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

October 31, 2008

Ray Porter, District Ranger
KRP DSEIS Comments
High Sierra Ranger District
P.O. Box 559
Prather, CA 93651

Subject: Draft Supplemental Environmental Impact Statement for Kings River Project, Fresno County, California (CEQ# 20080356)

Dear Mr. Porter,

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Supplemental Environmental Impact Statement (DSEIS) 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 our NEPA review authority under Section 309 of the Clean Air Act.

Based on our review, we have rated the proposed Phase 1 of the Kings River Project as Environmental Concerns – Insufficient Information (EC-2). A *Summary of EPA Rating Definitions* is enclosed. While EPA supports forest research and restoration of Sierra Nevada forests to conditions that are sustainable and resilient, the Proposed Action would amend the Sierra National Forest Land Resources Management Plan to allow a more intensive level of logging than is currently allowed. As a result, the project increases the risk of adverse impacts to aquatic and late successional forest species.

We commend the expanded range of alternatives in the DSEIS and the inclusion of additional measures to minimize adverse effects to the southern Sierra Nevada population of Pacific fisher and watersheds currently over their Threshold of Concern for Cumulative Watershed Effects. While these measures will reduce adverse effects, we remain concerned with the short-term and cumulative impacts of the intensive logging system proposed. Furthermore, it is not clear which protection measures would be included in the Proposed Action.

Our concern is heightened by the apparent exclusion of the Kings River Experimental Watershed, California Spotted Owl Study area, Defensible Forest Protection Zones, and Wildland Urban Interface from the less intensive logging proposed in other action alternatives. These areas represent a little under half of the acreage proposed for treatment. Research and protection from wildfire are commendable

objectives which we strongly support provided these actions do not result in significant adverse effects to the environment.

We appreciate the opportunity to review this DSEIS. When the FEIS is released for public review, please send one hard copy to the address above (mail code: CED-2). If you have any questions, please contact Laura Fujii, the lead reviewer for this project, at (415) 972-3852 or fujii.laura@epa.gov, or me at (415) 972-3521.

Sincerely,

Kathleen M. Goforth, Manager
Environmental Review Office

Enclosures:
Summary of EPA Rating Definitions
Detailed Comments

cc: Dave Harlow, US Fish and Wildlife Service

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements Definitions and Follow-Up Action*

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (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

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 these impacts.

EO – Environmental Objections

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

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 potential 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 of 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 analyzed 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 analyzed in the draft EIS, which should be analyzed 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 National Environmental Policy Act 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. February, 1987.

EPA DETAILED COMMENTS ON THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR THE KINGS RIVER PROJECT, OCTOBER 31, 2006.

Project Description

The Kings River Project implements an uneven-aged silvicultural system in 7 phases over 131,500 acres from 2004 to 2033 in order to restore historic pre-1850 forest conditions and provide opportunities for research. This Draft Supplemental Environmental Impact Statement (DSEIS) evaluates Phase 1 that would treat 8 management units on 13,700 acres.

Sensitive Species

Evaluate project design modifications to avoid and minimize impacts to sensitive species. The Proposed Action modifies, or does not implement, sensitive species standards and guidelines of the 2004 Sierra Nevada Forest Plan Amendment (SNFPA) and Sierra National Forest Land and Resource Management Plan because of conflicts with the specific research objectives. For instance, the project would allow work within 100 feet of Yosemite toad occupied meadows within the Kings River Experimental Watershed (p. 2-46) and would implement proposed treatments within California Spotted Owl Study Protected Activity Centers (p. 2-57). These modifications of sensitive species standards and guidelines increase the risk of adverse impacts. Of concern is the population of Yosemite toad in the Bull Creek and Teakettle watershed which appear to be isolated from other populations.[1] While we commend the inclusion of additional measures to minimize adverse effects on sensitive species such as the Yosemite toad (e.g., p. 3-190), we remain concerned with short-term and cumulative effects to these species.

> ***Recommendations:***
> Evaluate additional project design modifications to avoid and minimize impacts to sensitive species. For instance, describe specific research and management design measures, such as staggered temporal and spatial treatments, and assess the ability of these measures to avoid adverse impacts.
>
> The FEIS should evaluate the ability to relocate treatments, or implement the 500 foot no mechanical activity zone, for meadows occupied by Yosemite toad to avoid adverse irreversible impacts to this species.
>
> The FEIS should include a detailed description of research and management objectives. The FEIS should demonstrate that these objectives and goals cannot be achieved in any other less damaging manner.

Demonstrate that proposed design measures will prevent loss of population viability of late successional forest species. The Proposed Action would implement measures to minimize adverse effects on late successional forest species such as the Pacific fisher and California spotted owl. For example, there would be limits on the portion of Pacific fisher

[1] Figure 8c, Aquatic Species Biological Assessment & Biological Evaluation, Holly Sanders, Aquatic/Fisheries Biologist, High Sierra Ranger District, Sierra National Forest, 1/27/06.

home range available for treatment (less than one third), and the amount of California spotted owl protected activity centers (PACs) available for manipulation in the California Spotted Owl Study (p. 135). We note that the Proposed Action appears to delay achievement of the Pacific fisher canopy goal of 50% of the landscape in California Wildlife Habitat Relationship size 4 or 5 (pps. 143; Figure 14, p. 152; pps. 160, 193, 194).

Recommendations:
The FEIS should clearly demonstrate that the proposed project design measures will avoid loss of population viability of late successional forest species.

