

California Regional Water Quality Control Board
Lahontan Region

CEQA Environmental Checklist

South Shore Project Waste Discharge Requirements

PROJECT DESCRIPTION AND BACKGROUND

Project Title:	Issuance of Waste Discharge Requirements for the South Shore Fuel Reduction and Healthy Forest Restoration
Lead agency name and address:	Lahontan Regional Water Quality Control Board 2501 Lake Tahoe Blvd. South Lake Tahoe, CA 96150
Contact person and phone number:	George Cella, (530) 542-5426
Project Location:	Within the South Shore area of Lake Tahoe, CA: The Project extends from Cascade Lake on the northwest to the Heavenly Mountain Resort Special Use Permit boundary and the Nevada State line on the northeast, and from Lake Tahoe on the north to the LTBMU National Forest boundary on the south.
Project sponsor's name and address:	US Forest Service Lake Tahoe Basin Management Unit (LTBMU) 35 College Drive South Lake Tahoe, CA 96150
General plan designation:	Wildland Urban Interface (WUI)
Zoning:	National Forest-owned urban lots and National Forest System land (El Dorado County)

Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation.)

The Project is intended to reduce fuel hazards and restore ecosystem health through vegetation treatments on lands owned by the U.S.A. and managed by the U.S. Forest Service. The primary management objective is the reduction of hazard fuels within the South Shore of the Lake Tahoe Basin WUI in order to change fire behavior resulting in lower fire severity and reduced rates of spread. Secondary objectives include providing healthy wildlife habitat, restoration of a forest structure with increased resistance to drought, disease, and insects, and restoration of aspen stands within the South Shore Project area. The Project will apply vegetative treatments to reduce hazardous fuels on up to 10,670 acres within the South Shore WUI on a minimum three to seven-year schedule, with initial thinning treatments on approximately 2,660 acres per year. Of this, no more than 1,350 acres would be mechanically thinned per year. It is anticipated the Project area would remain within desired condition limits for a period of 15 to 20 years.

Hazardous fuel reduction would occur on Forest Service-managed lands in all three zones of the WUI: within the urban core where undeveloped public and developed private lands are adjacent; within the Defense Zone where undeveloped public lands extend $\frac{1}{4}$ mile from places where people live and/or work; and within the Threat Zone where undeveloped public lands extend 1 $\frac{1}{4}$ miles beyond the Defense Zone.

A combination of the following methods will be used to meet the fuels and vegetation objectives for the Project area, including Stream Environment Zones (SEZs): Mechanical thinning of brush and trees, using Cut-to-Length (CTL) or whole-tree operations (WT); hand thinning of brush and trees; saw log and biomass removal, with chipping and/or masticating of slash and brush; removal of infested, diseased, and dead trees, both standing and down; and prescribed pile burning and underburning subsequent to vegetation treatments.

The thinning operations used will be based on soil type, slope, and associated water quality concerns such as risk of sediment delivery to surface water.

	Hand treatments, end-lining, or reaching in by equipment would be used where slopes or soil conditions are not suitable for mechanical treatments and where road access is not feasible. Overall, mechanical harvesting using ground-based equipment with follow-up biomass removal, chipping, mastication, or prescribed burning, would occur on up to 5,728 acres. Hand thinning with similar follow-up fuels treatments would occur on up to 5,961 acres. The Project will involve the discharge of waste earthen materials to waters of the State in the Project area. Such discharges are subject to regulation pursuant to the California Water Code section 13263. The Water Board will regulate discharges from the Project by issuing Waste Discharge Requirements (WDR); therefore, the Water Board is the Lead Agency under CEQA. Best Management Practices (BMPs), mitigation measures, and a Monitoring Plan are incorporated into the Project description and in this WDR to avoid or substantially lessen adverse environmental impacts. See attached CEQA Checklist, Final Environmental Impact Assessment (FEIS) and WDR for specific additional details.
Surrounding land uses and setting; briefly describe the project's surroundings:	Urban and forested settings: the WUI is the zone surrounding the urban core where structures and other human development meet or intermingle with undeveloped wildland. The wildlands are managed by the LTBMU for resources, recreation, and transportation routes.
Other public agencies whose approval is required (e.g. permits, financial approval, or participation agreements):	Tahoe Regional Planning Agency, El Dorado Air Quality Management District

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project. Please see the checklist beginning on page 3 for additional information.

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

DETERMINATION:

On the basis of this initial evaluation:

☐	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: To Be Determined	Date:
Printed Name:	For:

CEQA Environmental Checklist

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Environmental Review Requirements

The Project is subject to the requirements of both the federal National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The LTBMU is the NEPA Lead Agency. The LTBMU has developed a Final Environmental Impact Statement and Record of Decision (FEIS/ROD) for the Project, pursuant to NEPA.

The Project involves the discharge of earthen wastes (fill) and/or waste organic materials (e.g., slash, chips, bark, burn piles, etc.) to waters of the State in the Project area, including wetlands. The California Regional Water Quality Control Board (Water Board) will regulate the proposed discharge of wastes by issuing Waste Discharge Requirements (WDR) pursuant to Section 13263 of the California Water Code. Because it will issue WDR for the Project, the Water Board is the Lead Agency under CEQA.

Section 15221 of the CEQA Guidelines directs that when a project requires compliance with both NEPA and CEQA, state Lead Agencies should use the EIS rather than preparing a separate Environmental Impact Report or Initial Study, as long as the EIS complies with the requirements of CEQA. Water Board staff has reviewed the information contained in the FEIS/ROD for compliance with CEQA, and determined that additional mitigation measures and information are needed to comply with CEQA requirements.

Therefore, the Water Board is circulating tentative WDR, and a CEQA checklist, along with the FEIS/ROD to support a Mitigated Negative Declaration in compliance with CEQA guidelines. This CEQA checklist was developed by Water Board staff to inform the public and interested agencies of the additional mitigation measures identified as necessary by the Water Board, and included in its tentative WDR. It also summarizes the mitigation measures contained in the FEIS/ROD. A discussion of growth inducing impacts and mandatory findings of significance, as required by CEQA, is also included in the CEQA checklist.

I. AESTHETICS: Would the project:

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

The Project is consistent with, and would meet scenic standards and thresholds in the Lake Tahoe Basin (FEIS Chapter 3 Scenic Resources). There are no scenic highways in the Project area.

Mitigation Measures for I.b):

Tree thinning and prescribed burning operations would be implemented with the following measures to mitigate potential impacts:

- Waste Discharge Requirements Best Management Practice (WDR BMP) No. 59: Retain up to 15% of existing 4 to 10-inch dbh trees and shrubs within foreground views (generally 100 feet) from the following travel routes: Pioneer Trail, Hwy 50, Hwy 89. Create irregular spacing and clumping distribution between trees and groups of trees within foreground views where practical. To determine practicality of the tree spacing and clumping, the LTBMU's Forest Landscape Architect will conduct a site inspection and look for physical features that must be considered (such as rock outcrops and other geomorphic variation) in designing the appropriate spacing and clumping to ensure the effects from planned tree thinning and burning will be less than significant.
- WDR BMP No. 25: The LTBMU shall develop and submit a Fire Prescription Plan, as specified in WDR Section B.9, to Water Board staff for review and acceptance prior to any Project-related burning activity, per WDR BMP No. 4. The Fire Prescription Plan shall include underburning prescriptions (such as creep, avoidance areas, specific measures to protect arborglyphs, etc.), burn pile details (such as percentage piled, buffers, sizing, re-piling, hot piling, etc.), and smoke controls (such as prescribing weather conditions, e.g., mixing heights and transport winds, for the affected communities and Desolation Wilderness). The Fire Prescription Plan shall therefore incorporate WDR BMPs No. 26 through 31 and adaptive management strategies, plus additional BMPs and Resource Protection Measures included in the LTBMU's Project-specific Thinning Contract, Burn Plan, and Smoke Management Plan. Underburn prescriptions shall be designed to ensure that fire intensity and duration do not result in severely burned soils and protect water and soil resources. The BMPs and RPMs specified in the accepted Fire Prescription Plan shall be adhered to throughout Project operations.
- WDR BMP No. 4: Where any of the mitigation measures require submittal of additional details, plans, BMPs, mitigation measures, or any other design to Water Board staff,

those designs shall be provided to Water Board staff for review and acceptance at least 30 days prior to site activities. In rare cases where timing is critical, the LTBMU may request a shorter time period for staff review and acceptance by the Water Board Executive Officer.

