



US Forest Service  
Pacific Southwest Region  
Lake Tahoe Basin Management Unit



Proposed Action for  
LTBMU Road Maintenance  
Alpine, Eldorado, Placer Counties of the State of California  
Carson City, Douglas and Washoe Counties of the State of  
Nevada

**BACKGROUND:**

There are approximately 250 miles of Forest Service system roads in the Lake Tahoe Basin on which reoccurring routine maintenance is required. The road system provides public and administrative access to National Forest resources.

**PURPOSE AND NEED:**

There is a need to perform routine road maintenance activities on National Forest system roads in order to provide safe administrative and public access to National Forest system lands, and to maintain a sustainable road system.

**PROPOSED ACTION:**

Road maintenance includes any expenditure in the repair or upkeep of a road necessary to perpetuate the road and provide for its safe use as defined in FSH 7709.59-Road System Operations and Maintenance Handbook Chapter 60-Road Maintenance. Routine road maintenance activities within the road prism include brushing vegetation for sight distance, removal of fallen trees, removal of hazard trees, re-vegetating cut and fill slopes, cleanup and removal of litter. Activities also include grading of roadway surface to maintain proper surface drainage and smoothness, replacement of base coarse and surfacing, dust abatement, removal and repair of slides and slumps. Maintenance of road drainage function includes cleaning, repair, and replacement of drainage dips, water bars, lead off ditches, road way ditches, culverts, sediment basins and other drainage structures. Routine maintenance activities also include repair or replacement of defective bridge rails, guide posts, guard posts, safety rail, and bridge decks. Traffic service maintenance activities include the repair or replacement of signs, sign supports, traffic lane markings, gates including posts, boulders and fencing used to limit access by unauthorized vehicles.

No changes to current road maintenance levels established in the Road Management Database (INFRA) are proposed.

This project will implement the continuing routine maintenance of the LTBMU road system, while minimizing effects to the natural and human environment. Implementation will be guided by a two-step process:

1. **Annual Maintenance Plan.** An Annual Maintenance Plan will be developed and coordinated with USFS resource specialists. Annual maintenance will follow this plan.

2. **Coordinate Additional Maintenance Needs.** When additional maintenance needs are identified, these shall be further coordinated with USFS resource specialists to determine if additional analysis is merited or if the maintenance can proceed at that time.

### **PROJECT DESIGN FEATURES:**

Project design features are elements of the project that are applied in treatment areas. These features are developed based on Forest Plan direction and site specific evaluations in order to reduce or avoid negative impacts of the proposed action. Project design features associated with this project include the following.

#### Soil Design Features

The following categories of design features will be applied to avoid or minimize effects on resources, including soil, vegetation, wildlife, fisheries, stream environment zones (SEZ), air, recreation, and heritage resources resulting from road maintenance activity.

1. 1. Road maintenance activities that involve grading or movement of more than 5 cubic yards of soil will occur within the Tahoe Regional Planning Agency (TRPA) grading ordinance season (May 01 – Oct 15). If grading or movement outside of this window becomes necessary (i.e. to finish BMPs, etc.) a standard grading exception permit request will be submitted to the TRPA and Lahontan Water Quality Control Board (LWQCB) [for projects located in California] for approval. During periods of inclement weather, operations would be shut down until conditions are sufficiently dry and stable to allow construction to continue without the threat of substantial erosion, sedimentation, or offsite sediment transport.
2. Earthen materials temporarily generated during maintenance will be stockpiled in stable areas located outside of stream environment zones (SEZs). Coir logs or silt fences will be installed around the base of temporary stockpiles to intercept runoff and sediment draining from the stockpiles. To minimize airborne transport of dust, stockpiles will be either watered or covered during periods of non-use.
3. Appropriate erosion and sediment control BMPs will be applied to all disturbed ground during maintenance activities. Design features will vary with conditions, but are likely to include (1) placement of readily available mulch materials (pine needles, branches, coarse woody debris) and/or imported mulch materials (certified weed-free) ,and (2) installation of coir logs and/or silt fences.
4. Ground and vegetation disturbance will be minimized during implementation. To the degree possible, maintenance activities will be confined to the area of existing disturbance within the road prism, defined as the top of the cut slope to the base of the fill slope. No snags or green trees will be felled unless identified as a hazard and then only in compliance with direction given in FSH 7709.59

Chapter 41.7 Section 2. Tree-felling along decommissioned road segments as necessary to block roads and cover the closed road surface in a non-continuous manner will occur.

