UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
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Subject: Draft Environmental Impact Statement for Eldorado National Forest Public Wheeled Motorized Travel Management Plan, Alpine, Amador, El Dorado and Placer Counties, CA (CEQ# 20070296)

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. Our detailed comments are enclosed.

EPA commends the Forest Service for their efforts to address the many challenges inherent in developing a balanced Public Wheeled Motorized Travel Management Plan that also responds to recreational and resource management demands. We acknowledge that the Travel Management Plan process is a positive step in addressing resource impacts from motorized uses. Of special note is the proposal to decrease access to dispersed use sites located within 300 feet of water, wet weather seasonal closures, over-the-snow travel restrictions, and the overall reduction of designated routes in proposed Wilderness, traditional recreation areas, and on vulnerable maintenance level-one roads.

Based on our review, we have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "*Summary of Rating Definitions*") due to our concerns regarding potential impacts to water quality, meadows, riparian areas, critical habitat, and watersheds at risk from increased cumulative watershed effects. Additional information is also necessary to fully describe the Affected Environment, monitoring and enforcement commitments, and future follow-up actions.

While we support Alternative D-Preferred Alternative, we recommend the Forest Service modify this alternative to further reduce impacts to sensitive meadows and riparian resources and at-risk watersheds, such as the Upper Cosumnes River and McKinney, Middle Dry, and Dogtown Creeks. We urge the Forest Service to describe and implement an aggressive and reliable monitoring and enforcement program. The Final Environmental Impact Statement (FEIS) should also commit to specific follow-up actions, such as an inventory of stream crossings, inspection of routes identified in poor condition, and restoration and decommissioning of closed routes.

We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send two (2) hard copies to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 972-3846 or Laura Fujii, the lead reviewer for this project. Laura can be reached at (415) 972-3852 or fujii.laura@epa.gov.

Sincerely,

Laura Fujii for

Nova Blazej, Manager
Environmental Review Office

Enclosure:
Summary of EPA Rating Definitions
Detailed Comments

cc: Jason Nedlo, Team Leader, Eldorado National Forest
Steve Thompson, California Operations, US Fish and Wildlife Service
Kenneth D. Landau, Central Valley Regional Water Quality Control Board
Carolyn Suer and Carl Brown, California Air Resources Board

SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

EPA DETAILED DEIS COMMENTS ELDORADO NATIONAL FOREST PUBLIC WHEELED MOTORIZED TRAVEL MANAGEMENT PLAN, ALPINE, AMADOR, EL DORADO, PLACER COUNTIES, CA., OCTOBER 18, 2007

Alternative Analysis

Modify action alternatives to further reduce impacts to sensitive meadows and riparian resources. EPA has consistently expressed concern with the potential adverse effects of Forest transportation systems on water quality, fisheries, wildlife habitat, ecological integrity, the spread of noxious weeds, and air quality.[1] Meadows provide habitat for sensitive, and often unique, species and are easily accessed and damaged by motorized vehicle use (pps. 139- 140). Further evidence of the need to protect meadows and riparian habitat is provided by the Sierra Nevada Ecosystem Project which found that loss of riparian function was particularly evident in mountain meadows and riparian areas lacking vegetation cover associated with motor vehicle access (p. 157). We note that the Draft Environmental Impact Statement (DEIS) states that 8.5 miles of roads would be within meadows under Alternative D-Preferred Alternative (Table 3-30, p. 146) with open routes in 86 meadows (p. 205).

> ***Recommendations:***
> We recommend the Forest Service modify all action alternatives, and specifically Alternative D-Preferred Alternative, to further reduce impacts to meadows and riparian resources. Reducing motorized use in meadows and riparian resources would reduce stream bank disturbances, accelerated erosion, and adverse water quality effects. Where feasible, we advocate maximum protection of sensitive resources such as wetlands, alpine meadows, and drinking water sources. For example, consider eliminating routes that bisect meadows and those with the highest potential for erosion or significant damage to resources. Another option is to consider temporary closure of route segments with identified road-related resource problems until the impairment has been addressed.

Modify action alternatives to further reduce impacts in at-risk watersheds. The Upper Cosumnes River and McKinney and Middle Dry Creeks watersheds are identified in the DEIS as having a high density of stream crossings, near stream route densities, as well as very high route densities adjacent to perennial streams (pps. 77, 93, 99, 105, 157). We remain concerned with the potential adverse cumulative watershed effects that could result from continued use in these at-risk watersheds.