WDR BMP No. 60: Design prescribed fires to retain up to 15% of selected understory vegetation, as well as to reduce evidence of tree scorching within foreground views (generally 100 feet) from Pioneer Trail, Hwy 50, and Hwy 89.

- WDR BMP No. 61: Minimize cut stump heights. Stump heights shall not exceed approximately six inches measured from the uphill side.
- WDR BMP No. 62: Locate mechanical treatment landings beyond foreground views (generally 100 feet) from travel routes Pioneer Trail, Hwy 50, and Hwy 89 where feasible. To determine feasibility of the locations, an LTBMU Forest Landscape Architect will inspect the sites and consider physical obstacles to avoid, such as rock outcrops, SEZ, sensitive vegetation in siting the landings to ensure there are no significant impacts from the landings..

II. AGRICULTURE AND FOREST 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. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

There are no agricultural resources in or adjacent to the Project treatment units.

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:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
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)?	☐	☒	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

Mitigation Measures for III.a) through III.d):

The Project area lies within the jurisdiction of the El Dorado Air Quality Management District (EDAQMD), which is responsible for the El Dorado County portion of the Lake Tahoe Air Basin. The proposed treatment areas, where both prescribed pile and underburning is proposed, are within and adjacent to the city of South Lake Tahoe and surrounding unincorporated communities. The Project includes meeting applicable air quality standards and permits and contains the following mitigations:

- WDR BMP No. 25: The LTBMU shall develop and submit a Fire Prescription Plan, as specified in WDR Section D.1, to Water Board staff for review and acceptance prior to any Project-related burning activity, per WDR BMP No.4. The Fire Prescription Plan shall include underburning prescriptions (such as creep, avoidance areas, specific measures to protect arborglyphs, etc.), burn pile details (such as percentage piled, buffers, sizing, re-piling, hot piling, etc.), and smoke controls (such as prescribing weather conditions, e.g., mixing heights and transport winds, for the affected communities and Desolation Wilderness). The Fire Prescription Plan shall therefore incorporate WDR BMPs No. 26 through 31 and adaptive management strategies, plus additional BMPs and Resource Protection Measures included in the LTBMU's Project-specific Thinning Contract, Burn Plan, and Smoke Management Plan. Underburn prescriptions shall be designed to ensure that fire intensity and duration do not result in severely burned soils and protect water and soil resources. The BMPs and Resource Protection Measures specified in the accepted Fire Prescription Plan shall be adhered to throughout Project operations.
- WDR BMP No. 63: Scheduling of prescribed burn activities shall comply with air quality standards and restrictions, and the LTBMU shall acquire the relevant permits from California Air Resources Board (CARB)/EDAQMD for prescribed burning and smoke mitigations (e.g., Smoke Management Plan). The Smoke Management Plan shall follow the guidance and direction in the following documents to protect air quality:

- o Interim Air Quality Policy on Wildland and Prescribed Fires, issued by the Environmental Protection Agency in 1998;
- o Memorandum of Understanding between the (CARB) and the USDA Forest Service, signed on July 13, 1999; and
- o Smoke Management Guidelines in Title 17 of the Code of Federal Regulations.

The Project would substantially reduce expected smoke, including greenhouse gases (GHGs – see Section VII) such as CO₂, as compared to a high intensity wildfire.

TENTATIVE

IV. BIOLOGICAL RESOURCES: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☒	☐	☐
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?	☐	☒	☐	☐
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?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Mitigation Measures for IV.a), IV.b), and IV.d):

The Project includes the following measures to conduct project activities in a manner that minimizes impacts to wildlife and habitat. Consultation was conducted with the US Fish and Wildlife Service for Lahontan Cutthroat Trout, and the Project would not impact recovery efforts for this species. Findings in the FEIS support no significant impact to terrestrial or aquatic wildlife.

- WDR BMP No. 64: For California Spotted Owl protected activity centers (PACs), maintain a limited operating period (LOP) prohibiting vegetation treatments, prescribed fire, or road or trail building within approximately ¼ mile of the activity center, if known, or within ¼ mile of the PAC, if unknown, during the breeding season (March 1 to August 15).
- WDR BMP No. 65: For northern goshawk PACs, maintain a LOP prohibiting vegetation treatments, prescribed fire, or road or trail building within approximately ¼ mile of the activity center, if known, or within ¼ mile of the PAC, if unknown, during the breeding season (February 15 to September 15).
- WDR BMP No. 66: For northern goshawk disturbance zones, maintain a LOP restricting management activities, including habitat manipulation for purposes other than habitat improvement, within approximately ½ mile of existing nest trees located outside urban zones from February 15 to September 15.

- WDR BMP No. 67: For the bald eagle winter habitat near Taylor and Tallac Creeks, maintain a LOP restricting management activities, including habitat manipulation for purposes other than habitat improvement, from October 15 to March 15.
- WDR BMP No. 68: For suitable habitat surrounding an active willow flycatcher nest, maintain a LOP prohibiting vegetation treatments, prescribed fire, or road or trail building during the breeding season (June 1 to August 31).
- WDR BMP No. 69: For osprey disturbance zones, maintain a LOP restricting management activities, including habitat manipulation for purposes other than habitat improvement, within approximately ¼ mile of the nest during the breeding season from March 1 to August 15.
- WDR BMP No. 70: For peregrine falcon disturbance zones, maintain a LOP restricting management activities, including habitat manipulation for purposes other than habitat improvement, within approximately ¼ mile of the nest from April 1 to September 30.

Black-backed Woodpecker Habitat Modification

On December 15, 2011 the California Fish and Game Commission (FGC) agreed to consider the Black-Backed Woodpecker (BBWO) for listing as either endangered or threatened pursuant to the California Endangered Species Act. In general, the primary threat to BBWO habitat is removal of snags within BBWO breeding habitat. The guidelines recommend retaining snags within the range of natural variability within watersheds affected by fire. BBWOs excavate nesting cavities in snags occurring in intensively burned forests.

The FEIS, p 3-296, estimates that the potential change in snag densities due to the Project will not alter the existing population trend, or change the distribution of BBWO. Of the 3,614 acres of burned forest in the Project area, fuels treatments will occur on approximately 315 acres, resulting in reduced snag densities in those 315 acres only. The resulting snag densities on burned forest acres will not fall below Forest Plan guidelines.

- WDR BMP No. 71: Except in Wildlife Areas where specific snag retention is prescribed: Where available an average of four of the largest diameter snags and four downed logs per acre would be retained. Snags would be at least 15-inch dbh in clumped and irregular spacing, depending on the average size class in the stand. (This does not supersede the removal of hazard trees).
- WDR BMP No. 17: Existing downed trees and Large Woody Debris (LWD, or Coarse Woody Debris, as denoted in the FEIS) that are in Class I, II, or III watercourses shall be left in place for habitat unless the LTBMU's Hydrologist or Fisheries Biologist authorizes removal to protect or improve channel stability and the LTBMU follows WDR BMP No. 3 (see WDR Attachment F).
- WDR BMP No. 18 (in part): Trees (live or dead) may be marked for removal within five feet of the bank edge of any waterbody only where fuel loads or stand densities exceed prescription and where LWD is at or above desired levels. No live trees greater than 14-inch dbh which contribute to the stability of stream banks, as determined by the LTBMU's Hydrologist or Fisheries Biologist, shall be removed (for shade, stability, habitat, and water quality impacts).
- WDR BMP No. 20: Directional falling shall be used to keep felled trees out of Class I, II, or III watercourses unless the channel reach is identified as deficient in LWD (for habitat). Taylor Creek is the only watercourse identified in the FEIS as being below desired LWD levels; therefore, within LWD-deficient section(s) of Taylor Creek, the LTBMU's Fisheries Biologist shall select trees greater than 12-inch DBH, while adhering to WDR BMPs No. 3 and 18, to be felled directionally into the channel. The LTBMU's Fisheries Biologist shall submit additional details and adequate justification to Water Board staff for review and

acceptance per WDR BMPs No. 3 and 4, prior to felling trees into any other watercourse within the units listed under FEIS RPM AR-3.

