UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

JUN 21 2010

Patricia A. Grantham, Forest Supervisor
Klamath National Forest
1312 Fairlane Road
Yreka, CA. 96097-9549
Attn: Two Bit Project

Subject: Draft Environmental Impact Statement for the Two-Bit Vegetation Management, Siskiyou County, California (CEQ# 20100165)

Dear Ms. Grantham:

The Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the above project. Our review and comments are pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

The proposed action (Alternative 2) will manage vegetation on approximately 9,530 acres through thinning and burning in the Klamath National Forest north and west of Happy Camp Ranger District. 7,250 acres is proposed for prescribed burning and about 1,980 acres will be utilized for commercial thinning. EPA understands that the project is intended to provide a sustainable timber supply for local communities and sustain diverse, fire-resilient ecosystems and a functioning forest and watershed.

EPA acknowledges the importance of the project's goals of improving forest health, reduce fuel loading, and decreasing fuels along important access roads to allow better access for fire suppression activities during fire events. We support the use of thinning and prescribed underburning as important measures necessary to reduce the risk of fire, promote biodiversity, and restore natural ecological processes within the forest. We recognize the ecological significance of the Klamath National Forest and support the inclusion of resource protection measures and best management practices described in the DEIS. Project features such as limiting the amount of new road construction will help minimize adverse effects. Overall, the DEIS contains valuable information useful to both the public and decision maker(s); however, we have some concerns that should be addressed in the Final Environmental Impact Statement (FEIS).

We have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "*Summary of Rating Definitions*"). We are concerned about the lack of information regarding the decommissioning of roads, particularly in relation to

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their role in meeting Total Maximum Daily Load (TMDL) requirements of the Klamath Basin. We recommend the FEIS provide additional information on worker exposure to naturally occurring asbestos, air quality emissions and mitigation measures, and climate change. Our enclosed detailed comments provide additional information regarding the concerns identified above.

We appreciate the opportunity to review this DEIS and are available to discuss our comments. When the FEIS is released for public review, please send one hard copy and one CD to the address above (mail code: CED-2). If you have any questions, please contact Stephanie Skophammer, the lead reviewer for this project, at (415) 972-3098 or skophammer.stephanie@epa.gov, or contact me at (415) 972-3521.

Sincerely,

Kathleen M. Goforth, Manager
Environmental Review Office

Enclosures: Summary of EPA Rating Definitions
EPA Detailed Comments

cc: Siskiyou County Air Pollution Control District
Ken Harris, District Ranger, Happy Camp Ranger District

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) 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 Environmental Impact Statement (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 should 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 Council on Environmental Quality (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 COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) FOR THE TWO-BIT VEGETATION MANAGEMENT, SISKIYOU COUNTY, CALIFORNIA, JUNE 21, 2010

Project Description

The Happy Camp Ranger District of the Klamath National Forest is proposing to conduct vegetation management and fuels reduction activities along Indian Creek near Happy Camp, California. The purpose of this project is to sustain diverse, fire-resilient ecosystems, in keeping with historic conditions and provide a programmed flow of timber products to local communities. The Proposed Action (Alternative 2) would involve approximately 9,530 acres of National Forest system lands across the 68,000 acre project area and would include thinning in 1,980 acres and underburning in 7,250 acres.

Closure and Restoration of Roads and Landings

Provide a closure and restoration plan for the proposed temporary roads and landings. The DEIS states that 2.9 miles of temporary roads would be constructed, 4.3 miles of existing roads would be reconstructed and 60 acres of landings would be constructed to access treatment units (pg. 16). Although the DEIS states that 4.1 miles of road would be decommissioned following the timber harvest and fuel reduction actions are completed, there is no detailed information provided on when or how this closure would occur.

Indian Creek is currently listed as a 303(d) impaired watershed, and a Total Maximum Daily Load (TMDL) action plan that has been developed for the Klamath Basin is scheduled to be approved in December 2010. The DEIS states that the proposed alternative will help accelerate the delisting of Indian Creek due to a reduction in road sediment sources from road decommissioning, but there is a lack of information on how this will occur. Specifically, there is little information concerning what roads will be decommissioned and the time frame in which the decommissioning will take place.

Recommendation:

We recommend the FEIS provide a list and map of the roads and trails proposed for decommissioning, as well as a detailed closure and restoration plan for the proposed temporary roads and landings. This plan should include specific information on the extent to which these roads and landings would be recontoured, replanted with appropriate vegetation, monitored, and closed to off-highway vehicle use. We recommend the FEIS include a specific post-harvest schedule for closure of the temporary roads and landings and discuss the relationship of the restoration and closure plan to the Klamath Travel Management Plan published on January 29, 2010. Additionally, the FEIS should explain how decommissioning those particular roads and landings will directly contribute to compliance with TMDL implementation requirements for the Klamath Basin.

Naturally Occurring Asbestos

Limit exposure to Naturally Occurring Asbestos. The DEIS describes the presence of ultramafic rock in the project area (pg. 160). Ultramafic rock often contains asbestos, which is a human health hazard when airborne. As noted in the DEIS, there is a potential for asbestos fibers to be introduced into the air by: 1) ground disturbing activities of ground-based and cable yarding; 2) temporary road opening; 3) maintenance of existing roads underlain by ultramafic rock. The DEIS states that approximately 3,392 acres of treatment would occur within areas of ultramafic rock, including 35 acres of new temporary road construction and reopening of existing roads. The DEIS states that standard mitigation measures would be applied, including constructing lines during wet soil conditions and using OSHA-approved air filtering apparatus (pg. 43).