> ***Recommendations:***
> We recommend all action alternatives further reduce road densities and stream crossings in at-risk watersheds, such as the Upper Cosumnes River and McKinney and Middle Dry Creeks. We recommend the FEIS provide a commitment and proposed schedule for further inventory and monitoring of the McKinney, Middle Dry, and Dogtown Creeks, and Upper Cosumnes River watersheds, as recommended in the DEIS (p. 105).

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[1] EPA letters to USFS on the EIS and Supplemental EIS for the Sierra Nevada Forest Plan Amendment Project dated 8/11/2000, 2/12/2001, 9/23/2003, and 3/15/2004.

Commit to follow-up actions. The DEIS describes various actions which should take place to mitigate potential adverse effects of wheeled motor vehicle use and reduce existing identified route-related resource impacts. Recommended actions include an inventory of stream crossings (p. 80), inspection of roads identified in poor condition (p. 95), and future decommissioning of closed routes (p. 67). The DEIS states that if any action alternative were implemented, there would be a backlog of degraded Maintenance Level-1 (ML-1) & ML-2 roads needing decommissioning, restoration, or minimal maintenance of drainage structures (p. 67).

> ***Recommendations:***
> The Final Environmental Impact Statement (FEIS) should include a commitment to implement follow-up actions such as the inventory of stream crossings, inspection of routes identified in poor condition, the restoration of designated routes, and closure and decommissioning of closed roads. We recommend the FEIS include a list of these follow-up actions with target implementation dates.

Provide tables documenting the resource impacts addressed by the alternatives. The action alternatives would reduce the adverse impacts of Alternative A-No Action by reducing the miles of open routes, prohibiting cross-country travel, implementing seasonal closures, and regulating parking and dispersed camping activities. While the DEIS evaluates the potential effects of the action alternatives, it does not document specific identified resource impacts that would be addressed by the different alternatives.

> ***Recommendation:***
> We recommend the FEIS document the route-related resource impacts that are being addressed through proposed route closures, restoration, or maintenance actions. One option is to include in the FEIS tables listing identified road-related problems and how they have been addressed. For example, the FEIS should state how the action alternatives address the high route densities and road-stream connections within the McKinney Creek and Middle Dry Creek watersheds.

Water and Riparian Resources

Evaluate effects on the Lake Tahoe Total Maximum Daily Load. EPA is participating in the development of the Lake Tahoe Total Maximum Daily Load (TMDL) program which will allocate specific water quality load restrictions on identified sources of sediment to move the basin into compliance with water quality standards. Roads and trails are primary contributors of excess sediment and water quality contaminants. It is not clear from the DEIS, whether proposed route designations in the Eldorado National Forest could contribute sediment into the Lake Tahoe Basin or result in changes in road usage during particularly sensitive periods for water quality. For instance, Alternative D-Preferred Alternative would continue motorized use of the Rubicon Trail on the Pacific Ranger District which enters the Lake Tahoe Basin.

Recommendation:
We recommend the FEIS evaluate the potential effects of the proposed route designations on development of the Lake Tahoe TMDL and the ability to meet water quality standards in Lake Tahoe.

Evaluate the effects of alternatives on route proliferation at dispersed campsites near streams, lakes, springs and meadows. The DEIS states that route proliferation from public wheeled motor vehicle use often occurs around dispersed campsites that are along sensitive riparian areas (p. 84). Although the evaluation of effects on water and riparian resources considers many other indicator measurements, it does not appear to evaluate the effect of alternatives on route proliferation in sensitive resource areas.

Recommendation:
We recommend the FEIS evaluate the effect of the alternatives on route proliferation at dispersed campsites near streams, lakes, springs, and meadows, and the related impacts to water and riparian resources.

Monitoring and Enforcement

Develop, describe, and implement a Travel Management Plan Monitoring and Enforcement Strategy. It is important that wildlife protection, vegetation management, and erosion control goals be achieved to minimize the adverse effects of the Public Wheeled Motorized Travel Management Plan. While we recognize the monitoring and implementation strategy described on pages 26 through 28, we believe the public and decision makers would benefit if this strategy is expanded to include specific information on funding, monitoring and enforcement criteria, thresholds, and priorities.

Recommendations:
We recommend development of a detailed Travel Management Plan Monitoring and Enforcement Strategy. Such a Strategy should include specific information on the monitoring and enforcement program priorities, focus areas (e.g., issues, specific locations), personnel needs, costs, and funding sources. We recommend the FEIS demonstrate that the proposed monitoring and enforcement strategy is adequate to assure that motorized vehicle use will not violate access restrictions or exacerbate already identified road-related resource problems. We recommend the Monitoring and Enforcement Strategy be periodically updated (e.g., annually or biennially).

