

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
AND GRANTING OF A PROHIBITION EXEMPTION FOR SLASH PILING AND
BURNING IN STREAM ENVIRONMENT ZONES

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.

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. Makes required findings and grants a prohibition exemption for slash piling and burning in Tahoe Basin SEZs.
4. 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 4.1-5 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 4.1-5 and 4.1-6) provides that exemptions may be granted for a number of categories of projects, the following of which are most 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. 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 a number of categories of projects, the following of which are most applicable to timber harvest and vegetation management activities in 100-year floodplains conducted under the Timber Waiver (as numbered in the Basin Plan):

- 2) 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.
- 4) 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 5.2-4) of the Basin Plan specifies the following discharge prohibitions for activities within SEZs of the Lake Tahoe HU:

“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 above 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.

Chapter 5 (page 5.8-7) provides that exemptions may be granted for a number of categories of projects, the following of which are most applicable to timber harvest and vegetation management activities conducted under the Timber Waiver:

1. For public service facilities if all of the following findings can be made:
 - 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 all of the following findings can be made:
 - 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

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 and/or roads
- Construction of temporary roads
- Construction of new waterholes within the 100-year floodplain
- Construction of temporary watercourse crossings and associated approaches in place longer than one season
- Construction of skid trails
- Slash piling and burning not conducted in accordance with Timber Waiver Category 6 and Attachment Q.
- Conventional equipment operated off-road in SEZs or floodplains

For project activities not covered by the prohibition exemption granted pursuant to No. 3, below, project applicants may request a prohibition exemption for timber harvest and vegetation management activities. The project 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 for a proposed prohibition exemption. The Water Board's Executive Officer is authorized to grant these exemptions; therefore, no Water Board public hearing is typically required. Activities subject to the prohibitions may not proceed until Water Board authorization is granted.

3. Required Findings and Granting of Discharge Prohibition Exemption for Tahoe Basin SEZ Slash Piling and Burning done in Accordance with Category 6 of Timber Waiver and Attachment Q

Timber Waiver enrollees may propose slash piling and burning within SEZs in the Lake Tahoe Basin. The Basin Plan prohibits permanent disturbance or fill within SEZs, unless the Water Board grants an exemption to this prohibition. Timber Waiver Attachment Q requires the Enrollee to implement specific management actions for slash piling and burning within SEZs to protect sensitive soils and water quality. To allow for the timber harvest and vegetation management activities under this Timber Waiver, the Water Board makes the following findings for a prohibition exemption to the Basin Plan prohibitions against permanent disturbance or fill within SEZs.

a. The project is necessary for public health, safety, or environmental protection.

The purposes of a project proposing slash piling and burning within SEZs must be to:

- develop defensible space within SEZs adjacent to communities within the Lake Tahoe Basin where fire suppression operations can be safely and effectively conducted in order to protect homes and communities from wildfires; and/or
- restore forest health within SEZs of the Lake Tahoe Basin where stands of trees have become sufficiently dense and surface fuels have accumulated to such a degree that wildfires with sustained crown fire and long range spotting could quickly develop, causing severe resource damage and threatening human life and property; and/or
- restore meadows and aspen stands within the Lake Tahoe Basin in order to reduce the potential for catastrophic wildfire to spread through these areas, to promote maintenance of meadows and aspen stands consistent with the TRPA and/or Pacific Southwest Research Station's "Aspen Community Mapping and Condition Assessment Report," and to provide wildlife habitat for species that are dependent on meadows and/or aspen.

The 2000 Lake Tahoe Watershed Assessment (Watershed Assessment) noted that the Tahoe Basin has one of the highest fire ignition rates in the Sierra Nevada, concentrated around the Wildland Urban Interface (WUI). The Watershed Assessment projected that "should a fire escape initial control attempts under extreme wildfire conditions, at least 50 percent of the area in the resulting burn would likely be crown fire, with overstory tree mortality greater than 50 percent ... Even a small wildfire in the basin is potentially a significant event because of the juxtaposition of high ignition potential, high density and value of human developments, and high fuel hazard." The recommendation from the Watershed Assessment was "A combination of increased fire prevention, education, and strategic fuel hazard reduction will be most effective at reducing the likelihood of damaging fire in the basin." Some timber harvest and vegetation management activities will therefore result in increased environmental protection and improvement (specifically within the units where riparian enhancement will occur). A project proposing slash piling and burning within SEZs to develop defensible space, restore forest health, or restore meadows and aspen stands is therefore necessary for public health and safety, and environmental protection.

b. There is no reasonable alternative, including spans, which avoids or reduces the extent of encroachment.

To reduce the threat of a catastrophic wildfire, restore forest health, or remove encroaching conifers within meadows and aspen stands, the project's proposed timber harvest activities may include the removal of dead, dying, and diseased vegetation, ladder fuels, or other excessive and undesirable vegetation from SEZs within the WUI. To minimize impacts from these affected project areas, the Enrollee must be allowed to pile and burn slash within SEZs, or else forest health will not improve and the fuels may not otherwise be removed, remaining a fire hazard.

The proposed slash piling and burning within SEZs would be limited to hand work, in order to reduce or avoid the extent of encroachment by vehicles and road construction into the SEZs. The use of hand crews within the SEZs to remove the threat of a catastrophic wildfire involves the labor-intensive piling and burning of dead and dying fuels. Burn piles must be stacked and later burned within SEZs due to the safety limitations placed on hand crews to move the slash acceptable distances. Alternately, the use of whole tree logging mechanical equipment to remove the slash from SEZs may have more negative consequences than pile burning, due to potential compaction and disturbance of these sensitive soils.

c. The impacts are fully mitigated.

