River is prohibited."

Page 4.1-7 4(c). "The discharge or threatened discharge, attributable to human activities, of solid or liquid waste materials including soil, silt, clay, sand, and other organic or earthen materials to lands within the 100-year floodplain of the Truckee River or any tributary to the Truckee River is prohibited."

Chapter 4 (pages 4.1-4 and 4.1-5) provides that **exemptions** may be granted for the following categories of projects that are applicable to timber harvest and vegetation management activities conducted under the Timber Waiver:

- 1) Projects solely intended to reduce or mitigate existing sources of erosion or water pollution or to restore the functional value to previously disturbed floodplain areas.
- 2) Bridge abutments, approaches, or other essential transportation facilities identified in an approved county general plan.
- 3) Projects necessary to protect public health or safety or to provide essential public services.

Lake Tahoe HU

100-year Floodplains

Chapter 5 (page 5.2-3) of the Basin Plan specifies the following **discharge prohibitions** for activities within 100-year floodplains:

8. and 9. "The discharge, or threatened discharge, attributable to human activities, of solid or liquid waste materials, including soil, silt, clay, sand and other organic and earthen materials to lands below the highwater rim of Lake Tahoe or within the 100-year floodplain of any tributary to Lake Tahoe is prohibited."

Chapter 5 (page 5.7-6) provides that **exemptions** may be granted for the following categories of projects that are applicable to timber harvest and vegetation management activities in 100-year floodplains conducted under the Timber Waiver:

- 4) Public service facilities if: (a) the project is necessary for public health, safety or environmental protection, (b) there is no reasonable alternative, including spans, which avoids or reduces the extent of encroachment in the floodplain, and (c) impacts on the floodplain are minimized.
- 5) Erosion control projects, habitat restoration projects, SEZ restoration projects and similar projects provided that the project is necessary for environmental protection and there is no reasonable alternative which avoids or reduces the extent of encroachment in the floodplain.

Stream Environment Zones

Chapter 5 (page 5.2-3) of the Basin Plan specifies the following **discharge prohibitions** for activities within SEZs:

13. "The discharge or threatened discharge, attributable to new development in Stream Environment Zones, of solid or liquid waste, including soil, silt, sand, clay, rock, metal, plastic, or other organic, mineral or earthen materials, to Stream Environment Zones in the Lake Tahoe basin is prohibited."

"New development" as used in the Prohibition 13 means ". . . construction activity resulting in permanent soil disturbance . . . New development does not include maintenance or repair of an existing structure or the replacement of any existing structure with another structure on the same parcel of no greater land coverage." (Basin Plan page 5.2-4). This means that if an activity occurs in an SEZ that does not result in permanent disturbance, the prohibition is not violated.

Available Exemptions for Timber Harvest and Vegetation Management Activities within the Little Truckee River, Truckee River, and Lake Tahoe HUs

Chapter 5 (page 5.8-7) provides that **exemptions** may be granted for the following categories of projects that are applicable to timber harvest and vegetation management activities in SEZs conducted under the Timber Waiver:

1. For public service facilities if:
 - a. The project is necessary for public health, safety or the environment;
 - b. There is no reasonable alternative, including spans, which avoids or reduces the extent of encroachment;
 - c. The impacts are fully mitigated; and
 - d. SEZ lands are restored in an amount 1.5 times the area of land developed or disturbed by the project
2. For erosion control projects, habitat restoration projects, wetland restoration projects, SEZ restoration projects, and similar projects, programs and facilities, if:
 - a. The project, program, or facility is necessary for environmental protection;
 - b. There is no reasonable alternative, including relocation, which avoids or reduces the extent of encroachment in the SEZ; and
 - c. Impacts are fully mitigated

According to the Basin Plan, impacts to SEZs due to erosion control projects, habitat restoration projects, wetland restoration projects, or SEZ restoration projects do not need to meet the 1.5:1 restoration requirement.

2. Types of Activities Which May Be Eligible for a Discharge Prohibition Exemption

In order to obtain an exemption for a waste discharge prohibition for timber harvest and vegetation management activities, applicants must provide Water Board staff with the information needed to justify the exemption, and allow for a 10-day public review and comment period. The Water Board's Executive Officer is authorized to grant these exemptions; therefore, no Water Board public hearing is typically required.