Commit to an inventory of stream crossings as part of the designated route monitoring program. The DEIS states that 59% of stream crossings surveyed in 2006 were connecting roads to streams providing direct links for accelerated sedimentation into these streams. The DEIS also states that there is no forest inventory of the condition of the approximately 17,000 stream crossings on the Eldorado National Forest. Although many of these stream crossings are on ephemeral streams, EPA is concerned with the potentially significant water quality impacts of these crossings and associated stream sedimentation (p. 80).

Recommendations:
We recommend the FEIS include a commitment to inventory the condition of stream crossings as part of the route condition and dispersed site monitoring program. We also recommend the FEIS describe a process and schedule for addressing the most significant route-related sedimentation problems.

Commit to inspection of routes identified in poor condition. Table 3-17 lists the watersheds and associated routes most susceptible to chronic erosion and sedimentation that result from routes in poor condition. The DEIS states there is a need to inspect these routes on the ground to determine their actual condition (p. 95).

Recommendation:
We recommend the FEIS include a commitment and schedule to inspect the routes identified in poor condition to determine the need for remediation and potential closure.

Define "resource damage" for key resources, monitoring criteria, and thresholds for management action. We commend the proposed monitoring to evaluate the effectiveness of route management decisions and the accuracy of analysis assumptions and conclusions. Of note is the commitment to conduct condition inventories and route proliferation assessments for 20% of the designated route mileage and dispersed sites per year. The DEIS states that if resource damage is occurring, steps to prevent further damage will be taken (pps. 26-27).

Recommendation:
To ensure consistent monitoring, enforcement, and protection of resources, we recommend the FEIS define "resource damage" for key forest resources and describe the criteria and thresholds that will trigger remedial action or proposed closure of the route or trail.

State when on-site evaluations of soil moisture and soil strength will be conducted. The DEIS states that before opening or closing a route an on-site evaluation of soil moisture and soil strength would be made to determine whether or not native surface roads and trails are suitable for traffic (p. 68). While we support this commitment, adequate implementation may not be feasible due to limited monitoring resources. In addition, it is not clear whether this monitoring would take place regardless of the proposed wet season closure or only upon request for a determination by the Forest Supervisor to open areas during the seasonal closure.

Recommendations:
We recommend the FEIS state when on-site evaluation of soil moisture and soil strength will be conducted to determine whether or not native surface routes are suitable for traffic. Given the potential for significant erosion and sedimentation from routes damaged during wet season use, EPA recommends implementation of a wet season closure that would avoid use of roads and trails prior to their suitable use, whether or not soil monitoring is implemented.

Air Quality

Evaluate the accumulation of hazardous air emissions from increased snowmobile and ATV use under inversion conditions. The DEIS states that hazardous pollutants in prescribed and wildfire burn emissions are very minor, and there are no hazardous pollutants in vehicle emissions (p. 51). We note that the 2-stroke engines of snowmobiles and all-terrain vehicles (ATV) mix the lubricating oil with the fuel, expelling both as part of the exhaust. These engines allow up to one third of the fuel delivered to the engine to be passed through the engine and into the environment virtually un-burned.[2] A majority of these hydrocarbons are aromatic hydrocarbons, including polyaromatic hydrocarbons, which are considered to be the most toxic component of petroleum products. Aromatic hydrocarbons are also associated with chronic and carcinogenic effects. Increased snowmobile and ATV use could increase pollutant emissions in valleys that have frequent inversion conditions and periods of poor air dispersion.

> ***Recommendation:***
> We recommend the FEIS provide an accurate and more detailed evaluation of the potential accumulation of hazardous pollutants from the increased use of snowmobiles and ATVs in mountain valleys subject to frequent inversion conditions.

Limit the exposure of users to naturally occurring asbestos. The DEIS states that there are only 4.5 miles of motorized routes that cross serpentine soils on the Georgetown Ranger District (p. 51). It is important to note that serpentine and other soils in the Sierra Nevada have been found to contain chrysotile and amphibole asbestos. Asbestos levels less than 1.00 percent in soil can generate airborne asbestos at hazardous levels. While we acknowledge the limited miles of routes through serpentine soils, we remain concerned with the potential exposure to naturally occurring asbestos when vehicles travel on unpaved routes.

> ***Recommendations:***
> Although only 4.5 miles of designated routes cross serpentine and other soils which may contain naturally occurring asbestos, it is important to protect human health by limiting the exposure of users to this air pollutant. We recommend that the Forest Service review the asbestos occurrence information on the California Geological Survey at http://www.consrv.ca.gov/cgs/minerals/hazardous_minerals/asbestos/index.htm and the California Air Resources Board (CARB) regulations and guidance at http://www.arb.ca.gov/toxics/asbestos/asbestos.htm. The CARB web site addresses California's Asbestos Airborne Toxic Control Measures for Surfacing Applications which apply to unpaved roads.
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> The Forest Service should also review the results and road surfacing recommendations in the Department of Toxic Substances Control report "Study of Airborne Asbestos From A Serpentine Road in Garden Valley, California" (April

[2] Air Quality Concerns Related to Snowmobile Usage in National Parks, US Department of the Interior, February 2000.