Attachment Q, "Required Management Actions for Pile Burning within Waterbody Buffer Zones, and Stream Environment Zones to Qualify for a Basin Plan Prohibition Exemption under Timber Waiver Category 6," describes the specific management actions, which, when implemented in conjunction with the requirements of this Timber Waiver, will ensure that significant effects are avoided. No more than 15% of any acre can be burned each year, and no more than 15% of an acre, or SEZ/WBBZ contiguous area if smaller than one acre, can have burn scars at any time unless the scars have vegetative recovery (as defined in Attachment A). By limiting the extent of burn scars allowed within the SEZs at any given time, these requirements provide assurance that significant effects are avoided. Burn scars must have vegetative recovery (as defined in Attachment A) before any additional burning may occur. Timber Waiver Attachment Q requires that native duff, or organic mulch and seed, be raked into burn scars to a specified coverage percentage if vegetative recovery of the burn scar has not occurred within two growing seasons. This treatment can be effective in reducing erosion and accelerating native plant cover restoration following SEZ pile burning.

The Timber Waiver requires enrollees to verify that the implemented BMPs are successful in avoiding significant impacts to soil stability, soil productivity, and riparian plant growth. Results from this monitoring will be used to either support the current BMPs, or to modify them through an adaptive management strategy to provide additional protection and mitigation measures in SEZs. The Timber Waiver also requires 100 percent of the BMPs associated with all project activities be properly implemented and functional. The Timber Waiver requires enrollees to monitor the effectiveness of their BMPs and identify areas that need to be strengthened, and prescribes Forensic Monitoring to determine the source of any impact or potential impact in order to correct the problem.

d. SEZ lands are restored in an amount 1.5 times the area of land developed or disturbed by the project

Proposed timber harvest and vegetation management activities in SEZs will reduce surface and ladder fuels, reducing the potential loss of riparian and SEZ habitat through a catastrophic fire, and will reduce stand mortality by reducing stand density, thus

reducing competition for water and nutrients and increasing resistance to drought, insect invasions, and disease. Removing shade-tolerant species while retaining jeffrey, ponderosa, and sugar pine will produce a healthier ecological species balance in these sensitive areas.

Additionally, aspen regeneration projects that reduce encroaching conifers in aspen stands and meadows will restore riparian species dominance within these areas, restoring natural functionality within the treated SEZ and riparian areas.

This Timber Waiver mandates that no more than 30 percent of an SEZ acre may be covered in burn piles and only 15 percent of any SEZ acre may have burn scars at any time that are not in a stage of vegetative recovery (Attachment Q). Piles need to cure and are generally burned within two or three years after being built. The piling and burning in this manner limits the overall disturbance, provides conservation of biomass, and enhances the vegetative recovery.

The Basin Plan exemption criteria for permanent disturbance to SEZs from public service facilities requires restoration of SEZ lands at a ratio of 1.5 to 1. The Water Board finds that the area to be covered in burn piles is considered a temporary, not permanent, disturbance due to the relatively rapid recovery of the soils following the burning of the piles and application of the management actions outlined in Attachment Q. The Water Board has also determined that the improvement of forest health and fire safety within the SEZ compensates for the temporary SEZ soil disturbance created by the SEZ burn piles.

e. PROHIBITION EXEMPTION GRANTED

Based on Findings made here, and the requirements of Timber Waiver Attachment Q, the Water Board hereby grants an exemption to the Basin Plan prohibition for permanent disturbance in SEZs by the placement and burning of slash piles within SEZs, for activities proposed in Timber Waiver Category 6 applications, as long as those activities adhere to the requirements of Attachment Q. To comply with this SEZ prohibition exemption, the Enrollee must not exceed the slash piling and burning limitations specified in these Findings and Attachment Q, and the Enrollee must include applicable project information in its Category 6 application to describe that it will not exceed these limitations.

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.

4. 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)
1. Hand crew operations (except for slash piling and 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.	
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 applicable Waiver Category.	
3. 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.	
4. 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.	
5. 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	Prohibited discharges to 100-year floodplains do not occur if activities meet all the following conditions: a. Soils are operable (as defined in Attachment A). b. Equipment is kept at least 25 feet from watercourse channels. c. Slash mats are employed or sufficient ground cover exists to prevent direct contact of equipment tires/tracks with the ground surface, and discharge of earthen materials to surface waters. d. Eligibility criteria and conditions of applicable Waiver Category are met.	Permanent disturbance in SEZs does not occur if activities meet all the following conditions: a. Soils are operable (as defined in Attachment A). b. Equipment is kept at least 25 feet from watercourse channels. c. Slash mats are employed or sufficient ground cover exists to prevent direct contact of equipment tires/tracks with the ground surface and, discharge of earthen materials to surface waters. d. Eligibility criteria and conditions of applicable Waiver Category are met.
6. Construction and removal of temporary watercourse crossings	Prohibited discharges to 100-year floodplains do not occur if activities meet all the following conditions: 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	Permanent disturbance in SEZs does not occur if activities meet Basin Plan Section 5.13 criteria: "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

Activity	100-year Floodplains (Lake Tahoe and Truckee HUs)	Stream Environment Zones (Lake Tahoe HU)
	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.	crossing shall be restored within one year of removal."
7. 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 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.
8. 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)	Permanent disturbance to SEZs does not occur from maintenance, repair, or replacement of an existing structure that does not result in greater land coverage (Basin Plan 5.2).
9. Waterhole Maintenance or Repair	Prohibited discharges to 100-year floodplains do not occur from maintenance or repair of an existing waterhole within the original footprint.	Permanent disturbance to SEZs does not occur from maintenance or repair of an existing waterhole within the original footprint.

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.