The nature of certain timber harvest and vegetation management projects makes them eligible for exemptions to the above-described prohibitions. Such eligible projects may include:

- Timber harvest and vegetation management projects to reduce fuel loading that are identified in a community wildfire protection plan
- Improvement of a stream crossing on an existing road to benefit water quality
- Timber harvest and vegetation management projects for aspen regeneration or improvement of riparian conditions
- Construction of an approach or bridge abutment within a 100-year floodplain to conduct timber harvest or vegetation management activities. (Such approaches or bridge abutments do not have to be identified in a county general plan)
- Timber harvest and vegetation management activities to protect forest values, such as wildlife habitat

Examples of activities conducted within 100-year floodplains or in SEZs that would require an exemption include:

- Enlargement of existing permanent watercourse crossings on existing roads
- Construction of temporary roads
- Construction of temporary watercourse crossings in place longer than one season
- Construction of skid trails
- Pile burning
- Conventional equipment operated off-road in SEZs or floodplains

3. Activities Not Requiring a Discharge Prohibition Exemption

Timber harvest and vegetation management activities listed below in Table N1, when conducted in compliance with the Timber Waiver and the conditions specified in Table N1, do not result in discharges in conflict with the above waste discharge prohibitions. Therefore, they **do not require a prohibition exemption** and may proceed as part of a project permitted under this Timber Waiver without any additional notification or authorization.

Table N1: Timber Harvest and Vegetation Management Activities within SEZs and 100-year Floodplains in the Truckee and Lake Tahoe Hydrologic Units (HUs) Which Do Not Violate Waste Discharge Prohibitions.

Activity	100-year Floodplains (Lake Tahoe and Truckee HUs)	Stream Environment Zones (Lake Tahoe HU)
Hand crew operations (except for pile burning)	Prohibited discharges to 100-year floodplains or permanent disturbance in SEZs do not occur if activities meet the eligibility criteria and comply with the conditions of Waiver Category 2.	
Over-snow equipment operation (no placement of slash within SEZs or 100 year floodplains)	Prohibited discharges to 100-year floodplains or permanent disturbance in SEZs do not occur if activities meet the eligibility criteria and comply with the conditions of Waiver Category 1, 4, 5 or 6.	
Operations on existing roads	Prohibited discharges to 100-year floodplains or permanent disturbance in SEZs do not occur if activities meet the eligibility criteria and comply with the conditions of applicable Waiver Category.	
Broadcast Burning	Prohibited discharges to 100-year floodplains or permanent disturbance in SEZs do not occur if activities meet the eligibility criteria and comply with the conditions of applicable Waiver Category.	
Operation of cut-to-length equipment with less than 13 psi ground pressure on granitic soils off existing roads in SEZs and 100-year floodplains	<p>Prohibited discharges to 100-year floodplains do not occur if activities meet all the following conditions:</p> <ul style="list-style-type: none"> a. Equilibrated groundwater levels are at least two feet below the soil surface. b. Soils are dry (as defined in Attachment A) to a minimum depth of 12 inches. c. Slash mats are employed or sufficient ground cover exists to prevent discharge of earthen materials to surface waters. d. Eligibility criteria and conditions of applicable Waiver Category are met. 	<p>Permanent disturbance in SEZs does not occur if activities meet all the following conditions:</p> <ul style="list-style-type: none"> a. Equilibrated groundwater levels are at least 2 feet below the soil surface. b. Soils are dry (as defined in Attachment A) to a minimum depth of 12 inches. c. Slash mats are employed or sufficient ground cover exists to prevent discharge of earthen materials to surface waters. d. Eligibility criteria and conditions of applicable Waiver Category are met.
Construction and removal of temporary watercourse crossings	<p>Prohibited discharges to 100-year floodplains do not occur if activities meet all the following conditions:</p> <ul style="list-style-type: none"> a. Temporary stream crossings are constructed with clean cobbles or logs. If sand or soil is used as running surface, BMPs must be in place (e.g. filter cloth, brow logs) to prevent discharge of earthen materials to surface waters. b. Stream crossings are completely removed at the end of operations, or prior to the winter period (as defined in Attachment A), whichever is sooner. c. Eligibility criteria and conditions of applicable Waiver Category are met. 	<p>Permanent disturbance in SEZs does not occur if activities meet Basin Plan Section 5.13 criteria:</p> <p>"Crossing of perennial streams or other wet areas shall be limited to improved crossings in accordance with the [TRPA] BMP handbook or to temporary bridge spans that can be removed upon project completion or the end of the work season, whichever is sooner, and damage to SEZ associated with a temporary crossing shall be restored within one year of removal."</p>

