UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

January 29, 2010

William R. Queen, District Ranger
Lookout Mountain Ranger District
3160 NE Third Street
Prineville, Oregon 97754

RE: EPA Region 10 Review of the Canyon Fuels and Vegetation Management Project
EPA Project Number: 09-072-AFS

Dear Mr. Queen:

The U.S. Environmental Protection Agency (EPA) has reviewed draft Environmental Impact Statement (DEIS) for the Canyon Fuels and Vegetation Management Project (CEQ Number 20090436) on the Lookout Mountain Ranger District of the Ochoco National in Oregon. Our review of the DEIS was conducted in accordance with our responsibilities under National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

Section 309 specifically directs the EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Under our Section 309 authority, our review of the DEIS considers the expected environmental impacts, and the adequacy of the EIS in meeting procedural and public disclosure requirements of NEPA.

The focus of the proposed actions is modification of stand structure across the planning area in order to improve the vegetative condition and restore plant communities toward the range of historic conditions. Alternative 3 has been identified as the preferred alternative. This alternative would harvest 4,193 acres, precommercial thin 5,949 acres, remove juniper on 1,397 acres, restore hardwoods on 236 acres, and conduct prescribed burning on 2,038 acres.

EPA is supportive of the proposed management objectives, particularly as they relate to increasing the number of large trees, increasing late and old structure stands, and introducing large woody debris and hardwood plant species within the Riparian Habitat Conservation Areas (RHCAs). In the Final EIS, we would like to see inclusion of additional information regarding riparian harvest prescriptions, grazing management in RHCAs, and a discussion on climate change impacts. We also encourage the Forest Service to consider modifying the prescriptions proposed for the Douthit Creek drainage so as to bring the equivalent harvest area (EHA) down to 25 percent due to concerns about water quality and habitat. Please refer to the attached comments for further detail.

Based on our analysis, we have rated this DEIS as EC-1 (Environmental Concerns – Insufficient Information). An explanation of this rating is enclosed. We appreciate the

Printed on Recycled Paper

opportunity to provide comments, and I encourage you to contact me, or Teresa Kubo of my staff with any questions. She can be reached at (503) 326-2859 or kubo.teresa@epa.gov.

Sincerely,

Christine B. Reichgott

Christine B. Reichgott, Unit Manager
Environmental Review and Sediment Management Unit

Enclosure

Printed on Recycled Paper

EPA Region 10 Detailed Comments
Canyon Fuels and Vegetation Management Project
January 28, 2010

Basal Area Targets in RHCAs

The DEIS describes silvicultural activities including basal area targets in Appendix A of the DEIS (page 299). It is not clear, however, whether a different set of targets would be applied to riparian habitat conservation areas (RHCAs). Page 16 of the DEIS makes reference to District thinning protocols, and indicates that trees to be cut would depend on height, slope, and distance to the stream. For purposes of review, it would be helpful to have assumptions behind the shade analysis, and the District thinning protocols for riparian areas included as a part of Appendix A. We are specifically interested in any activity that may be conducted within the primary shade zone on class I-III streams, and how that primary shade zone is defined.

Recommendation:

- We recommend that shade analysis assumptions and District thinning protocols be included in the FEIS.
- We recommend that the FEIS define the primary shade zone, and any activities that would be conducted within that zone.

Douthit Creek Drainage

The DEIS notes on page 88 that the Douthit Creek drainage is very sensitive. The Bottom Line Survey (BLS) conducted by the Forest Service identified multiple headcuts on the creek and the Fisheries Biologist's report for the Watershed Analysis indicated it was in a downward trend. Under Alternative 3, the equivalent harvest area (EHA) would be above 25 percent threshold for 11 years. Given the sensitivity of the drainage, and its importance as habitat for redband trout, we encourage the Forest Service to look for opportunities to bring the EHA in the drainage below 25 percent, or seek ways to minimize harvest impact in the drainage. This could include modifying the logging system. Where conditions allow and sufficient utilizable material is available, we recommend utilizing a cut-to-length harverster/forwarder system to conduct thinning.

Recommendation:

- We encourage the Forest Service modify the prescriptions proposed for the Douthit Creek drainage so as to bring the equivalent harvest area (EHA) below 25 percent.

Grazing

The DEIS documents that grazing has affected the ability of the watersheds in the project area to provide vigorous and stable riparian habitat.[1] The document further recognizes that the proposed thinning and burning activities in the RHCAs will provide additional access as well as highly palatable forage to livestock.[2] We appreciate that there have been changes in the range utilization standards, and other improvements in recent years that are improving overall range

[1] Canyon Fuels DEIS, page 93
[2] Canyon Fuels DEIS, page 104

Printed on Recycled Paper

conditions. We are concerned, however, at the lack of specificity on measures for ensuring livestock would not impede the recovery of the RHCAs following treatment.

Recommendation:

- We recommend that the FEIS include: (i) an inventory of those areas for which livestock exclusion would be critical to recovery (for example, where soils rate as moderately or highly erosive), (ii) a discussion of measures that would be used to exclude cattle, and (iii) a discussion of the implementation and effectiveness monitoring that would be conducted relative to these measures and in the interest of ensuring a full and rapid recovery of the RHCAs.

Fire Regime Condition Class

On page 45 of the DEIS, treatment effectiveness is considered for a number of parameters out to 50 years. We recognize that future harvest over time is outside the scope of the Canyon project; however we recommend that consideration be given in the FEIS to the kinds of treatments that may be required in the future in order to maintain desired conditions. Without periodic treatment, the project's medium and long term fire risk gains may be limited.[3]

Recommendation:

- Include a discussion of future treatment requirements in order to maintain desired conditions. This should include an examination of long term access needs.

Climate Change Mitigation and Adaptation

We appreciate the discussion in the DEIS on the project's expected impacts on air quality (DEIS, p. 207). We encourage the Forest to expand on this discussion to consider the project's expected contributions to carbon dioxide emissions, and the expected impact of climate change on the project area. This includes wildfire patterns and frequency, altered water quantity and quality (e.g. temperature); timing of flow; spatial and temporal shifts of vegetative communities and wildlife habitat; potential increases for invasive species resistance to mitigation measures;[4] and increased opportunities for warm weather recreation.

To adapt to the above and other climate change impacts - as well as to mitigate climate change - EPA supports the recommendations and cited resources of the January 13, 2009 Forest Service initial guidance document, "Climate Change Considerations in Project Level NEPA Analysis".

Recommendations:

- We recommend that the FEIS discuss effects of climate change on the project and the effects of the project on climate change. For the effects discussion of climate change on the project area we are especially interested in how the project's protection of connectivity, resilience and biodiversity anticipates likely climate change impacts.[5]

---

[3] See, for instance, Mason et al., 2003. Investigation of Alternative Strategies for Design, Layout and Administration of Fuel Removal Projects. http://www.ruraltech.org/pubs/reports/fuel_removal/

[4] http://www.ars.usda.gov/research/publications/Publications.htm?seq_no_115=134271

[5] See, for example, "SAP 4.4. Adaptation Options for Climate-Sensitive Ecosystems and Resources | National Forests" at http://www.climatescience.gov/Library/sap/sap4-4/final-report/sap4-4-final-report-Ch3-Forests.pdf for additional information.

Printed on Recycled Paper

- In light of the CO_2 emissions that would be generated by pile burning and underburning, we also recommend the FEIS identify the market conditions that would make biomass utilization feasible, and we encourage the Forest Service to aggressively pursue this option.
- Finally, we recommend that the FEIS and/or ROD include some indication of how climate change considerations (if any) have been weighed during decision making.

Printed on Recycled Paper

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.