



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



**Decision Memo for Implementation of the
LTBMU Road Maintenance
Alpine, El Dorado, Placer Counties, California
Douglas and Washoe Counties, and Carson City, 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. Reoccurring routine road maintenance is necessary and is conducted by trained construction or maintenance personnel. Deferred maintenance needs are increasing at a considerable rate every year.

PURPOSE AND NEED:

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 road system). For National Forest system roads in the Lake Tahoe Basin, those life cycle costs are measured not just in dollars and personnel commitments, but, also in environmental effects. Timely and effective maintenance activities preclude the need for greater financial investments later.

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. Work items may include surface rock replacement, seal coats and asphalt overlays, bridge replacement, slide removal, and other items that contribute to the preservation of the existing road. At times there may be a need for adding to or modifying the original conditions without increasing service provided. Typical examples of these activities include installing additional minor culverts and traffic control devices, implementing traffic management strategies, placing small quantities of spot surfacing, and re-vegetating cut and fill slopes.

This project will implement the continuing proper 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.** Develop an Annual Maintenance Plan. Coordinate the plan with an Interdisciplinary team. Conduct annual maintenance according to this Decision Document.
2. **Coordinate Additional Maintenance Needs.** When additional maintenance needs are identified, these shall be coordinated with an Interdisciplinary Team to determine if they fit under the analysis and Decision Document for this project. If the additional maintenance needs are consistent with this Decision Document, they shall be added to the Annual Maintenance Plan and the maintenance activity will occur.

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. Road maintenance activities that involve grading or movement of more than 5 cubic yards of dirt will occur between May 01 and October 15 (except as specifically permitted by the TRPA) each year to avoid the period of highest precipitation, stream flow, and erosion potential. During periods of inclement weather, operations will be shut down until soil/channel conditions are sufficiently dry and stable to allow construction to continue without the threat of substantial erosion, sedimentation, or offsite sediment transport.
2. Earthen spoils temporarily generated during maintenance will be stockpiled in stable areas located outside of 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 temporary construction. Design features will vary with conditions, but are likely to include (1) placement of readily available mulch materials (e.g., pine needles, branches, coarse woody debris) and/or imported mulch materials (e.g., certified weed-free) to protect disturbed surfaces from raindrop impact, reduce runoff velocity, and reduce erosion; and (2) installation of coir logs and/or silt fences to reduce runoff velocity, promote runoff infiltration, and capture sediment from disturbed areas before discharge to nearby surface waters and drainage ways.
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 trail or road prisms, 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 (attached). In the areas of the forest identified as late serial stands, no standing trees larger than 6" dbh will be cut. Tree-felling along decommissioned road segments as necessary to block roads and cover the closed road surface in a non-continuous manner.

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 restored 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 occur, are encountered, or are 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; *USDA, 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 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 project activities in SEZs.

1. Where mechanized equipment is used, all equipment refueling and maintenance activities will occur outside SEZs to minimize the potential risk of adversely affecting water quality.
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.
5. Maintenance activities will be limited to areas of existing road prism. This constraint will minimize the creation of new disturbance within the project area and minimize the risk of negative impact to waters of the United States.

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. Avoid or minimize impacts to federally threatened, endangered, LTBMU sensitive, or TRPA special interest species. Any detection of federally threatened, endangered, LTBMU sensitive, TRPA special interest species, or special habitats such as fens, riparian vegetation, or stream habitat, 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 Botanist, Sensitive Plant Ecologist, and/or Wildlife Biologist and protected as directed in the Forest Plan.

