



**US Forest Service  
Pacific Southwest Region  
Lake Tahoe Basin Management Unit**



**Decision Memo for Implementation of the  
Trails Maintenance Program  
Douglas and Washoe Counties, and Carson City Nevada  
Placer, El Dorado and Alpine Counties, California**

**BACKGROUND:**

The Lake Tahoe Basin Management Unit (LTBMU) manages all approved recreational trails on National Forest System (NFS) lands or rights-of-way within its jurisdiction. There are currently approximately 320 miles of classified trails (known as "classified" or "system" trails), authorized for motorized use (approximately 20 miles) or restricted to non-motorized use, within the LTBMU. The inventory of classified trails is listed in the Forest Service's INFRA database which includes the trail location and management objectives. Management of the trails system requires an effective program of preventative maintenance, refurbishment, repair, and in some cases rebuild of the trails within the system.

**PURPOSE AND NEED:**

Trails degrade over time through a combination of natural processes and human use. Trail features such as the tread, drainage structures, retaining walls, and stream crossings need regular maintenance to remain effective. Timely and effective maintenance activities will preclude the need for more invasive actions later.

The purpose of this program is to efficiently maintain the LTBMU trail system on a continuing annual basis, with consideration of effects to the natural and human environment.

A well-designed program of inspection and maintenance is required to maximize the life of any investment, while minimizing the life cycle cost of operating the facility (in this case, a trail system). For trails, those life cycle costs are measured in dollars, personnel commitments and in environmental effects. The purpose of this project would be to implement an efficient program of annual preventative and corrective maintenance to promote the enjoyment of recreational users as well as protection and restoration of the Basin ecosystem.

**PROPOSED ACTION:**

The proposed action is to conduct annual routine and corrective maintenance on the existing classified trail system under the jurisdiction of the LTBMU.

**Annual Routine Maintenance**

Annual routine maintenance typically consists of minor tasks such as log removal, brushing, drainage cleaning and repair, cleaning culverts, loose rock and root removal, berm and slough removal, and tread repair in accordance with Forest Service direction (see references below). It includes those routine activities necessary to keep the travelway clear and trail features such as drainage structures and retaining walls functional. This work will be done annually throughout the summer from early May through mid-October as the snow pack and other conditions permit. The work is done with handtools (crosscut saws, shovels, rockbars etc.) and chainsaws (outside of wilderness). Depending on funding and available personnel (including volunteers) most of the classified trails on the LTBMU will receive annual routine maintenance.

**Corrective Maintenance**

Corrective maintenance activities include tasks that are more intensive than annual routine maintenance but still involve the customary maintenance of trail features on classified trails. Typical actions would include replacement of failing drainage or stabilizing features, tread crowning and turnpike repair, and addition of minor stabilizing features such as drainage structures, rock steps or walls, etc. within the existing trail prism. Corrective maintenance may also involve minor trail re-routes (up to 100 feet in length) to avoid environmentally sensitive areas or unsustainable trail alignments.

Corrective maintenance projects will be consolidated into an Annual Maintenance Plan by the LTBMU Trails Coordinator. The location, timing, methods, equipment and description of the work planned will be reviewed annually prior to the field season by an interdisciplinary team consisting of all effected resource management areas. At the time of the annual review, appropriate site specific design features in addition to those listed below could be added as necessary for each proposed corrective maintenance project.

Trail maintenance actions under this program meet the definition described by the Federal Accounting Standards Advisory Board and the Forest Service: "Maintenance: The act of keeping fixed assets (*including trails*) in acceptable condition. It includes preventive maintenance, normal repairs, replacement of parts and structural components, and other activities needed to preserve a fixed asset so that it continues to provide acceptable service and achieves its expected life. Maintenance includes work needed to meet laws, regulations, codes, and other legal direction as long as the original intent or purpose of the fixed asset is not changed. Maintenance excludes activities aimed at expanding the capacity of an asset or otherwise upgrading it to serve needs different from, or significantly greater than those originally intended."

Trail maintenance activities proposed will be conducted in accordance with the guidelines, procedures and standards published in FSH 2309.18 "Trails Management Handbook" (November, 1991) and EM-7720-103 "Standard Specifications for Construction and Maintenance of Trails" (August, 1996). Trail maintenance within designated wilderness (Desolation, Mt. Rose and Granite Chief) will follow policy in FSM 2320 "Wilderness Management". Within the Desolation Wilderness, maintenance will additionally follow guidance from the Desolation Wilderness Plan (November 1998).