Activity	100-year Floodplains (Lake Tahoe and Truckee HUs)	Stream Environment Zones (Lake Tahoe HU)
Placement of chips or masticated material	Prohibited discharges to 100-year floodplains do not occur if activities meet a. or b., and c. below: a. Chips or masticated material is incorporated into the soil, or b. Chips or masticated material do not exceed an average of two inches in depth, with a maximum of four inches, and c. Eligibility criteria and conditions of applicable Waiver Category are met.	Placement of chips or masticated material does not result in "permanent soil disturbance" in SEZs if: a. Chips or masticated material is incorporated into the soil, or b. Chips or masticated material do not exceed an average of two inches in depth, with a maximum of four inches, and c. Eligibility criteria and conditions of applicable Waiver Category are met.
Repair or replacement of permanent crossings for existing roads, when new crossing is same size as existing.	Prohibited discharges to 100-year floodplains do not occur if activities do not involve the loss of additional floodplain area or volume (Basin Plan Sections 4.1 and 5.2)	New permanent SEZ disturbance is not attributable to maintenance, repair or replacement of an existing structure that does not result in greater land coverage (Basin Plan 5.2).

Notes:

1. For equipment use on steep slopes in the Lake Tahoe HU, refer to the Basin Plan or the TRPA code of ordinances for prohibitions and exemption criteria.
2. Water Board will consider new information to update this list. The Water Board, after a public hearing, may amend the Timber Waiver to modify the above list.

Monitoring and Reporting Program for U.S. Forest Service Activities Enrolled Under Timber Waiver Categories 4 or 6

Overview

Monitoring is required for U.S. Forest Service projects enrolled in Timber Waiver Categories 4 and 6, pursuant to Water Code section 13267. The U.S. Forest Service shall satisfy the monitoring requirements for these categories through a combination of its *Best Management Practices Evaluation Program* (BMPEP) and project-specific implementation monitoring plans, or by complying with the monitoring and reporting requirements of the Timber Waiver. The monitoring requirements and forms for Timber Waiver Categories 4 and 6 are found in Attachments D, E, G, H, I, J, and L.

Fall Implementation Monitoring Requirements

If the U.S. Forest Service does not use Timber Waiver fall implementation monitoring forms found in Attachments D or G, then U.S. Forest Service watershed staff shall create a project-specific fall implementation checklist that will be used by U.S. Forest Service personnel to verify that all BMPs are installed prior to the winter period (as defined in Attachment A) of any year of operations. This blank checklist shall be submitted to the Water Board with the project's Timber Waiver Category 4 or 6 application.

Fall implementation monitoring reports shall be submitted to the Water Board by **January 15** of each year. These reports shall include the completed BMP implementation checklist and identify any instances where BMPs were not implemented as required and any corrective action that was taken. If no corrective action was taken, but was identified as necessary, the U.S. Forest Service shall specify a schedule for corrective action to be completed.

Winter Implementation Monitoring Requirements

All U.S. Forest Service projects enrolled under Categories 4 or 6 that propose winter period operations must conduct daily winter monitoring. If the U.S. Forest Service does not use the Timber Waiver Daily Winter Period Monitoring Checklist (Attachment E), then U.S. Forest Service watershed staff shall create a project-specific winter monitoring checklist that will be used by U.S. Forest Service personnel to verify that conditions are suitable for such activities. This blank checklist shall be submitted to the Water Board with the project's Timber Waiver Category 4 or 6 application. Winter monitoring checklists shall be submitted to the Water Board by **July 15** of each year that winter operations occur.

U.S. Forest Service projects enrolled under Category 6 that proceed with winter timber harvest and vegetation management activities shall complete winter implementation monitoring. If the U.S. Forest Service does not use Timber Waiver winter implementation monitoring form (Attachment H), the U.S. Forest Service watershed staff shall create a project-specific winter implementation monitoring checklist that will be used by U.S. Forest Service personnel at the conclusion of winter operations (or before April 1) to verify that all management measures designed to prevent sediment delivery and protect water quality are in place and secure. This monitoring shall be submitted to the Water Board by **July 15** of each year that winter operations occur.

Forensic and Effectiveness Monitoring Requirements

Watersheds below Threshold of Concern and not on Clean Water Act Section 303(d) List

In watersheds **that are not elevated above the TOC by project activities**, the Forest Supervisor's Office shall submit an annual BMPEP report for all activities on the Forest to the Water Board by July 15 of each year. This report will satisfy the forensic and effectiveness monitoring requirements for all projects enrolled under the Timber Waiver. If the BMPEP report identifies failed or ineffective BMPs for projects enrolled under the Timber Waiver, U.S. Forest Service staff shall submit a supplemental narrative that addresses when corrective action will be implemented.