The FEIS should provide a description and discussion of current knowledge and science on Pacific fisher and California spotted owl requirements. Provide information, data, and references that demonstrate that project design measures, such as limits on treatments in PACs, tree removal intensity, and tree size removed, are reasonably able to protect the species and prevent loss of population viability.

The FEIS should also describe how the proposed treatment design was determined and why it is considered protective of late successional forest species. For instance, describe the scientific basis for determining that treatment of one third of a fisher's home range would not have an adverse effect on fisher populations (p. 197).

Provide additional information on potential impacts to the Relictual slender salamander. The 2006 DEIS stated that cumulative impacts to the Relictual slender salamander may lead to listing and population losses due to the extent of the Kings River Project over time and the overlap in project activity areas (p. 89, 2006 DEIS).

***Recommendation*:**
Include in the FEIS additional information on the work being done to learn more about slender salamander species in Sierra National Forest. This information should include a summary of the research underway to determine the species of slender salamander, and whether the research will help determine the vulnerability of the species to Kings River Project activities.

Air Quality

Include the air conformity determination in the FEIS. The DSEIS cites the Kings River Project air conformity determination, but does not include a copy of the document (p. 3-97). A commitment to limit the number of acres underburned is important given the non-attainment status of the San Joaquin Valley airshed for ozone and particulate matter less than or equal to 10 micrometers (PM_{10}).

Recommendation:
The FEIS should include the air conformity determination as an appendix. We recommend a clear commitment to limit the number of acres burned per year to

ensure emissions remain within the California State Implementation Plan emission restrictions (p. 3-97).

Correct the inconsistencies between the text and tables describing air emissions. The text describing air quality effects of Alternatives 4 and 5 appears to contradict the data provided in Tables 3-21 & 3-22. For instance, the text states that Alternative 4-Fisher Emphasis would increase the volume of emissions produced. However, data provided in Table 3-21 Burn Emissions and Table 3-22 Mechanical Harvesting Emissions indicate that Alternative 4 would produce fewer emissions than the other action alternatives. The DSEIS also states that Alternative 5–Thin from Below would produce less slash and, thus, fewer emissions than Alternative 1-Proposed Action; while Table 3-21 Burn Emissions data states that particulate matter less than 10 under Alternative 5 would be much higher than under Alternative 1 (pps. 3-100 and 3-101).

Recommendation:
The FEIS should correct the inconsistencies found in the DSEIS between the text and tables. The FEIS should include additional information to support the conclusions regarding emission levels under each action alternative.

Cumulative Impacts Analysis

Conduct a more robust and specific cumulative impacts analysis. Past, present, and reasonably foreseeable activities in the Kings River Project are limited to those that occurred in the past 30 years and within the next 30 years (p. 3-4). It is evident from information provided in the DSEIS that there has been, and, will be, a significant level of forest management activity in the project area. This activity includes future phases of the Kings River Project, the existing prescribed burning program, maintenance of existing forest plantations, and management activities on private property adjacent to Federal forest lands (pps. 3-4 to 3-9). The cumulative impact analysis provides general statements regarding impacts. Potential measures to avoid and minimize these cumulative impacts are not discussed in detail.

Recommendations:
The FEIS should include a more robust and specific cumulative impacts analysis. This analysis should provide the rationale for the temporal and spatial boundaries utilized in the analysis, provide specific information on potential impacts to specific resources, and discuss potential avoidance measures.

The analysis should describe the environmental and health implications of potential cumulative impacts. For instance, discuss in detail the environmental and health impacts of projected air emissions from the existing underburn program and the harvest/prescribed burning of the remaining 60 management units. We recommend describing potential mitigation measures for significant cumulative impacts to human health or the environment.

Adaptive Management

Provide specific information on the adaptive management program. Adaptive management, monitoring, and results of initial treatments will be used to provide direction for later phases of the Kings River Project. These later phases will treat 60 management units on 117,800 acres from 2011 to 2033 (p. 17, 2006 DEIS). While the DSEIS provides specific information for adaptive management of fisher habitat, it does not appear to include information about adaptive management actions for other resources and species of concern.

> ***Recommendation:***
> The FEIS should provide specific information on the adaptive management process, monitoring, and commitments. Clearly describe the process for integrating forest treatment results into design development and decisions for the later phases of the Kings River Project.

General Comments

Provide a table with silvicultural prescriptions and conservation, protection, and mitigation measures applied for each alternative. It is not clear which specific protection measures, such as conservation measures for the Pacific fisher (p. 2-57), would be included in the Proposed Action or other action alternatives. Nor is it clear what specific silvicultural systems would be applied to areas such as the Kings River Experimental Watershed, California Spotted Owl Study area, Defensible Forest Protection Zones, and Wildland Urban Interface which seem to be excluded from various action alternatives (pps. 2-37, 2-39, 2-44, 2-61). We believe a detailed list of the management components that will be applied under each alternative would further the public's and decisionmakers' ability to clearly understand the environmental consequences of each alternative.

> ***Recommendation:***
> We recommend the FEIS include a table which lists the specific silvicultural prescriptions and conservation, protection, and mitigation measures that would be applied under each action alternative for the 8 management units, Kings River Experimental Watershed, California Spotted Owl Study area, Defensible Forest Protection Zones, and Wildland Urban Interface. Example specific silvicultural prescription components to include are harvest diameter-at-breast-height limit, clumped or not clumped, streamside management zone treatments, buffer zones for various resources (streams, sensitive species), coarse woody debris requirements, types of approved treatments (mechanical, helicopter, endlining), slash treatment, group regeneration or not, prescribed burning, slash treatments, and planting requirements.