Normal trail maintenance corridors extend 15 meters on either side of trail tread centerline. Both routine annual and corrective maintenance work will be accomplished through a combination of in-house, volunteer and contracted personnel who have received training approved by the LTBMU and are working under the supervision of a Crew Leader certified by the Trails Coordinator.

#### **PROGRAM DESIGN FEATURES APPLICABLE TO ALL TRAIL MAINTENANCE:**

Program design features are elements of the program 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 environmental impacts of the proposed action. Specific design features associated with this program include the following:

**Coordinate additional maintenance needs.** When unplanned corrective maintenance needs are discovered, these will be reviewed by an IDT prior to implementation, except in the case where there are urgent health and safety issues and there were no alternatives (such as closure).

#### **Soil Design Features**

**1: Limit timing of activities.** Trail maintenance involving grading or movement of more than 3 cubic yards of dirt will occur between May 1 and October 15 (except as specifically permitted through the TRPA) to avoid the period of highest precipitation, streamflow, and erosion potential. During inclement weather, SEZ operations will be shut down until stream flows are seasonably low and soil/channel conditions are sufficiently dry and stable to allow continuation without measurable erosion, sedimentation, or offsite sediment transport.

**2: Implement erosion and sediment control BMPs on delayed project elements.** Appropriate erosion and sediment control BMPs will be applied to all disturbed ground during temporary delays when inclement weather is forecast. Design features will vary with conditions, should include measures to suppress airborne transport of dust, reduce runoff velocity, promote infiltration, and capture sediment before discharge to nearby surface waters and drainage ways.

**3: Minimize ground and vegetation disturbance.** Ground and vegetation disturbance will be minimized. Few, if any, snags or green trees will be felled, since maintenance activities will rarely depart from the existing trail corridor. No live trees greater than 24 inches in diameter at breast height (dbh) will be felled, and

snags larger than 24 inches dbh will be left unless deemed a hazard (when it is within striking distance and has structural weaknesses or leans toward or over the trail). In late seral stands, no standing trees or non-hazard snags larger than 6" dbh will be cut.

**4: Decompact, recontour, and mulch in disturbed areas.** Soils lacking adequate ground cover will be mulched with available forest materials (ensuring that source areas retain sufficient cover), or with imported mulch, such as certified weed-free straw. Slash and logs from the site may be distributed over the area to provide additional soil cover, retain sediment, provide a microclimate to speed up the soil development and revegetation process, and to discourage use.

**5: Control concentrated runoff from trail surfaces to reduce erosion.** Methods to reduce erosion and disperse drainage from trails include outslipping the tread and inclusion of drainage improvement designs and features. Proper spacing of drainage improvements is less than 164 linear feet (50 meters), with reduced intervals for SEZ approaches, grades greater than 10%, turns and switchbacks.

#### Stream Environment Zone Design Features

**1: Prevent discharges of hazardous substances from refueling and maintenance.** All equipment (chainsaw) refueling and maintenance activities will occur outside SEZs to minimize the risk of adversely affecting water quality. Staging of materials and equipment will be limited to existing disturbed areas outside of SEZs.

**2: Stabilize stream banks.** Stream banks will be protected from erosion by maintenance or installation of appropriate crossing features, such as bank armoring, trail narrowing, and drainage features.

#### Fire Risk Reduction Design Features

**1: Keep fire tools onsite.** When mechanized equipment (chainsaw) is used during maintenance, fire tools and extinguishers will be kept on site and readily available.

**2: Monitor fire weather.** Monitoring of fire weather and Project Activity Level (PAL) will occur during project activities when equipment is used (e.g. chainsaw). If equipment use restrictions are implemented, activities will be suspended in compliance with Forest Service direction.

#### Biological Resource Design Features

**1: Control noxious weeds.** All off-road equipment and vehicles used for project implementation are required to be weed-free. Equipment and vehicles will be cleaned of mud, dirt, and plant parts before the equipment and vehicles enter and leave the project area and before exogenous vehicles enter the Basin. Details are specified in USFS National Strategy and Implementation Plan for Invasive Species.

Use within corridor sand, gravel, rock, or organic matter sources when possible. Otherwise, obtain weed-free materials from gravel pits and fill sources that have been surveyed and approved by the State Department of Agriculture or by a botanist or ecologist at the LTBMU.

**2: Avoid or minimize impacts on threatened, endangered, Forest Service sensitive, or TRPA special-interest wildlife and plant species.** If there are known threatened, endangered, or sensitive plant species or noxious weeds present within 100 feet of trail maintenance activities then the LTBMU Forest Botanist will be notified prior to implementation so that the plants can be flagged and avoided; a botanist/plant ecologist will be the individual who flags the plants due to the technical nature of correctly identifying the plant species.