2. Coordinate annually with the LTBMU Fisheries Biologist to review the Annual Maintenance Plan. The Fisheries Biologist may need to be on site during implementation, as determined through annual coordination, and/or provide additional site-specific design features to avoid direct or indirect impacts to threatened Lahontan cutthroat trout (LCT) or important elements (e.g. large woody debris or pools) of their habitat. Site-specific ESA consultation for LCT may be needed if impacts to LCT cannot be avoided.
3. Coordinate annually with the LTBMU Forest Botanist or Sensitive Plant Ecologist to review the Annual Maintenance Plan. The Roads Department will communicate with the Botany Department on the projected roads to be maintained that year. Subsequently, a list of known locations of federally threatened, endangered, LTBMU sensitive, TRPA special interest plant species, special habitats such as fens, riparian vegetation, or stream habitat that may be harmed by the project will be provided to the Roads Department along with a map or location information, and will be flagged by a Forest Service botanist and avoided during project implementation.
4. Coordinate annually with the LTBMU Noxious Weed Coordinator to review the Annual Maintenance Plan. Design features or mitigations to control the introduction and spread of noxious weeds, a.k.a. non-native invasive plant species, in the project area will be implemented during maintenance activities. Subsequently, a list of known locations of noxious weeds within the project area will be provided to the Roads Department along with a map or location information, and will be flagged or treated by a Forest Service botanist, and avoided during project implementation.
5. Avoid or minimize impacts from noxious weeds, a.k.a. non-native invasive plant species. Any detection of noxious weeds, a.k.a. non-native invasive plant species, before or during maintenance activities, within or from the project area, will be reported to the LTBMU Noxious Weed Coordinator.
6. All off-road equipment and vehicles used for project implementation are required to be weed-free. All equipment and vehicles utilized for the project will be cleaned of all attached mud, dirt, and plant parts. This will be done at a vehicle washing station or steam cleaning facility, if available, (power or high-pressure cleaning) before the equipment and vehicles enter the project area and before the vehicles enter the Basin (if they originate from outside the Basin).
7. All gravel, fill, or other materials are required to be weed-free. Use weed-free on-site 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 LTBMU Botanist or Ecologist.

8. Salvage project area topsoil for use in on-site 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-natives such as cultivated timothy (*Phleum pratense*), orchardgrass (*Dactylis glomerata*), or ryegrass (*Lolium* spp.) will not be used. Seed mixes must be approved by a LTBMU botanist for use on National Forest System Lands.

9. Coordinate annually with the LTBMU Wildlife Biologist to review the Annual Maintenance Plan. 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 is 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.
 - a. California spotted owl: March 1 - August 15
 - b. Northern goshawk: March 15 - September 15
 - c. Bald eagle (nest): March 1 - August 31
 - d. Bald eagle (winter habitat): October 15 - March 15
 - e. Golden eagle: March 1 - July 31
 - f. Osprey: March 1 - August 15
 - g. Willow flycatcher: June 1 - August 31
 - h. 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.
3. 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 Advisory Council on Historic Preservations 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.

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 31.12(4) Repair and maintenance of roads, trails, and landline boundaries [36 CFR 220.6(d)(4)].

This proposed action fits within this category because 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 Chapter 60.

EXTRAORDINARY CIRCUMSTANCES:

Extraordinary circumstances do not exist which preclude this project under this Categorical Exclusion. The following paragraphs address the extraordinary circumstance categories associated with the project 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 (CE). 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. (36 CFR 220.6(b).

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 a letter to the file, which serves as a Biological Assessment and Biological Evaluation. No effects to threatened or endangered species will occur as these species and their habitats due to the project description, design features, interdisciplinary coordination, and project scope. Critical habitat has not been designated or proposed on the LTBMU. Project design features, described in this letter, 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. 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 Basin. Wetlands, flood plains and SEZs are defined in GIS overlays. Design features, permitting procedures (RWQCB, TRPA, and ACOE), and mitigation measures will be applied as to prevent adverse effects.
3. Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas. –There are no congressionally designated areas within the project area.
4. Inventoried Roadless Areas – Inventoried Roadless Areas, with accompanying restrictions, will be delineated in GIS overlays. No roads or motorized trails will be constructed, maintained, or allowed in roadless areas.
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 roads within or adjacent to the RNA (although State Highway 89 defines the northern edge of the RNA). Both the RNA and its surrounding survey area will be included in the GIS overlay database.
6. American Indians 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 (LRMP). The Act requires all projects and activities to be consistent with the local forest LRMP (“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 LRMP 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 April 2009. This Road Maintenance Categorical Exclusion is consistent with the standards and guidelines contained in the Forest Plan.

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 (SOPA) on January 1, 2009.
- A focused list of public agencies, interested parties, and partners are informed of the proposed action in April 2009. Additionally newspaper articles were published in the Tahoe Daily Tribune providing information for 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:

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.

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.”