- • WDR BMP No. 18 (in part): Stream bank or near-stream vegetation removal shall also be managed to ensure there is no measurable increase in daily mean water temperatures where fuel reduction occurs. Shaded bank conditions shall be maintained on fish-bearing watercourses by retaining at least 50% of the stream bank site potential for herbaceous and shrub cover and at least 25% of the site potential for tree cover. Where natural tree cover is less than 20%, 80% of the potential shall be retained. Thirty-five to 70% of the stream shall be shaded from 11:00 AM to 4:00 PM.
- WDR BMP No. 54b (in part): Temporary crossings shall be “modified Spittlers,” and installed such that water flow is not obstructed.
- WDR BMP No. 58 (in part): An objective for this System Road 12N20 crossing is the maintenance of a natural stream bed, with possible designs including a bottomless arched culvert, a prefabricated steel span, or a prefabricated concrete “box” culvert with the underside buried under the natural stream bed. The final design shall be provided to the Water Board staff at least 30 days prior to site activities for approval, any other design used shall be at least as protective of beneficial uses and soil and water resources as these three potential designs.
- WDR BMP No. 77: Invasive and/or noxious weed infestations identified within the Project area (including travel routes and staging or landing areas) shall be immediately treated by methods accepted for use by the LTBMU Noxious Weed Coordinator, or flagged for avoidance before Project implementation within any given unit. Invasive and noxious weed species known to occur within the Project area are listed in FEIS Table 3-98. The FEIS did not identify specific methods; the LTBMU Noxious Weed Coordinator shall therefore develop and submit a Noxious Weed Plan to Water Board staff for review and acceptance prior to using any pesticides to control or eradicate invasive or noxious weeds, per WDR BMP No.4 and WDR Section B.10.
- WDR BMP No. 78: All off-road equipment used on this project shall be washed before moving into the Project area to ensure that the equipment is free of soil, seeds, vegetative material, or other debris that could contain or hold seeds of invasive and/or noxious weeds. “Off-road equipment” includes all logging and construction equipment and such brushing equipment as brush hogs, masticators, and chippers; it does not include log trucks, chip vans, service vehicles, water trucks, pickup trucks, and similar vehicles not intended for off-road use. When working in known weed infested areas equipment shall be cleaned before moving to other National Forest System lands which do not contain noxious weeds. The LTBMU Contract Administrator shall document required equipment washing.
- WDR BMP No. 79: All gravel, fill, or other imported materials shall be weed-free. The LTBMU Contract Administrator shall inspect all imported materials and off-road equipment brought onto the Project sites and document certifications for weed-free materials. On-site sand, gravel, rock, or organic matter shall be used where available, when these materials can be removed without creating a potential discharge to surface waters.
- WDR BMP No. 80: Certified weed-free mulches and native seed sources shall be used for all revegetation activities, including on decommissioned roads and landings. An LTBMU Forest Botanist will approve the proposed seed mixes to ensure there will be no significant impacts from using the seed mixes.
- WDR BMP No. 81: Pile burning or underburning shall be prohibited within areas of invasive or noxious weed infestations of species known to spread with fire (see also WDR BMP No. 28).

- WDR BMP No. 28: Fire shall be allowed to creep between piles and into these buffers, except where sensitive plants, ferns, and the noxious weeds whitetop and cheatgrass are present. Flame lengths shall be controlled to less than two feet in height.
- WDR BMP No. 82: Ground and vegetation disturbance shall be minimized in construction areas by adhering to the applicable BMPs noted above. In addition to the requirements of WDR BMP No. 52b, native vegetation shall be re-established where necessary and feasible on disturbed bare ground per WDR BMP No. 3, such as decommissioned staging, landing, and road areas to minimize weed establishment and infestation and stabilize soils. To determine the feasibility and necessity of re-establishing native vegetation on bare ground, the LTBMU Forest Soil Scientist will consider natural physical constraints to replanting, such as lack of soil, rock talus slope, coarse decomposed granite, tree canopy shading a thick duff layer, to ensure effects will be less than significant.
- WDR BMP No. 86: All identified sensitive plant populations, sensitive plant communities, and special interest Sphagnum areas, as noted in FEIS RPM SP-1, shall be flagged prior to Project activities within the specified treatment units. The protection buffer shall extend 100 feet from the edge of the population. An LTBMU Botanist shall conduct field investigations to identify and record sensitive and special interest plant locations prior to Project activity in Units 266 & 269.
- WDR BMP No. 87: No Project activities shall be allowed to occur within flagged sensitive or special interest plant protection buffers, unless approved by the LTBMU's Botanist,. These prohibited Project activities include hand or mechanical treatment, endlining, directional felling into the buffer zones, piling or burning of piles, and prescribed fire.
- WDR BMP No. 88: If any additional sensitive plants or sensitive plant communities are found prior to or during implementation of Project activities, they shall also be recorded, flagged, buffered, and avoided per WDR BMP No. 87.
- WDR BMP No. 89: The LTBMU's Botanist shall be notified immediately prior to any Project activities in Treatment Unit #83 to flag the Regionally-designated Sensitive Fungi monitoring plot. No Project activities, per WDR BMP No. 87, shall occur within the flagged area.
- WDR BMP No. 3: Where any part of the above mitigation measures are either not practicable or feasible due to the specified field conditions or are left to the LTBMU's discretion, the LTBMU's staff, as noted in the relevant mitigation measure, shall implement BMPs and mitigation measures that provide equal or better protection to these original mitigation measures. Where such deviations are made, additional explanation, tracking, and reporting are required pursuant to the MRP.

Mitigation Measures for IV,c):

- WDR BMP No. 12: SEZs (Stream Environment Zones) shall be determined by application of the criteria set forth in the Tahoe Regional Planning Agency's (TRPA's) Water Quality Management Plan for the Lake Tahoe Region, Volume III, SEZ Protection and Restoration Program (1988). Prior to commencing operations within any treatment unit which contains SEZs, wetlands, or waterbodies, maps of sufficient scale shall be developed which clearly identify these sensitive areas. SEZs shall also be flagged on the ground prior to operations. Flagging shall be maintained throughout the life of the Project activities (including prescribed fire activities) within any active treatment unit. Work in SEZs shall be limited to the time of year when soils are dry, or when operable conditions are present outside of normal operating season, as specified in WDR BMPs No. 6, 22a, and 22b.

- WDR BMP No. 31h (in part): Water used to control controlled burns shall only come from South Tahoe Public Utility District hydrants. Water shall not be drafted from wetlands or other special aquatic features.
- WDR BMP No. 14: In the area between any waterbody and 25 feet beyond bankfull stage (or top of bank, whichever is greater) of any waterbody, CTL (Cut-to-Length) tree removal methods shall be limited to reaching in and removing logs with full suspension to avoid ground disturbance.

CTL equipment shall maintain the 25-foot exclusion buffer on perennial and intermittent watercourses for over-the-snow and hard frozen soil operations in SEZs.

- WDR BMP No. 15: For Whole Tree (WT) equipment operations, waterbody buffer zones for all waterbodies shall be, at a minimum, as detailed in WDR Attachment F Table F3.