5. Disturbed areas of soil lacking adequate ground cover will be mulched with available forest materials, such as pine needles, tree bark, and branches (while ensuring that source areas retain sufficient cover), or with imported mulch, such as certified weed-free straw. Slash and logs from the site may also be distributed over the disturbed area to provide additional soil cover, retain sediment, provide a microclimate to speed up the soil development and revegetation process, and discourage use.

6. Methods to reduce erosion and disperse drainage from roads include installing properly spaced reverse grades, drainage dips, water bars, and cross drains, out-sloping the surface to enable water infiltration and revegetation. Proper spacing of drainage improvements is necessary with reduced intervals for SEZ approaches and steeper terrain turns and switchbacks. Rock lined ditches and sediment basins will be used to dissipate the energy of concentrated water flows thereby reducing the delivery of sediment into the adjacent environment.

7. Native surface approach roads at proposed SEZ upgrades may be paved to eliminate erosion and reduce the delivery of sediment into stream channels.

8. Wastes and petroleum products used will be contained, stored, collected, and removed from the project site in accordance with Resource Conservation and Recovery Act regulations and federal Occupational Safety and Health Administration standards.

9. If soil and/or groundwater contamination is encountered, or is suspected, work will be halted in the area, and the type and extent of the contamination identified. A qualified professional, in consultation with the appropriate regulatory agencies, will then develop an appropriate method to remediate the contamination.

10. Erosion control and prevention of sediment transport for this project will be implemented in accordance with; *UDSA, Water Quality Management for Forest System Lands in California - Best Management Practices*. This project will also be included in the Region 5, Best Management Practices Evaluation Program (BMPEP) monitoring sample pool and will be subject to temporary BMP (TBMP) monitoring evaluations while construction is ongoing.

## Air Quality Design Features

1. Utilize water and other temporary BMPs in disturbed areas during construction and apply mitigation treatments immediately after the completion of construction activities to reduce wind erosion and dust generation.

## Stream Environment Zone (SEZ) Design Features

In addition to defined perennial and intermittent streams, SEZs include seasonally wet areas such as meadows and are defined by the presence of hydrologic, soil, or vegetation indicator features. In addition to the soil protection design features described above, the following design features would be implemented for routine maintenance activities in SEZs.

1. Where mechanized equipment is used, all equipment refueling and maintenance activities will occur outside SEZs.
2. Stream banks adjacent to and/or affected by channel crossings will be stabilized and protected from erosion using a combination of structural and biotechnical methods. The specific methods used would vary depending on site conditions, but would likely include one or more of the following: adjustment of stream bank slopes; installation of rock slope protection (riprap); installation of biodegradable erosion control blankets; and/or the use of pole cuttings, container stock, or seed collected from local sources to reestablish native stream zone vegetation.
3. If drafting from a stream is necessary (for instance to wet down a temporarily disturbed area or spoil pile to reduce dust generation), a hydrologist and fisheries biologist will review and approve the location, amount of water, and other site-specific constraints.
4. Staging of materials and equipment will be limited to existing disturbed areas outside of SEZs (where soils are already compacted and vegetation has been cleared). No new disturbance will be created for staging and stockpile areas, and no trees or other vegetation will be removed. Following project completion, any areas used for staging and not intended for continued vehicular use will be tilled, seeded, and mulched.

#### Fire Risk Reduction Design Features

1. When mechanized equipment is used during maintenance, fire tools and extinguishers will be kept on site and readily available..
2. Daily monitoring of fire weather and Project Activity Level (PAL) will occur during construction. If thresholds restricting tool use are reached, related construction activities will be suspended in compliance with Forest Service direction.