**3: Ensure updated plant surveys are used.** Plant surveys will be reviewed to protect sensitive species and to prevent the spread of noxious weeds. If a current plant survey (controlled: w/in 5 years, cursory: w/in 2 years) is not available, a Forest Service botanist will validate plant data whenever:

- More than 10 cubic feet of rock or soil will be removed from a segment of tread and scattered in the adjacent corridor.
- New structures are constructed within 100 feet of any water feature.
- Ground disturbance occurs outside the existing trailway.

**5: Avoid or minimize impacts to federally threatened or endangered, LTBMU sensitive, or TRPA special interest species.** 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 the LTBMU Forest Wildlife Biologist and protected as directed in the Forest Plan.

**6: Implement Limited Operating Periods.** To avoid or minimize disturbance to breeding activities and suitable habitat of species, 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: Monitoring and survey.** When maintenance will be performed outside surveyed corridors or within 30 meters of previously recorded cultural resources, the LTBMU Heritage Resource Manager will be notified to assess the need for survey or monitoring.

**2: Discovery.** If any previously unrecorded heritage resources are discovered during maintenance activities, all related activities shall cease immediately and the procedures as set forth in Section 800.13 of the Advisory Council on Historic Preservations (ACHP) regulation 36 CFR Part 800 will be initiated.

#### Air Quality Design Features

**1: Limit vehicle speeds.** Project access vehicle speeds on unpaved surfaces will be limited to 15 miles per hour to prevent excessive dust generation.

#### **REASONS FOR CATEGORICALLY EXCLUDING THE PROPOSED ACTION:**

CEQ regulations allow Federal agencies to exclude from documentation in an environmental assessment (EA) or environmental impact statement (EIS) categories of actions that do not individually or cumulatively have a significant effect on the human environment, based on the agency's experience and knowledge. I have concluded that the proposed action fits under FSH 1909.15, Chapter 30, Section 31.12 (4), "Repair and Maintenance of roads, trails and landline boundaries". This proposed action fits within this category because all authorized actions involve repair, maintenance, or reconstruction within the existing trails system corridors.

#### **EXTRAORDINARY CIRCUMSTANCES:**

Extraordinary circumstances do not exist which preclude this program under this Categorical Exclusion (CE). The following paragraphs address the extraordinary circumstance categories associated with the program per 36 CFR 220.6(b). The mere presence of one or more of these resource conditions does not preclude use of a categorical exclusion. It is the existence of a cause-effect relationship between a proposed action and the potential effect on these resource conditions and, if such a relationship exists, the degree of the potential effect of a proposed action on these resource conditions that determine whether extraordinary circumstances exist.

1. Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species – The potential effects of this decision on listed wildlife, fish and plant species have been analyzed and documented in the Biological Assessment and Biological Evaluation (filed in the project record). No effects to threatened or

endangered species will occur to these species and their habitats due to the project activities as described, design features, interdisciplinary coordination and project scope. Critical habitat has not been designated or proposed on the LTBMU. Project design features are intended to minimize potential effects to Forest Service sensitive species. The proposed action, including these design features, may allow for minimal impact to individuals, but is not likely to result in a trend toward federal listing or loss of viability for LTBMU sensitive species. Therefore, no extraordinary circumstances are expected for LTBMU federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species.

2. Flood plains, wetlands, or municipal watersheds – There are no municipal watersheds in the LTBMU. Wetlands, flood plains and SEZs are delineated in GIS overlays and design features will be effective in preventing adverse affects. Consequently there are no extraordinary circumstances resulting in resource conditions that warrant further analysis.

3. Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas – There are three wilderness areas (Desolation, Mt. Rose, and Granite Chief) including or abutting LTBMU trails. Trails maintenance in those areas will be conducted in compliance with the FSM 2320 and the Record of Decision and Environmental Impact Statement constituting the Desolation Wilderness Management Plan (December 1998). With the design features listed, trail maintenance activities proposed will not impact the wilderness character and generate extraordinary circumstances resulting in resource conditions that warrant further analysis.

4. Inventoried Roadless Areas – Inventoried Roadless Areas (IRA), with accompanying restrictions, will be delineated in GIS overlays. There are no motorized trails in IRAs within the LTBMU. Maintenance of non-motorized trails will not generate extraordinary circumstances resulting in resource conditions that warrant further analysis.

5. Research Natural Areas – The only Research Natural Area (RNA) in the Basin is the Grass Lake RNA on Luther Pass. There are no current or anticipated classified trails within or adjacent to the RNA, consequently there are no extraordinary circumstances.