Watersheds at or above the Threshold of Concern or on Clean Water Act Section 303(d) List (Projects enrolled in Waiver Category 6 only)

In watersheds **that are at or above the TOC, or that will be elevated above TOC due to project implementation, or are in watersheds with 303(d) listed waters impaired for sediment**, U.S. Forest Service watershed staff shall submit a monitoring report that utilizes the BMPEP protocols to evaluate the effectiveness of implemented BMPs for any Category 6 activities (U.S. Forest Service projects enrolled in Waiver Category 4 are not subject to this requirement). BMPEP protocols shall be applied at focused "high risk" sites rather than on a random basis to assess the effectiveness of the applied BMPs. This report shall be submitted to the Water Board by July 15 following each year of project activities. If the focused monitoring utilizing BMPEP protocols identifies failed or ineffective BMPs, U.S. Forest Service staff shall submit a supplemental narrative that addresses when corrective action will be implemented.

The U.S. Forest Service BMP handbook can be found at the following link:
http://www.fs.fed.us/r5/publications/water_resources/waterquality/water-best-mgmt.pdf
Chapter 15 of the handbook is the BMPEP user's guide.

Photo-Point Monitoring Requirements:

If evidence of erosion and delivery of more than one cubic yard of sediment is observed:

- Identify the waterbody and describe specific locations within or adjacent to the waterbody.
- Photograph the source of sediment and point of delivery to the waterbody and record photo monitoring using the Photo-Point Monitoring Form (Attachment L).
- Describe what and when corrective measures will be taken to stop sediment delivery and protect water quality.

Attachment P
California Regional Water Quality Control Board
Lahontan Region

SUMMARY OF MONITORING AND REPORTING REQUIRED FOR CATEGORIES 4, 5, AND 6:

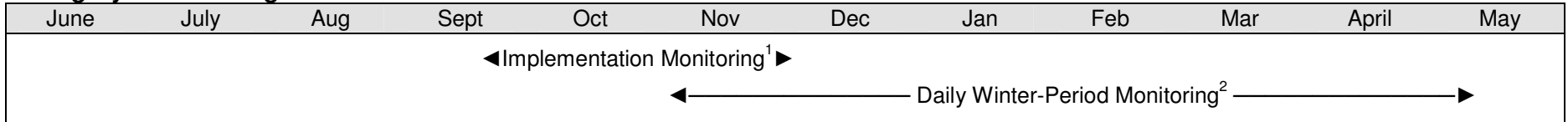
Reporting Required:

Category	Due annually by January 15 for duration of activities:	Due annually by July 15 for duration of activities:	Due upon completion:	Due by July 15 the year following completion of activities:
4	Fall Implementation Monitoring Report (Attachment D)	Daily winter-period monitoring report (Attachment E)	Implementation Monitoring Report (Attachment D) & Activity Completion Form (Attachment M)	Not applicable
5	Fall Implementation Monitoring Report (Attachment G)	If required: Winter Implementation, Forensic, and Effectiveness Monitoring Reports (Attachments H, I, & J)	Implementation Monitoring Report (Attachment G) & Activity Completion Form (Attachment M)	If required: Effectiveness Monitoring Report (Attachment J)
6	Fall Implementation Monitoring Report (Attachment G)	If required: Winter Implementation, Forensic, and Effectiveness Monitoring Reports (Attachments H, I, & J) Daily winter-period monitoring report (Attachment E)	Implementation Monitoring Report (Attachment G) & Activity Completion Form (Attachment M)	If required: Effectiveness Monitoring Report (Attachment J)

Photo-point monitoring is required prior to commencement of timber harvest and vegetation management activities, and during implementation, forensic, and effectiveness monitoring for any activity that includes any of the following: (1) the construction or reconstruction of a span crossing over a watercourse, or (2) the construction or reconstruction of a watercourse crossing using a culvert that is 24 inches or greater in diameter. Photo-point monitoring may also be required upon the request of Water Board staff.

Additional activity-specific monitoring may be imposed pursuant to California Water Code 13267.

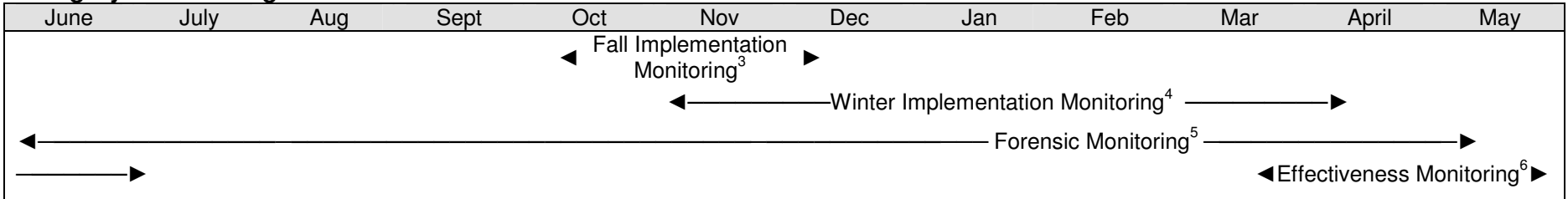
Category 4 Monitoring:



¹ Field work for implementation monitoring must be completed by November 15.