Ground-based equipment in WT treatment stands shall not operate in SEZs or within these waterbody buffer zones. Hand or CTL (per WDR BMPs No. 13 and 14) treatments may be used in these areas. SEZ areas within WT stands shall be treated with hand crews, leaving the resulting logs in place, except as described in WDR BMP No. 21. Additional waterbody buffer widths shall be implemented based on proximity to Lake Tahoe and Class I watercourses, slopes, and ground cover. No standard buffer zone width has been established for unclassified waterbodies. However, timber harvest and vegetation management activities shall be excluded from within the channel zone, except for use and maintenance of existing roads and crossings.

- WDR BMP No. 16: All waterbody buffer zones shall be flagged per WDR BMP No. 15 prior to operations. Flagging shall be maintained throughout Project operations in all active Treatment Units.

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V. CULTURAL RESOURCES: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

Mitigation Measures for V.a), V.b), and V.c):

The area of potential effects (APE) for heritage and cultural resources analysis extends to proposed areas of disturbance across Forest Service lands within the South Shore project area. The survey of the proposed treatment areas was conducted at the intensity appropriate to identify all heritage resources that might be affected by project activities. Copies of all archaeological surveys are on file at the Forest Service's LTBMU Supervisor's Office. Current environmental review policies must be in compliance with antiquities mandates and guidelines established by NEPA, Section 106 and 110 of the National Historic Preservation Act (NHPA), and regulations of the Advisory Council on Historic Preservation (e.g., ACHP, 36 CFR 800). These mandates require public agencies to identify, evaluate, and protect heritage resources on lands under their jurisdiction, and to ensure that their actions do not inadvertently impact heritage remains.

Direct physical impacts to heritage resources can occur if alterations are made to the integrity of the resource itself or to its surroundings. Mechanical thinning, construction, or uncontrolled burns could compromise these sites. The Project would protect heritage and cultural resources through both passive and active methods. Passive methods are to research, field identify, flag, and avoid cultural or heritage sites. Active methods include avoidance and/or hand thinning to reduce the risk of damage from high-intensity wildfire and removal of conifer encroachment in aspen stands to reduce competition for aspens with arborglyphs (historical carvings on trees).

The Project is consistent with the programmatic agreement between the State of California and the US Forest Service. There are no human remains/burial sites in project area. Mitigation Measures include the following:

- WDR BMP No. 72: Flag identified cultural sites and prohibit mechanical equipment from entering these sites.
- WDR BMP No. 73: Use hand thinning treatments to reduce wildfire effects within heritage sites.
- WDR BMP No. 74: The LTBMU's Archeologist will evaluate linear features pursuant to protocols specified by the California State Historical Preservation Officer to establish possible crossing areas, and develop the methodology for crossing these features without creating a significant impact to cultural resources.
- WDR BMP No. 75: Protect arborglyphs during prescribed fire, per WDR BMP No. 25.
- WDR BMP No. 25: The LTBMU shall develop and submit a Fire Prescription Plan, as specified in the WDR Section B.9, to Water Board staff for review and acceptance prior to any Project-related burning activity, per WDR BMP No. 4. The Fire Prescription Plan shall include underburning prescriptions (such as creep, avoidance areas, specific measures to protect arborglyphs, etc.), burn pile details (such as percentage piled, buffers, sizing, re-piling, hot piling, etc.), and smoke controls (such as prescribing weather conditions, e.g., mixing heights and transport winds, for the affected communities and Desolation Wilderness). The Fire Prescription Plan shall therefore incorporate WDR BMPs No. 26 through 31 and adaptive management strategies, plus additional BMPs and Resource Protection Measures included in the LTBMU's Project-specific Thinning Contract, Burn Plan, and Smoke Management Plan. Underburn prescriptions shall be designed to ensure that fire intensity and duration do not result in severely burned soils and protect water and soil resources. The BMPs and RPMs specified in the accepted Fire Prescription Plan shall be adhered to throughout Project operations.

VI. GEOLOGY AND SOILS: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Mitigation Measures for VI.b):

High geologic risk areas are not common within the Project sites, and are usually confined to hillslopes with a slope gradient greater than 60%. No mechanical treatment activity will occur on slopes above a 30% gradient, including where those high risk areas identified within the lower-Impact Cut-to-Length units. Only hand treatments, which do not result in measurable ground disturbance, will be conducted on slopes greater than 30%.

Impacts to soils are more likely to occur from Project activities, although hillslopes with a gentle gradient (i.e., less than 30%) could become active due to fuel management activities on saturated soils. Soils could also become compacted, rutted, and/or displaced due to heavy equipment use, loosened soils could be transported and cause erosion, and soils could become hydrophobic from uncontrolled burns and burning piles.

- WDR BMP No. 5 (in part): "Normal operating periods," as used throughout the WDR, refers to that period between May 1st and October 15th, when conditions within the Lake Tahoe Basin are generally dry. However, ground-based equipment operations are allowed during this period only when dry soil moisture conditions, as determined pursuant to WDR BMP No. 6, exist. Temporary erosion control measures as noted throughout WDR Attachment F shall be in place throughout the Project prior to commencing any soil-disturbing activities, and the LTBMU shall implement additional BMPs as required in WDR BMP No. 23 prior to any forecast storm event which may mobilize loosened sediments towards waterbodies.

The WDR and WDR BMP No. 5 also require the LTBMU to annually develop and submit, and Water Board staff to review Erosion Control Plans (ECPs) to augment unit-specific workplans. Annually, workplans could contain modifications to operational prescriptions (e.g., unit designations, specific road use or need, etc.) specified in the FEIS, ROD, or WDR. The ECP updates will reflect those modifications and designate the proposed treatment units for the year, while ensuring that the BMPs required by these WDR are adhered to.

The WDR, Attachment F, Best Management Practices and Mitigation Measures, also includes BMPs for operable dry soil moisture conditions, slopes, sensitive soils, water barring, and vegetation treatments in Resource Protection Areas and SEZs (see WDR BMPs No. 6 through 18 and 20 through 48), to ensure that soils are protected during Project activities..

The Water Board considers the Project WDR necessary to adequately address potential and planned impacts to waters of the State, including potential impacts from damage to sensitive soils in the Stream Environment Zones (SEZs). The Water Board therefore requires mitigation for these impacts to comply with the prohibitions specified in the Water Quality Control Plan for the Lahontan Region (Basin Plan). Principle control methods in the Basin Plan include prohibiting new development in SEZs or with excess impervious surface coverage. Under specific conditions where impacts to SEZ soils are necessary, the Basin Plan requires project proponents to restore existing SEZ land coverage in the amount of 1.5 to 1 of the amount of new land coverage proposed within the SEZ.

This Project proposes to add approximately 1.7 acres of SEZ disturbance in order to properly accomplish its goals (see WDR Attachment E, Table E6). To provide the worst case scenario, Water Board staff has assumed that the entire 1.7 acres constitutes 100% "new" land coverage within the SEZs, therefore requiring a minimum 2.55 acres of existing SEZ land coverage to be restored. Since 2004, the LTBMU has decommissioned 8.24 acres of roads and trails located within Project SEZ areas, thereby meeting this Basin Plan requirement, and reducing the overall impact to sensitive soils from the proposed Project activities.

VII. GREENHOUSE GAS EMISSIONS: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

TENTATIVE

Wildfires produce excessive GHG emissions. The South Shore Project proposes to reduce the threat of wildfires in the South Shore region by removing excess fuels within the Wildland Urban Interface (WUI). Ladder and ground fuels will be removed by hand and mechanical methods. While these forestry management practices could affect particulate matter (PM10) and carbon dioxide levels significantly, methane or nitrous oxide emissions may only be affected at very low levels by the open burning of slash, or at slightly higher levels by allowing the slash to decay on site. However, these effects will be far less than that produced in a catastrophic wildfire.