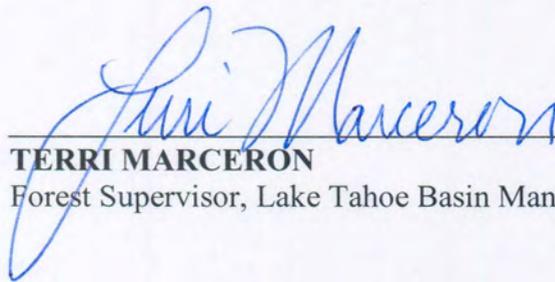
CONTACT PERSON:

For additional information about this project contact Paul Potts – Project Leader at (530)-543-2746 or by email at ppotts@fs.fed.us

SIGNATURE AND DATE:

I have concluded that this decision may be categorically excluded from NEPA related documentation as it is within one of the categories established by the Chief of the Forest Service in Forest Service Handbook (FSH) 1909.15 sections 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 road maintenance procedures and ensure more 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.



TERRI MARCERON

Forest Supervisor, Lake Tahoe Basin Management Unit

6/29/09
Date

APPENDICES:

Excerpt from FSH 7709.59

41.7 - Hazard Identification and Correction

1. General.

Analyze road features and traffic operations that have caused or have the potential to cause accidents as part of planning and programming for road development and maintenance projects and as part of periodic condition surveys.

On low-volume roads, crash history is seldom a reliable indicator of significant safety problems. Making comparative analyses between hazardous sites also may be difficult because of the infrequency of accidents. Accordingly, use common sense and judgment to determine safety deficiencies and the priority for corrective action. Accident rate comparison formulas commonly used for high-volume highways are not appropriate.

Roads that are open should have a condition survey at least annually. Roads that have been closed should be checked for obvious hazards prior to being opened. Roads open to travel should also be checked following major storms or similar events that could significantly affect their condition, result in changes in their traffic service level, or have created new safety hazards.

Establish processes for road users, both administrative and public, to report road hazards. Reports of unsafe conditions should be promptly investigated.

2. Danger Trees.

a. Danger tree hazards on roads will be prioritized by high, medium, and low categories.

b. Roads or segments thereof identified as high priority constitute a considerable adverse effect on public safety (36 CFR 212.52 (b) (2)) and thus require prompt action. The level of exposure is time-critical. Action must not be delayed to accommodate commercial removal of trees. Acceptable actions are:

(1) Mitigate danger trees which have been determined as likely upon failure to fall on or roll into the traveled way. Schedule work to eliminate danger trees in the areas of highest exposure first.

(2) Close the road segment if the hazards cannot be mitigated. (sec. 40.4)

c. Roads identified as medium to low priority are not considered time critical. Strategies utilizing the sale of forest products, including commercial timber sales and land stewardship contracts, may be employed to mitigate roadside danger trees along these roads.

d. The priority of danger tree hazards may increase as trees deteriorate with time.

(1) Road segments identified as having low and medium priority danger tree hazard should be monitored for increases in hazard due to ongoing tree deterioration.

(2) When a road segment moves from medium to high priority status, prompt action shall be taken as described in this section.

(3) In situations where road segments do not currently have high priority tree hazards, may be predicted to have such hazards resulting from ongoing tree deterioration at a future point in time, and strategies utilizing the sale of forest products are being employed to mitigate the hazards before they become high priority, include a determination by a qualified individual of the date when high priority hazards are likely to occur in the project file. Planning of sales must be accomplished in a manner that will result in tree hazard mitigation by the identified date.

e. Procedures for environmental analysis and decision making regarding danger trees.

(1) Road maintenance, including treatment of danger trees, may be categorically excluded from analysis and documentation in an environmental assessment or environmental impact statement under certain circumstances. See FSH 1909.15, chapter 30 for guidance concerning categorical exclusions and specifically section 31.12(4).

(2) When preparing documentation for projects where a qualified individual has identified that tree hazards will reach high priority status by a future point in time, clearly display the determination in the publicly available project file as well as the policy requirement that roads with high priority safety hazards must be closed to public traffic (sec. 40.4).

f. Consider all available methods for mitigation and treatment of danger trees and apply them as appropriate to local situations. These methods include, but are not limited to, commercial timber sales, land stewardship contracts, burned area emergency rehabilitation funding, personal use firewood sales, and appropriated funds.

g. When mitigation and treatment of danger trees are a significant impact on a forest's annual program of road maintenance work, include specific references to the resources needed for ongoing danger tree mitigation in the annual road maintenance plan. (FSM 7732.11)