#### Biological Resource Design Features

1. All construction and earth-moving equipment are required to be weed-free. All off-road equipment used on this project shall be free of soil, seeds, vegetative material, or other debris that could contain or hold seeds of noxious weeds. "Off-road equipment" includes all construction equipment; it does not include, service vehicles, pickup trucks, and similar vehicles not intended for off-road use. Equipment will be considered clean when visual inspection by contract COR does not reveal soil, seeds, plant material, or other such debris.

2. All gravel, fill, or other materials are required to be weed-free. Use onsite sand, gravel, rock, or organic matter when possible. Otherwise, obtain certified weed-free materials from gravel pits and fill sources that have been certified weed free or approved by the LTBMU Botanist.
3. Salvage project area topsoil for use in onsite revegetation, unless contaminated with noxious weeds. All activities that require seeding or planting must utilize locally collected native seed sources when possible. Plant and seed material should be collected from or near the project area, from within the same watershed, and at a similar elevation when possible. Persistent non-native's such as *Phleum pratense* (cultivated timothy), *Dactylis glomerata* (orchard grass), or *Lolium* spp. (ryegrass) will not be used. Seed mixes must be approved by a Forest Service Botanist for use on National Forest System lands.
4. Any detection of federally threatened or endangered, LTBMU sensitive, or TRPA special interest species or of nests, dens, roost sites, or other areas of concentrated use (e.g., perch or plucking post) by these species, before or during maintenance activities, within or from the project area, will be reported to a USFS wildlife biologist and protected as directed in the Forest Plan.
5. To avoid or minimize disturbance to breeding activities and suitable habitat of species addressed in Biological Resource Design Feature 5, limited operating periods (LOPs) will be implemented around nests, dens, roost sites, and other areas of concentrated use (e.g., Protected Activity Centers) by these species as directed in the Forest Plan. LOPs limit the type, spatial extent, and timing of project activities permitted. The timing of LOPs are standardized by species as described below. Limitations to the types of project work that may be conducted during a LOP and the spatial extent of the LOP are to be determined by a USFS wildlife biologist and are typically based upon the potential of the activity to disturb relevant federally threatened or endangered, LTBMU sensitive, or TRPA special interest species.
  - California spotted owl: March 1 - August 15
  - Northern goshawk: March 15 - August 31
  - Bald eagle (nest): March 1 - August 31
  - Bald eagle (winter habitat): October 15- March 15
  - Golden eagle: March 1 - July 31
  - Osprey: March 1 - August 15
  - Peregrine falcon: April 1 - July 30
  - Willow flycatcher: June 1 - August 31
  - Marten: May 1 - July 31

## Heritage Resource Design Features

1. When maintenance will be performed within 30 meters of previously recorded cultural resources, the LTBMU Heritage department will be notified to assess the need for survey or monitoring.
2. When maintenance will be performed in areas that have not been surveyed, the Heritage department will be notified and assess the need to survey or monitor maintenance activities.

However if in the scope or design of the proposed project is altered or changed, additional review by the Heritage Resources Program will be required.

Furthermore, if any previously unrecorded heritage resources are discovered during maintenance activities, all related activities must cease immediately and the procedures as set forth in Section 800.13 of the Council on Environmental Quality's regulation 36 CFR Part 800 must be initiated.

### Recreation Design Features

1. Provide advanced notice to the public to ensure that the public is aware of project activities. Post signs in project area near public access points to highlight the proposed action.
2. Initiate temporary road closures only when needed to protect public safety and or the environment, while limiting public access as little as possible.

### **IMPLEMENTATION DATE:**

Planned implementation of the directions listed in this decision shall be implemented five days from the date of this decision. Maintenance actions under this decision will be implemented within the seasonal restrictions applicable to the type of activities to be conducted.

### **CONTACT PERSON:**

For additional information about this project contact Paul Potts – Project Leader at (530)-543-2746. Electronic comments must be submitted in a format such as an email address, plain text (.txt), rich text format (.rtf), or Word (.doc) to [comments-pacificsouthwest-ltbtmu@fs.fed.us](mailto:comments-pacificsouthwest-ltbtmu@fs.fed.us) using the subject title “Roads Maintenance project”.