The emerging role of the California Environmental Quality Act (CEQA) in addressing climate change and greenhouse gas emissions has been the subject of much discussion since the passage of Assembly Bill 32 (Global Warming Solutions Act of 2006). Although the Governor's Office of Planning and Research (OPR) drafted CEQA guidelines for the mitigation of greenhouse gas emissions of the effects of greenhouse emissions, they have not yet transpired into a final rulemaking. None-the-less, an assessment of GHG and climate change is included in the body of the FEIS (pp. 3-37, 3-152, and 3-320 through 3-324). The LTBMU has included this information in order to provide the public and decision-makers as much information as possible about the Project. However, GHG is unique compared to most other potential environmental impacts, or impacts that have the potential to accumulate, which have a defined geographic assessment area which could serve as the area of focus for analysis. With GHG, the "relevant" area for assessment is earth's entire atmosphere, since the gases mix and circulate worldwide. In the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change.

Mitigation Measures for VII.a):

The LTBMU will coordinate with the state and local air quality agencies to schedule prescribed burn activities to comply with air quality standards and restrictions (per FEIS RPM No. AQ-1 and WDR BMP No. 63) and implement a Fire Prescription Plan (WDR "Reports Required," Section D.1, p. 20) which will ensure Project-related prescribed fires, including the burning of piles, are kept under control and emissions are reduced:

- WDR BMP No. 25: The LTBMU shall develop and submit a Fire Prescription Plan, as specified in the WDR Section D.1, to Water Board staff for review and acceptance prior to any Project-related burning activity, per WDR BMP No.4. The Fire Prescription Plan shall include underburning prescriptions (such as creep, avoidance areas, etc.), burn pile details (such as percentage piled, buffers, sizing, re-piling, hot piling, etc.), and smoke controls (such as prescribing weather conditions, e.g., mixing heights and transport winds, for the affected communities and Desolation Wilderness). The Fire Prescription Plan shall therefore incorporate WDR BMPs No. 26 through 31 and adaptive management strategies, plus additional BMPs and Resource Protection Measures included in the LTBMU's Project-specific Thinning Contract, Burn Plan, and Smoke Management Plan. Underburn prescriptions shall be designed to ensure that fire intensity and duration do not result in severely burned soils and protect water and soil resources. The BMPs and Resource Protection Measures specified in the accepted Fire Prescription Plan shall be adhered to throughout Project operations.
- WDR BMP No. 63: Scheduling of prescribed burn activities shall comply with air quality standards and restrictions, and the LTBMU shall acquire the relevant permits from California Air Resources Board (CARB)/EDAQMD for prescribed burning and smoke mitigations (e.g., Smoke Management Plan). The Smoke Management Plan shall follow the guidance and direction in the following documents to protect air quality:
 - o Interim Air Quality Policy on Wildland and Prescribed Fires, issued by the Environmental Protection Agency in 1998;
 - o Memorandum of Understanding between the (CARB) and the USDA Forest Service, signed on July 13, 1999; and
 - o Smoke Management Guidelines in Title 17 of the Code of Federal Regulations

Fugitive dust from thinning operations, construction, and use of unpaved roads will be mitigated using the following specified dust abatement methods:

- palliatives, among others, may be used. Material Safety Data Sheets (MSDSs) and publications such as the U.S. Forest Service's "Dust Palliative Selection and Application²² Guide" (Publication Number 9977-1207-SDTDC, 1999) shall be used to make the selection. The MSDSs for dust palliatives used during Project activities shall be included

roads shall be swept clean whenever dirt tracking does occur. Where vehicles continue to track soils onto the paved road, additional measures, such as rumble strips or tire wash-offs shall be

- WDR BMP No. 34: Dust control, including the use of chips and slash, shall be used throughout the Project to prevent transport of fine sediment to waterbodies or to human receptors, such as open recreational areas, residences, etc. Roads and landings shall be watered for dust abatement at least as often as needed to keep dust down. Water used for dust abatement shall come from South Tahoe Public Utility Department hydrants. Water shall not be applied in excess so as to cause erosion into any waterbody. Commercial dust palliatives may be used, provided published materials indicate they do not have impacts on water quality. Oil-based palliatives shall therefore not be used, but certain Organic Nonpetroleum - Lignin Derivatives, Synthetic Polymer Derivatives, and enzyme-based palliatives, among others, may be used. Material Safety Data Sheets (MSDSs) and publications such as the U.S. Forest Service's "Dust Palliative Selection and Application Guide" (Publication Number 9977-1207-SDTDC, 1999) shall be used to make the selection. The MSDSs for dust palliatives used during Project activities shall be included in the approved Project Erosion Control Plan (ECP). All environmental impacts and the product-specific BMPs for handling, storage, and use of the selected dust palliative(s) shall be reiterated under its own heading in the ECP. Since some dust palliatives which do not impact water quality may still have adverse effects on aquatic life, at a minimum, dust palliatives shall not be used within 50 feet of a waterbody, or 75 feet where the road gradient towards the waterbody exceeds 30%.
- WDR BMP No. 36: Where a native surface road meets a paved road, the road intersection shall be covered with no less than a four-inch lift of three-inch plus competent angular rock, for a distance of at least 25 feet, to prevent tracking of mud onto the paved road. This coverage shall be maintained in operable condition throughout use. The paved roads shall be swept clean whenever dirt tracking does occur. Where vehicles continue to track soils onto the paved road, additional measures, such as rumble strips or tire wash-offs shall be installed. Encroachment permits would be obtained to access City of South Lake Tahoe streets and/or El Dorado County roads from Forest Service lands. On site meetings with City or County engineering department staffs shall determine the extent and type of stabilization to utilize at each intersection. Soil type, grade, and alignment shall determine the extent of the stabilization above minimum requirements.
- WDR BMP No. 42: (During wet conditions or outside of normal operating period): Where a native surface road meets a paved road, the road intersection shall be covered with no less than a four-inch lift of three-inch plus competent rock, for a distance of at least 25 feet, to prevent tracking of mud onto the paved road. This coverage shall be maintained in operable condition throughout use. The paved roads shall be swept clean whenever dirt tracking onto a snowless road does occur. Where vehicles continue to track soils onto the paved road, additional measures, such as rumble strips or tire wash-offs shall be installed. If this native surface road is only to be used outside of normal operating periods or during wet conditions and the preceding coverage has not been provided, adequate snow cover or frozen soil conditions, as defined in WDR BMPs No. 22a and 22b, must be maintained throughout use. Rough organic material (e.g., chip) may be used where roads are packed with at least six inches of snow and additional traction is required. Encroachment permits shall be obtained to access City of South Lake Tahoe streets and/or El Dorado County roads from Forest Service lands. On site meetings with City or County Engineering staffs engineers shall determine the extent and type of stabilization to utilize at each intersection. Soil type, grade, and alignment shall determine the extent of the stabilization past above minimum requirements.

VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through 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?	☐	☒	☐	☐
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?	☐	☐	☐	☒
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?	☐	☒	☐	☐
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?	☐	☒	☐	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
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?	☐	☒	☐	☐

Mitigation Measures for VIII.a) through VIII.c) and VIII.e) through VIII.h):

The purpose of the Project is to protect community from wildfire. Minor hazardous materials are used for equipment maintenance and re-fueling that would not create a significant threat to people or the environment. The Project includes the following materials handling requirements to ensure safe storage, transport, and use of hazardous materials:

- WDR BMP No. 1: All equipment used shall be monitored daily for leaks, and immediately repaired and/or removed from service if necessary to protect water quality. All hazardous material spills, whether from equipment, fueling activities, or other materials handling and storage, shall be immediately contained and spilled materials and/or contaminated soils must be disposed of in a legal and responsible manner. An emergency spill kit adequate to contain spills that could result from hazardous materials or equipment on-site shall be at the project site at all times.
- WDR BMP No. 49: Landings, fuel storage, and refueling shall be prohibited in SEZs.
- WDR BMP No. 50: Landings, fuel storage, and refueling areas shall be located outside Resource Conservation Areas (RCAs) unless a specific site plan detailing reasoning for the proposed in-lieu practice and adequate additional mitigation measures is submitted to Water Board staff for review and acceptance prior to implementation (per WDR BMPs No. 3 and 4).
- WDR BMP No. 2: Uncured concrete materials shall be stored in a weatherproof area, away from SEZs and waterbodies. Concrete mixing shall only occur within a self-contained and removable, impenetrable container that provides protection from accidental runoff. Concrete mixers or sweepings shall not be washed out within 50 feet of storm drains, open ditches, streets, SEZs, or waterbodies; concrete washings and wastes shall be stored in an impenetrable container for later disposal and concrete wastes shall be cleaned up and disposed of properly.
- WDR BMP No. 76: Live true fir and pine tree cut stumps 14 inches diameter and greater shall be treated with an EPA registered borate compound (Sporax), which is registered in California for the prevention of annosus root disease.
 - Sporax shall be applied to conifer stumps within 24 hours of creation.
 - Sporax shall not be applied within 25 feet of standing or running water.
 - Sporax shall not be applied in flag and avoid areas to protect threatened, endangered or sensitive plants.
 - Sporax shall not be applied during precipitation events

WDR BMP No. 77: Invasive and/or noxious weed infestations identified within the Project area (including travel routes and staging or landing areas) shall be immediately treated by methods accepted for use by the LTBMU's Noxious Weed Coordinator, or flagged for avoidance before Project implementation within any given unit. Invasive and noxious weed species known to occur within the Project area are listed in FEIS Table 3-98. The FEIS did not identify specific eradication methods; if chemical means of eradication are chosen, the LTBMU's Noxious Weed Coordinator shall develop and submit a Noxious Weed Plan, which shall include and follow the MSDSs specific to the applicable pesticide, to Water Board staff for review and acceptance prior to using any pesticides to control or eradicate invasive or noxious weeds, per WDR BMP No.4 and WDR Section B.10.**Discussion for VIII.d):**

There are no treatments at Meyers Landfill site, which is the only location which would fit this category within the Project area.

IX. HYDROLOGY AND WATER QUALITY: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
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)?	☐	☐	☐	☒
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?	☐	☒	☐	☐
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?	☐	☒	☐	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐
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?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☒	☐	☐
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?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow	☐	☐	☐	☒

Mitigation Measures for IX.a), IX.c), and IX.f):

The Water Board considers the WDR necessary to adequately address potential and planned impacts to waters of the State from this project, to require mitigation for these impacts to comply with the water quality standards specified in the Water Quality Control Plan for the Lahontan Region (Basin Plan). The WDR therefore incorporate WDR Attachment F, Best Management Practices and Mitigation Measures, which contain the necessary measures to meet this requirement (see WDR BMPs No. 1 through 58). Water quality standards and control measures for surface and ground waters of the Lahontan Region are contained in the Basin Plan, which became effective on March 31, 1995. The Basin Plan designates beneficial uses for water bodies and establishes water quality objectives (WQOs), waste discharge prohibitions, and other implementation measures to protect those beneficial uses. In 2011, the Basin Plan was amended to incorporate the Lake Tahoe Total Maximum Daily Load, including requirements for forest

management agencies. The WDR Attachment B contains excerpts from the Basin Plan on the beneficial uses, WQOs, prohibitions, and TMDL requirements applicable to this Project (see WDR Attachment B). The WDR implements the Basin Plan by specifying orders the LTBMU must comply with..**Mitigation Measures for IX.d) and IX.h)**:

- WDR BMP No. 20: Directional falling shall be used to keep felled trees out of Class I, II, or III watercourses unless the channel reach is identified as deficient in LWD. Taylor Creek is the only watercourse identified in the FEIS as being below desired LWD levels; therefore, within LWD-deficient section(s) of Taylor Creek, the LTBMU's Fisheries Biologist shall select trees greater than 12-inch DBH, while adhering to WDR BMPs No. 3 and 18, to be felled directionally into the channel. The LTBMU's Fisheries Biologist shall submit additional details and adequate justification to Water Board staff for review and acceptance per WDR BMPs No. 3 and 4, prior to felling trees into any other watercourse within the units listed under Resource Protection Measure AR-3 in the FEIS.
- WDR BMP No. 24: Over-snow watercourse crossings may be constructed as long as they are designed to pass all flows during rain on snow events, snow melt, or other unexpected flow event equal to or greater than a 20-year, one-hour storm event, without the risk of diversion or obstruction of the natural flow of water within the channel, and removed at the conclusion of operations. Removal of such watercourse crossings shall be done without obstructing flows, impairing water quality, or disturbing watercourse bed or banks, per WDR BMPs No. 54d through f, and 55.
- WDR BMP No. 46: Before over-the-snow operations begin, existing culvert locations, and nearby waterbodies, SEZs, and riparian areas shall be clearly marked such that markings shall be visible in deep snowpack. During and after operations, all culverts and ditches shall be open and functional.
- WDR BMP No. 54: Temporary crossings on Class II and III (intermittent and ephemeral) watercourses shall be constructed as follows:
 - o Temporary crossings shall be "modified Spittlers," And installed such that water flow is not obstructed. The incorporated culvert shall be sized to pass a 20-year, one-hour storm event, so that these crossings do not need to be removed prior to a storm event. Upon consultation with Water Board staff, "Humboldt" crossings may be used, but must be removed, and the associated soils stabilized, prior to any one-inch storm event forecast by the NWS.
 - o Temporary over-snow crossings shall be constructed and removed according to WDR BMP No. 24.
 - o All temporary crossings, with the exception of over-snow crossings, shall be properly removed, with the channel bed and banks stabilized, prior to October 15th, per WDR BMP No. 55.
 - o The FEIS identifies one temporary road crossing, located on the Saxon Creek intermittent channel, which will overwinter. This crossing may be required during winter operations and constructing and removing it numerous times during the fall, winter, and spring would create unnecessary sedimentation. The LTBMU shall submit additional details and adequate justification to Water Board staff for review and acceptance per WDR BMP No. 4, prior to leaving any other crossing in place overwinter. Crossings on temporary roads, which remain in place outside of the normal operating period, shall be constructed such that they can pass the 100-year flood flow and associated debris.
- WDR BMP No. 55: All crossings on all waterbodies shall be protected from side-sloughing of native-surfaced roads by placing coir logs, straw bales, or the equivalent along the edges of the crossing above the creek. Any accumulated or sloughed-in soils in the channel following removal of a temporary crossing shall be removed and stabilized in an upland location, and the stream bed and banks shall be restored to their original configuration. Disturbed soils shall be stabilized per WDR BMP No. 21b.