² Daily winter-period monitoring required only on days of equipment operation between November 15 and April 1 (or October 15 and May 1 in Tahoe/Truckee)

Category 5 Monitoring:



³ Field work for fall implementation monitoring must be completed by November 15.

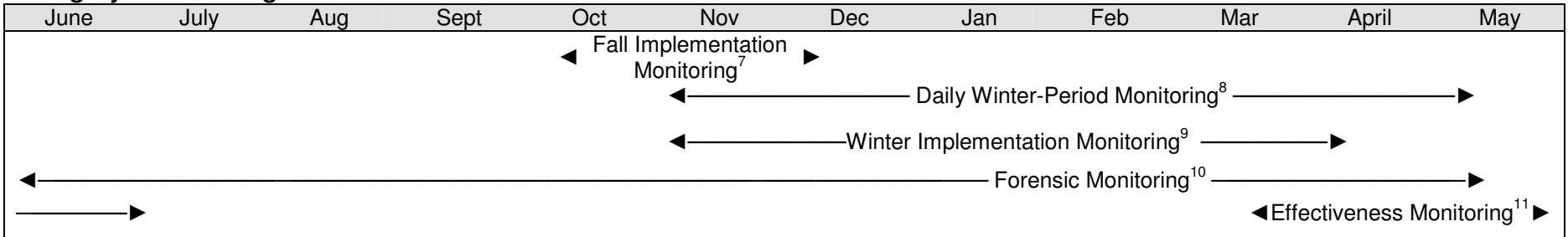
⁴ Winter implementation monitoring is required only when timber harvest and vegetation management activities occur after November 15 and before April 1 (between October 15 and May 1 for Tahoe/Truckee).

⁵ Forensic monitoring may occur at any time of the year after a significant rain or snow-melt event.

⁶ Effectiveness monitoring should be conducted at, or near, the end of the spring runoff, preferably between March 15 and June 15.

Note: Forensic and effectiveness monitoring is only required if one or more of the 8 conditions listed on page 2 of Attachment F exist within the activity area.

Category 6 Monitoring:



⁷ Field work for fall implementation monitoring must be completed by November 15.

⁸ Daily winter-period monitoring required only on days of equipment operation between November 15 and April 15 (between October 15 and May 1 for Tahoe/Truckee).

⁹ Winter implementation monitoring is required only when timber harvest and vegetation management activities occur after November 15 and before April 1 (after October 15 and before May 1 for Tahoe/Truckee).

¹⁰ Forensic monitoring may occur at any time of the year after a significant rain or snow-melt event.

¹¹ Effectiveness monitoring should be conducted at, or near, the end of the spring runoff, preferably between March 15 and June 15.

Note: Forensic and effectiveness monitoring is only required if one or more of the 8 conditions listed on page 5 of Attachment K exist within the activity area.

Attachment Q
California Regional Water Quality Control Board
Lahontan Region

Design Features for Pile Burning within Waterbody Buffer Zones
(Examples)

- Maintain a 25 foot buffer (no piling or burning) from water courses
- Allow fire to creep between piles and into these buffers, maintaining flame lengths of less than 2 ft in height except where sensitive plant occurrences, fens, and the noxious weeds whitetop and cheatgrass are present.
- Place piles in a non-linear pattern in each unit where possible.
- The maximum pile size shall not exceed 10 feet diameter by 5 feet height.
- No more than 30% of any SEZ acre may be occupied with piles.
- No more than 15% of any SEZ acre may be burned each year.
- Maximize the distance between piles to the extent feasible, maintaining approximately 20 feet average spacing between piles.
- After initial ignition of piles, but while still burning, allow each pile to be re-piled once (i.e., place large unburned pieces back into the burning pile). Additional re-piling will be allowed if necessary to achieve 80% consumption of the piled material.
- When piles are adjacent to aspen trees, re-piling during pile burning shall be restricted to one time per pile and hot piling (i.e. don't feed one pile with the material from other piles or ground material) is prohibited.

(source: USFS-LTBMU)