6. American Indian and Alaska Native religious or cultural sites – Known sites are shown in LTBMU heritage program database overlays. Activities that may affect such sites will be cleared through the LTBMU Heritage Program Manager and appropriate state agencies. Design features and notifications included in this project are sufficient to protect cultural sites; therefore there are no extraordinary circumstances.

7. Archaeological sites, or historic properties or areas – Archaeological and historic areas are delineated in LTBMU heritage program database overlays. Activities that affect such sites will be cleared through LTBMU Heritage Program Manager and appropriate state agencies. Design features and notifications included in this project are sufficient to protect archeological and historic areas; therefore there are no extraordinary circumstances.

**FINDINGS REQUIRED BY OTHER LAWS:**

This project is in accordance with Federal, State, and local laws. Specifically:

National Forest Management Act – This Act requires the development of long-range land and resource management plans (Forest Plan). The Act requires all projects and activities to be consistent with the local Forest Plan. The LTBMU Forest Plan was approved in 1988 and has been amended several times, including the Sierra Nevada Forest Plan Amendment (2004). The Forest Plan guidance for natural resource management activities has been reviewed in consideration of this project. Since maintenance will be conducted within all management areas in the LTBMU, all management area guidance was considered within this review.

A Forest Plan consistency matrix and review for this project was completed in March 2009. The Trails Maintenance Program as proposed is consistent with the standards and guidelines contained in the Forest Plan, and in particular with Section 7 “Dispersed Recreation Management – Summer”.

Wilderness Act of 1964 – Activities in Wilderness Areas will be conducted in accordance with the applicable regulations under this Act, as contained in FSM 2320 “Wilderness Management”, and in the Record of Decision and Environmental Impact Statement constituting the Plan for the Desolation Wilderness.

Endangered Species Act – In accordance with Section 7(c) of the Endangered Species Act, the USFWS list of “endangered and threatened species that may be affected by projects in the Lake Tahoe Basin Management Area” (January 31, 2008) was reviewed and appropriate restrictions are reflected in the GIS overlays and design features.

National Historic Preservation Act - Section 106 of the National Historic Preservation Act requires Federal agencies to take into account the effect of a project on any district, site, building, structure, or object that is included in, or eligible for inclusion in the National Register. Section 106 of the National Historic Preservation Act (P.L. 89.665, as amended) also requires Federal agencies to afford the State Historic Preservation Officer (SHPO) a reasonable opportunity to comment. Surveys conducted for Native American religious or cultural sites, archaeological sites, and historic properties or areas that may be affected by this decision are reflected in the LTBMU heritage program database.

**PUBLIC INVOLVEMENT:**

- Listed in the Schedule of Proposed Actions on January 1, 2009.
- A focused list of public agencies, interested parties, and trail partners were informed of the proposed action in May/June 2009. Additionally a newspaper advertisement was published in the Tahoe Daily Tribune on soliciting public input, and the proposal was posted on the LTBMU public website. Responses are contained in the Project File; no significant issues were identified during public scoping.

**IMPLEMENTATION DATE:**

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

**ADMINISTRATIVE REVIEW OR APPEAL OPPORTUNITIES:**

This decision is not subject to appeal pursuant to 36 CFR 215.12(f) as it is a decision "for actions that have been categorically excluded from documentation in an EA or EIS in FSH 1909.15, Chapter 30, section 31."

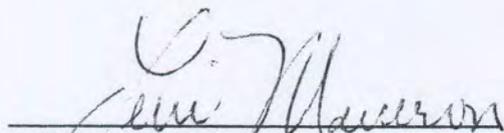
**CONTACT PERSON:**

The project contact person is Jacob Quinn, Interdisciplinary Team Leader, Lake Tahoe Basin Management Unit, 35 College Dr., South Lake Tahoe, CA 96150.

**SIGNATURE AND DATE:**

I have concluded that this decision may be categorically excluded from NEPA related documentation as it is one of the categories identified by the Chief of the Forest Service in Forest Service Handbook (FSH) 1909.15 section 31.12 (4). My decision concludes that no extraordinary circumstances exist related to the proposed action that may result in a significant individual or cumulative effect on the human environment, and that the decision is not subject to appeal. I have elected to issue this Decision Memo to direct standardization of trail maintenance procedures and ensure more defined control of field activities on NFS Lands within the LTBMU.

My conclusion is based on information presented in this document, my familiarity with the maintenance activities and areas, and the entirety of the project file.

  
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**TERRI MARCERON**

Forest Supervisor, Lake Tahoe Basin Management Unit

6/25/09  
Date

Appendix:

A – Sections 980-994 of EM 7720-103