- WDR BMP No. 56: The proposed new culvert crossing on Powerline Road (Rd 12N08) shall consist of a 48-inch corrugated metal culvert. Diversion and Dewatering Plans shall be implemented per WDR BMP No. 54c. Installation of this crossing shall require additional fill to bring the road grade at the crossing to an acceptable height for haul trucks to pass the entry and exit slopes. This fill shall be excavated primarily from the road alignment on either side of the crossing, with some excavation coming from the land adjacent to the road to lessen the slopes on either side of the road prism. Waste materials (i.e., organic soil) from the removal of the existing culvert shall be stabilized in an upland location, and the existing culvert shall be properly disposed of off-site. To reduce the amount of fill needed for this culvert replacement and road upgrade, concrete headwalls shall be used to maintain the road width through the crossing. Concrete shall be stored, mixed, and disposed of per WDR BMP No. 2. Additional drainage features shall be added per WDR BMP No. 11 along the incised road segment which will increase in length after excavating the required fill. Any areas disturbed by the excavation or filling for road crossing replacement shall be covered with chips per WDR BMP No. 21b, except on the approaches and crossing itself. These areas shall be covered with clean, three-inch plus competent angular rock, with no less than four-inch lift at any spot at any time, to provide stability. In addition, drainage features shall be constructed such that discharge shall infiltrate immediately into soils without reaching a waterbody (per WDR BMP No. 37d). In the event that road drainage from the incised road approaches to the crossing cannot be discharged away from the water course, the entire length of incised road shall be rocked with a minimum eight inch lift of three inch plus competent angular rock with the minimum binder necessary to provide a stable road surface. Final plans for this culvert replacement shall be submitted to the Water Board staff per WDR BMP No. 4 for review and acceptance at least 30 days prior to implementation. Photo-point monitoring, using MRP Attachment G, shall occur at this location during excavation, culvert installation, and materials removal.
- WDR BMP No. 57: The permanent watercourse crossing on Forest Service system road 12N01A over an intermittent tributary to Saxon Creek shall be replaced and improved in the fall, when the channel is dry and the meadow is drier than at other times of the year. Diversion and Dewatering Plans shall be implemented per WDR BMP No. 54c. Possible designs to be evaluated for reducing installation disturbance to the floodplain include: 1) a series of pre-fabricated bridge segments with gabion basket supports filled with small boulders permeable to water flow, and 2) a series of multiple arched culverts surrounded by the gabion baskets, with the center culvert large enough to pass the bankfull water volume. The FEIS identifies the latter of these options as the proposed design, but leaves the options open. The final design shall be provided to Water Board staff per WDR BMP No. 4 at least 30 days prior to site activities for acceptance and any other design used shall be at least as protective of beneficial uses and soil and water resources as these two potential designs. Excavation in the floodplain (within the existing road prism) would be required to remove the existing fill and connect the foundation of the road with the crossing to support equipment and hauling trucks. Excavated fill shall be removed to an upland location and stabilized, and all other waste materials from the existing crossing shall be properly disposed of off-site. The removed fill would be replaced with clean granular rock to support the weight of the crossing and the intended use. Rocking and drainage shall be as described in WDR BMP No. 56. Photo-point monitoring, using MRP Attachment G, shall occur at this location during installation and removal.
- WDR BMP No. 58: A crushed culvert on Forest Service system road 12N20 in the Osgood Swamp watershed shall be removed, and the crossing over the spring-fed Class I watercourse shall be improved. An objective for this crossing is the maintenance of a natural stream bed, with possible designs including a bottomless arched culvert, a prefabricated steel span, or a prefabricated concrete "box" culvert with the underside buried under the natural stream bed. The final design shall be provided to Water Board staff at least 30 days prior to site activities for approval, any other design used shall be at least as protective of beneficial uses and soil and water resources as these three potential designs. Because this channel is spring fed, it flows perennially. The flow

therefore shall be diverted around the site during culvert replacement. Diversion and Dewatering Plans shall be implemented per WDR BMP No. 54c. The LTBMU shall contact Water Board staff at least 48 hours prior to initiating the Diversion and Dewatering plan to allow Water Board staff an opportunity to be present when the diversion is started. The LTBMU is not required or expected to delay project implementation to accommodate Water Board staff availability to inspect project initiation activities. Once the construction area is free of standing water, the unsuitable materials (i.e., organic soil) shall be removed to an upland location and stabilized, and the existing pipes shall be properly disposed of off-site. The new crossing shall be installed with its footings extending below the existing channel to allow for a natural material bed. Finally, fill consisting of clean cobble, gravel, or sand shall be placed around and over the new culvert to connect the existing road surface elevation with the culvert crossing. Road drainage shall be provided as described in WDR BMP No. 56. Prior to allowing the channel flow back into the downstream reach after crossing installation, re-introduced water would be retained behind the lower coffer dam and pumped to upland areas until turbidity levels are less than 3 NTU at the downstream end. If a turbidity level of less than 3 NTU cannot be reached after three days of pumping, pumping and infiltration will continue until decreases in turbidity greater than 25% of the previous measured turbidity are no longer being achieved and turbidity is less than or equal to 20 NTUs prior to releasing flows into the existing channel. The LTBMU will contact Water Board staff to inform them of: 1) the turbidity level in the new channel; and 2) how long it is anticipated treatment shall occur, should this final step be necessary. Monitoring shall include photo-points, using MRP Attachment G, at this crossing during installation and removal, as well as the data collected to achieve the 3 NTU standard.

- To mitigate for new disturbance or land coverage within SEZs largely attributable to roads and trails for this project, the LTBMU must restore a minimum of 2.55 acres of existing disturbance or land coverage within SEZs. The 2.55 acre restoration requirement is a calculation of 1.7 acres (from WDR Attachment E Table E6) of new disturbance or land coverage in SEZs multiplied by 1.5. This calculation conservatively assumes that the 1.7 acres of new disturbance or land coverage does not have any existing disturbance or land coverage. Within three years of project commencement involving ground disturbance, the LTBMU must submit documentation from the Tahoe Regional Planning Agency that verifies the LTBMU has restored a minimum 2.55 acres of SEZ disturbance or land coverage.
- To meet the TMDL requirements specified in section 3 of WDR Attachment B, the LTBMU must comply with this WDR, including WDR Attachments B, C, F, I.

X. LAND USE AND PLANNING: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

The Project is consistent with applicable laws, regulation, and policy (FEIS Chapter 1). The LTBMU proposes to reduce the risk of high intensity wildfire on National Forest System lands in the wildland urban interface (WUI) in order to provide a defense zone between the Forest and urban and/or suburban development. The Healthy Forest Restoration Act of 2003 (HFRA) authorizes projects on federal lands to reduce fuel loads and increase or maintain healthy forest conditions. It provides a foundation to work collaboratively with at-risk communities to reduce wildfire hazards caused by fuel loads within the wildland urban intermix (WUI) that exceed desired conditions as defined by the Forest Plan (HFRA Sec.102 (b)). The Act requires federal agencies to consider recommendations made by at-risk communities that have developed community wildfire protection plans (HFRA Sec. 101 (3)). An updated list of urban wildland interface communities within the vicinity of federal lands that are at high risk from wildfire was published in the Federal Register on August 17, 2001. The community of South Lake Tahoe is listed in the Federal Register as a community at-risk. The South Lake Tahoe Fire Department, Lake Valley Fire Protection District, Tahoe Douglas Fire Protection District, and Fallen Leaf Fire Department have developed community wildfire protection plans (CWPPs). Coordination with these agencies in the development and use of their CWPPs is an important part of the HFRA analysis for this project. The community fire safe council worked with corresponding fire departments and fire protection district personnel to design these CWPPs for effective vegetation and fuels treatments and defensible space across all land ownerships, including National Forest System lands.

The LTBMU collaborated with the local fire districts and fire safe councils to design fuel reduction activities that are consistent with the CWPPs and provide the defensible space identified in the CWPPs where it occurs on National Forest System lands.

The LTBMU conducted surveys in wildlife analysis areas following the USFS Region 5 Protocols in Proposed Activity Centers and Habitat Conservation Areas.

XI. MINERAL RESOURCES: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

There are no known mineral resources or locally-important mineral resource recovery sites within the Project area.

XII. NOISE: Would the project result in:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
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 expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐
) 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?	☐	☐	☒	☐

The Project would cause minor short term and temporary noise impacts from chainsaw and equipment usage near neighborhoods. To ensure the project activities, such as chainsaws, masticators, backhoes, wood chippers, and other mechanized machinery, do not create a significant noise effect, the LTBMU will adhere to the standards set forth in the Tahoe Regional Planning Agency (TRPA) Code of Ordinances regarding community noise equivalent levels. To protect its workers from potential adverse noise impacts, the LTBMU will follow the noise standards sets forth in the federal occupational health standards which are at least as stringent as those prescribed in California Code of Regulations, Title 8, Subchapter 7, Group 15 Occupational Noise..

XIII. POPULATION AND HOUSING: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

The Project does not incorporate plans which would influence population growth, housing, businesses, or infrastructure.

XIV. PUBLIC SERVICES:

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:

- | | | | | |
|-----------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Fire protection? | ☐ | ☐ | ☐ | ☒ |
| b) Police protection? | ☐ | ☐ | ☐ | ☒ |
| c) Schools? | ☐ | ☐ | ☐ | ☒ |
| d) Parks? | ☐ | ☐ | ☐ | ☒ |
| e) Other public facilities? | ☐ | ☐ | ☐ | ☒ |

The Project does not include provisions for new or physically altered governmental facilities.