It is important to protect human health by limiting the exposure of workers to this air pollutant. Very low levels of asbestos in soil can generate airborne asbestos at hazardous levels. We are concerned about the potential for exposure to Naturally Occurring Asbestos from proposed activities.

Recommendations:

EPA recommends that the FEIS identify the project areas that contain ultramafic rock and include maps illustrating these areas in an Appendix. The FEIS should discuss exposure mechanisms and assess the potential for exposure to elevated levels from proposed activities.

EPA recommends that the Forest Service review the asbestos occurrence information on the California Geological Survey website: 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 website addresses California's Asbestos Airborne Toxic Control Measures for surfacing Applications, which apply to unpaved roads. This issue should be documented in the FEIS.

EPA also recommends that the Forest Service review the recommendations presented in the Department of Toxic Substances Control report, "*Study of Airborne Asbestos from a Serpentine Road in Garden Valley, California*" at: http://www.dtsc.ca.gov/loader.cfm?url=/commonspot/security/getfile.cfm&pageid=33546.

EPA recommends that the Forest Service provide additional information on the mitigation measures that will be implemented in response to this problem, including information about the potential impacts to natural resources as a result of the mitigation. The FEIS should identify and include commitments for measures that can be implemented to protect human health from Naturally Occurring Asbestos.

Air Quality

Provide a detailed smoke management plan consistent with the Siskiyou County Air Pollution Control District's (SCAPCD) Smoke Management Program. The DEIS states that a smoke management plan will be submitted to SCAPCD and that project design features were developed in order to avoid creating a nuisance, visibility impairment, or impacts to public health (pg. 127).

> ***Recommendation:***
> The FEIS should include a detailed smoke management plan that sets forth how the project will comply with the SCAPCD regulations for pile burning and smoke management, an implementation schedule, the responsible parties, and monitoring and reporting requirements.

Include a Construction and Operations Emissions Mitigation Plan. The DEIS presents estimates for emissions from unpaved log truck travel (table 37; pg. 128) and states that dust from hauling will be minimized by requiring abatement with either water or some other alternative. Emissions from prescribed burning are also estimated (table 36; pg. 127). We recommend that the FEIS also include measures to mitigate these emissions.

> ***Recommendation:***
> EPA recommends that the Forest Service include a Construction and Operations Emissions Mitigation Plan for fugitive dust and diesel particulate matter (DPM) in the FEIS and adopt this plan in the Record of Decision (ROD). We recommend that the following measures be included in order to reduce impacts associated with emission of particulate matter and other toxics, particularly in areas where the public or Forest Service staff may be impacted:
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> *Fugitive Dust Source Controls:*
>
> - Stabilize open storage piles and disturbed areas by covering and/or applying water or other dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
> - Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
> - When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.
>
> *Mobile and Stationary Source Controls:*
>
> - Reduce use, trips, and unnecessary idling from heavy equipment.
> - Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels, where applicable, and to perform at verified standards applicable to retrofit technologies. The California Air Resources Board has a number of mobile source anti-idling requirements which could be employed. See their website at: http://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm.

- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.
- If practicable, lease new, clean equipment meeting the most stringent of applicable federal or state standards.

Administrative controls:

- Identify, in the FEIS, all commitments to reduce construction and operations emissions, and specify air quality improvements that would result from adopting specific air quality measures.
- Identify where implementation of mitigation measures is rejected based on economic infeasibility.
- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking. (Suitability of control devices is based on: whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public).

Climate Change

Describe climate change and its effects on successful reforestation. Current research indicates that climate change could impact the amount, timing, and intensity of rain and storm events; increase the length and severity of the fire season; modify the rate and distribution of harmful timber insects and diseases; and aggravate already stressed water supplies. A significant change in weather patterns could have important implications for how we manage our forests. A number of studies specific to California have indicated the potential for significant environmental impacts as a result of changing temperatures.[1] The California Climate Action Team released a report[2] on the impacts of climate change to California, the latest research, and State efforts to adapt to impacts. The report indicates that estimates of the long-term risk of large wildfires in California are substantial, with increases in occurrences statewide ranging from 58% to 128% in 2085.

On the subject of climate change, the DEIS presents information in Section 3.15 and concludes that the analyses of impacts associated with greenhouse gases and carbon dioxide emissions or sinks at the project level are too low to provide meaningful information that can be translated into climate change information (pgs. 277). EPA recommends that the Forest Service consider the potential effects of climate change on Forest Service resources and describe how the Forest Service will adaptively manage affected resources. For example, the likelihood of larger and more frequent wildfires could increase erosion, sedimentation, and chemical and nutrient loads in surface waters, resulting in adverse impacts to water quality and quantity as well as species diversity.

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[1]Our Changing Climate: Assessing the Risks to California, A Summary Report from the California Climate Change Center, July 2006.

[2] Draft 2009 Climate Action Team Biennial Report to the Governor and Legislature. See internet address: http://www.climatechange.ca.gov/publications/cat/index.html.

Recommendation:
We recommend the FEIS include a more detailed description of climate change and its implications for successful reforestation. For example, describe and evaluate projected climate change consequences such as frequency of high intensity storms, amplified rain events, and the severity and frequency of insect outbreaks, droughts, and fire seasons, and their effects on the success of reforestation efforts.