2005) at
http://www.dtsc.ca.gov/loader.cfm?url=/commonspot/security/getfile.cfm&pageid=33546.

We recommend posting signage to inform users that naturally occurring asbestos is present in areas found to contain naturally occurring asbestos in amounts greater than 0.25 percent (per specimen) or where airborne asbestos is found at hazardous levels.

Provide visibility information specific to the project area and evaluate effects on local visibility and smog. The DEIS discussion of visibility appears to be limited to a statement that the visiblity of nearby Class I airsheds is considered good to excellent most of the time (p. 51). The DEIS does not state whether there are existing visibility concerns caused by dust generated by motorized use, valleys subject to inversion conditions, or smoke from residential areas, dispersed camping, timber management activities, or wildfires. Direct effects of fugitive dust and smoke are reduced visibility on and adjacent to routes and increased levels of particulate matter less than 10 microns in diameter (PM10), and particulate matter less than 2.5 microns in diameter (PM2.5) which are human health concerns. We are concerned with the potential increase in ozone, fugitive dust, and smoke in vulnerable viewsheds and areas of high use which could have adverse impacts on smog levels, visibility, and human health.

Recommendations:
We recommend the FEIS provide a description and evaluation of the potential visibility impacts from fugitive dust, ozone, and smoke in the project area, in addition to effects on nearby Class I airsheds. We recommend the evaluation include information on dust generated in motorized vehicle high-use areas, the presence and frequency of valley inversion conditions, and the extent of existing visibility concerns as a result of smog and smoke.

Affected Environment

Provide a summary of the 1977 and 1990 Off-Highway Vehicle Plans. The existing condition is defined in the DEIS as Alternative A-No Action which includes motorized wheeled vehicle use on all routes identified in the forest route inventory, cross-country motor vehicle travel, no seasonal closure, no restrictions on wheeled over-the-snow travel, and no specific prohibitions regarding parking and dispersed camping (pps. Iv and 47). However, prior to the August 16, 2005 Court Order which rescinded the 1990 Off-Highway Vehicle (OHV) Plan, we assume OHV travel was regulated by the Eldorado National Forest in conformance with this Plan. Although the DEIS states that the 1977 OHV Plan has expired and the1990 OHV Plan has been rescinded, it does not describe the OHV regulations or Forest Service management of OHV travel under these Plans (p. iv).

Recommendations:
We recommend the FEIS provide a short summary of the travel regulations and management strategies of the 1977 and 1990 OHV Plans. This summary would

provide a useful benchmark for evaluation of the current management proposal. We recommend the summary include a synopsis of the miles of public access by type of vehicle per route and the season open for use as provided in the 1997 and 1990 OHV Plans.

Provide a specific description of the affected environment within the Project area. The DEIS provides a general description of the forest-wide affected environment. Thus, the description is general providing an overview of regional conditions. Specific information on local existing conditions such as visibility within areas of historically high OHV use and the location of landslides and unique geological features in relation to proposed route designations is not provided.

Recommendation:
We recommend the FEIS include affected environment information which is specific to the project area. This information should include data on project area visibility and air quality constituents in high-use OHV areas, route-related landslides, and unique resources (e.g., springs, fens, sensitive habitats) and geologic features.

Proceedural Comments

Provide visual examples of the different classes of vehicles and road and trail classifications. The Public Wheeled Motorized Travel Management Plan identifies routes open to the public by type of vehicle, road and trail classification, and the season the routes are open for use.

Recommendation:
To ensure full disclosure and clarity of the specific route designations, we recommend the FEIS include visual examples (pictures or drawings) of the different classes of vehicles (e.g., ATV, 4WD, dual sport motorcycle) and different road and trail classifications (e.g., ML-1, ML-2, ML-3 roads, trails).

Provide unique descriptive titles for each alternative. The alternatives are identified by alphabetic descriptors (e.g., A, B, C) which do not distinguish the alternatives by their primary management emphasis. Since the number of miles open to travel under each alternative appears to change based on the focus of the narrative (e.g., water and riparian impacts, over-the-snow travel), unique descriptive titles for each alternative would provide clarity and consistency in the narrative evaluation.

Recommendation:
We recommend the FEIS include unique descriptive titles for each alternative which clearly states the primary emphasis and focus for that alternative.