XV. RECREATION:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☒	☒

The Project area does not include activities within existing neighborhood or regional parks. Forest recreational users could be displaced from sites where Project activities are taking place for short periods of time, generally not lasting more than a few weeks. Some use of these active sites would be irretrievably lost. As the operations moved to new locations, both people and wildlife would return to use the site. Taken in context of the whole Project area and duration of the Project this irretrievable commitment would be so small as to be insignificant. The sites of active treatment would be small compared to the entire analysis area which includes the areas proposed for treatment and area that is not proposed for treatment. Recreational users would have innumerable options to use other nearby inactive portions of the forest.

- WDR BMP No. 83: The extent and duration of temporary forest closures associated with mechanical treatments shall be minimized by restricting the size of active treatment units, and completing operations within each unit in a safe and timely manner. The LTBMU shall provide signage during area closures informing the public of the reasons for the closure and alternative options for recreation access during the closure. To determine the safety and timing of the temporary closure and activity from the project, an LTBMU safety officer will consult with an LTBMU Recreation Officer to plan the closure for low visitor times ensure the safest conditions for the LTBMU workers and the general public.
- WDR BMP No. 84: The LTBMU shall schedule mechanical treatments where practical to avoid peak visitor use recreation times (July 1 – Labor Day) in and adjacent to the following developed recreation areas: Camp Richardson Resort, Camp Richardson Corral, Fallen Leaf Campground, Baldwin Beach, Tallac Historic Estates, and recreation residence tracts. To determine the practicality of avoiding the peak visitor use times for the planned activity from the project, an LTBMU safety officer will consult with an LTBMU Recreation Officer to plan the optimal mechanical treatment during low visitor times, which are typically in late Fall.
- WDR BMP No. 85: The LTBMU shall provide information to the public through the LTBMU visitor services regarding current and planned temporary forest closures associated with treatment units.

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XVI. TRANSPORTATION/TRAFFIC: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

The transportation system plays a critical role in supporting Project activities through providing access to, from, and within treatment units. In addition the road system also provides access to the public and for forest administration beyond this Project. The Project will not impact air traffic patterns.

The transportation system includes FS System roads, temporary roads and landings, plus existing state, county and city roads and streets. The analysis in FEIS covers the transportation system as means to access the area. The impacts of roads, road maintenance, and road construction are covered in detail in each of the appropriate resource sections in the FEIS (Soils, Water and Riparian, Aquatic Wildlife, Terrestrial Wildlife, Recreation).

The California Department of Transportation (CalTrans) manages and maintains the state highway system that provides access into and out of the project area. This system of highways provides a high degree of user comfort and mobility. Speed is controlled by speed limits and traffic congestion, vertical and horizontal alignments are seldom a factor in determining vehicle speeds. All of the state routes into the project area are double-lane paved roads.

El Dorado County manages and maintains a system of urban and rural roads within the project area. This system of roads provides access to homes, businesses and recreation sites from the State highway system. These roads provide an adequate degree of user comfort and mobility. Speed is usually determined by local speed limits and occasionally by traffic congestion. There are several county roads within the project area where speeds are controlled by horizontal and vertical alignment as well as road width. The preponderance of the county transportation system consists of double-lane paved roads.

The City of South Lake Tahoe manages and maintains a system of streets linking homes and businesses to the state and county road network. User comfort and mobility is adequate for the intended use. Speeds are controlled by posted speed limits and prima facie speed laws. Horizontal and vertical alignments are not the limiting factor in determining speed. All city streets within the project area are paved and double-lane.

The LTBMU manages and maintains a system of permanent roads (the FS System roads) that links the forest user or administrator to the state, county and city network of roads and streets. User comfort and mobility are not the primary purpose of these roads. Speed is generally controlled by horizontal and vertical alignment as well as road width and surface type. The standard for FS System roads vary based on the purpose and need of the road.

The LTBMU would use only 3.9 miles of City of South Lake Tahoe streets out of a total of 127 miles within the project area. There would be no environmental effects because there would not be a need to improve or reconstruct any of these streets.

There are approximately 38 miles of El Dorado County/State roads that would be utilized for both action alternatives out of a total of 121 miles in the project area. As with the City streets, there would be no environmental effects because there would not be a need to improve or reconstruct any of these roads.

There is a potential for some Forest Service roads to be expanded or improved at existing intersections with both City, County, and State roads to accommodate the equipment and vehicles that would be used for project activities. WDR BMPs and FEIS RPMs stated throughout this checklist, the FEIS/Record of Decision (ROD), and the WDR would be applied appropriate to the soil type, grade and alignment that would prevent environmental impacts.

Where native surface Forest Service roads, both permanent and temporary, used in the Project intersect any paved or chip sealed road from any jurisdiction, City and County engineers would be contacted, and the appropriate BMPs and RPMs will again be implemented that prevent the tracking of soil onto the surfaced road. Consequently there are no environmental impacts associated with road junctions.

Overall there would be no lasting effect on the State/County/City road systems. Traffic may increase temporarily on roads that access active units during different stages of the project. There is no way to estimate the exact increase since it depends on what stage of the project is being implemented. It can be anticipated that in some areas heavy equipment will move in then spend time operating in the forest.

During this time service trucks, crew transport, chip hauling trucks, etc. will be using the public road system in varying amounts. There may then be a period up to several years with little increased traffic in any given area until the follow up fuels treatments are initiated (primarily prescribed burning).

XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
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 project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

The Project will not produce waste or storm waters which require the use of wastewater treatment facilities. The WDR BMPs and FEIS RPMs described throughout this checklist, the FEIS/ROD, and the WDR are designed to slow and infiltrate stormwater runoff.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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, substantially 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?	☐	☒	☐	☐
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)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Mitigation Measures for XVIII.a) and XVIII.c):

The LTBMU used an iterative process to schedule the Project treatment units in order to reduce potential cumulative impacts on any particular watershed and decrease the number of watersheds that exceed the threshold of concern due to fuels treatments. However, short-term impacts were expected to occur mainly from the inherent inability of the LTBMU's current BMPs and RPMs, as described in the FEIS and ROD, to effectively retain fine sediments following heavy rainstorms (greater than one inch per hour).

The WDR, Appendix F, Best Management Practices and Mitigation Measures, disclose the specific BMPs and mitigation measures, which, when implemented in conjunction with this WDR, will ensure that significant effects are avoided; where impacts cannot be avoided, these BMPs are sufficiently detailed to ensure that impacts will be fully mitigated. WDR BMP No. 3 allows the LTBMU to use discretion in the field where any part of a required BMP is not practicable or feasible due to the specified field conditions. Under this particular BMP, the LTBMU has agreed to implement BMPs and mitigation measures that provide equal or better protection to the original BMP in the WDR. Where such deviations are made, additional explanation, tracking, and reporting are required pursuant to the WDR Monitoring and Reporting Program (MRP).

The MRP, as described in the WDR Attachment C, specifies procedures for verifying that the 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 WDR also require 100 percent of the BMPs associated with all Project activities be properly implemented and are functional. The Monitoring Program allows the LTBMU to use the their Best Management Practices Evaluation Program (BMPEP) to test the effectiveness of these BMPs and identify areas which need to be strengthened, and the prescribed Forensic Monitoring outlined in the MRP to determine the source of any impact or potential impact in order to correct the problem. Additional monitoring is included in the MRP to verify the effectiveness of BMPs implemented for high-risk activities; where impacts are noted, the MRP includes an adaptive management strategy to correct the impacts and change future BMPs for these activities. The MRP shall be used to determine if compliance with WDR has been achieved, and includes inspection checklists, specific provisions for when monitoring must occur,

and follow-up procedures to ensure that actions have been documented and mitigation measures have been implemented and performed as intended.

TENTATIVE