11.3 Federal Agencies

FA_EM_1109_002

From: Fujii.Laura@epamail.epa.gov [mailto:Fujii.Laura@epamail.epa.gov]
Sent: Wednesday, November 09, 2011 02:39 PM
To: Vasquez, Elizabeth A

Subject: Request for EPA-specific extension to Comment deadline date from November 21 (29) for DEIS Klamath Facilities Removal

Comment 1 - NEPA

Hello Liz,

EPA would like to request a formal EPA-specific extension from the comment deadline date of November 21 (29), 2011 to the end of December 2011.

We acknowledge the time constraints for a final secretarial determination by March 2012. However, additional time for our review is required to ensure sufficient time for coordination and concurrence of our comments between two EPA Regions, upper management, and EPA Headquarters.

Your serious consideration of this request would be appreciated. Please let me know if you require a more formal letter requesting this extension.

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Environmental Review Office, CED-2
Communities and Ecosystems Division
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Comment Author	Fuji, Laura
Agency/Assoc.	U.S. Environmental Protection Agency, Region 9
Submittal Date	November 09, 2011

Comment Code	Comment Response	Change in EIS/EIR
FA_EM_1109_002-1	Master Response N/CP-12 Comment Period.	No

FA_LT_1230_005

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

DEC 29 2011

Ms. Elizabeth Vasquez
Natural Resources Specialist
U.S. Bureau of Reclamation
2800 Cottage Way
Sacramento, CA. 95825

Subject: Draft Environmental Impact Statement /Environmental Impact Report (EIS/EIR) for Klamath Facilities Removal, Klamath County, Oregon and Siskiyou County, California.

Dear Ms. Vasquez:

The U.S. Environmental Protection Agency (EPA) has reviewed the above Draft EIS (DEIS) for Klamath Facilities Removal on the Klamath River. Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), our NEPA review authority under Section 309 of the Clean Air Act, and our participation as a Cooperating Agency. Our detailed comments are enclosed.

EPA has a long history of active involvement in Klamath River water management issues pursuant to our Clean Water Act (CWA), Clean Air Act, and NEPA authorities, as well as our tribal trust responsibilities and work with Endangered Species Act (ESA) issues. We are currently working with the States of California and Oregon to implement Total Maximum Daily Loads (TMDLs) to address impaired water quality for the Klamath River and its tributaries, including the Lost River sub-watershed. We continue to work with Klamath Basin Indian Tribes to address water quality issues on the Klamath River and its tributaries, including the Trinity River. We provided written comments on the proposed Federal Energy Regulatory Commission (FERC) Klamath Hydroelectric Project (FERC No. 2082) Relicensing (2006 and 2007) and Reclamation's Trinity River Mainstem Fishery Restoration Program (2000 and 2004).

The waters within the project area do not currently meet the States of California or Oregon water quality standards for temperature, dissolved oxygen, pH, and ammonia toxicity. Project facilities cause or contribute to these adverse water quality conditions. The States of Oregon and California have listed their portions of the Klamath River in the project area on their respective lists of impaired waters (Clean Water Act Section 303(d)) based on these water quality standards exceedences. Both states have adopted TMDLs to address these water quality impairments that identify load reductions necessary to attain water quality standards. We note that PacifiCorp's proposed Water Quality Plan to achieve its TMDL load reductions relies entirely on dam removal. Furthermore, the development and implementation of a comprehensive water quality management program, integrated with fish passage and disease management programs, remains an outstanding issue for dams-in-place alternatives.

Comment 1a - Approves of Dam Removal

EPA strongly supports removal of the four dams on the mainstem of the Klamath River. Removal of these dams would significantly improve water quality, fisheries habitat, Tribal trust assets, and human health and the environment. Improvements would occur more rapidly compared to not removing the four dams. For example, large blooms of blue-green algae occur in Copco 1 and Iron Gate Reservoirs, prompting postings of public health advisories around the reservoirs and along the length of the Klamath River during summer months. Removal of these reservoirs would significantly decrease or eliminate the long-term spacial extent, temporal duration, and concentration of toxic blue-green algae blooms.

We have concerns regarding potential impacts to wetlands and the short-term effects on fisheries and water quality from dam deconstruction; however, we believe that those concerns can be addressed through the implementation of mitigation measures (see enclosed Detailed Comments). Thus, based on our review of the DEIS, we have rated Alternative 2: Full Facilities Removal (Proposed Action) and Alternative 3: Partial Facilities Removal as "Environmental Concerns" (EC) (See the enclosed "Summary of Rating Definitions").[1] We have rated Alternative 1: No Action, Alternative 4: Fish Passage, and Alternative 5: Fish Passage at JC Boyle and Copco 2 with Removal of Copco 1 and Iron Gate Dams as "Environmental Objections" (EO) because they would likely result in continued violation of water quality standards, and would fail to address significant fishery and water quality problems created or exacerbated by the Klamath River dams.

Comment 2 - NEPA/CEQA

We have rated the adequacy of the DEIS as "Category 2-Insufficient Information." To ensure the Secretary has sufficient information to make his decision, we recommend the Final EIS (FEIS) include a more robust discussion and evaluation of potential wetland losses and mitigation, and of the expected quantity of sediment released through dam removal. In addition, we recommend the FEIS include a more comparable level of evaluation for each alternative providing similar levels of data and analysis. For clarity, the FEIS should include a short description of next steps such as the NEPA compliance process for related specific KBRA actions. Additional editorial recommendations are in the enclosed Substantive Editorial Comments. Less substantive editorial comments were provided to you on November 23, 2011, in our capacity as a Cooperating Agency.

Comment 3 - NEPA/CEQA

Comprehensive monitoring and aggressive mitigation measures will be critical to minimize and manage unavoidable short-term impacts of dam deconstruction and released sediments. We recommend the FEIS include a detailed monitoring and mitigation plan that describes the proposed monitoring and mitigation actions, when the actions would be implemented, the responsible parties, funding, and mitigation success criteria. We also recommend implementation of validation monitoring to verify DEIS assumptions and predictions regarding short-term (less than 2 years) project effects and the rate of recovery from project impacts.

There are numerous federal projects and studies currently occurring in the Klamath Basin. We recommend the FEIS discuss the potential relationship and interaction among these activities and how the proposed action could affect these other Klamath Basin activities. Of specific concern is the project's contribution to achievement of Klamath Basin TMDL requirements, Tribal water quality standards, and mandates to restore the Trinity River fishery.

Comment 4 - Water Quality

[1] The DEIS does not identify a preferred alternative; therefore, in accordance with EPA's *Policy and Procedures for the review of Federal Actions Impacting the Environment*, we must rate each of the alternatives listed in the DEIS.

We appreciate the opportunity to comment on this DEIS. Please send two copies of the FEIS and one CD to the address above (mail code: CED-2) at the same time it is officially filed with our Washington, D.C. office. We also request that you send one copy of the FEIS and one CD to US EPA Region 10, Environmental Review and Sediment Management Unit, 805 SW Broadway, Suite 500, Portland, OR 97205. If you have any questions, please contact me at (415) 972-3843, or Laura Fujii, the lead reviewer for this project. Laura can be reached at (415) 972-3852 or fujii.laura@epa.gov.

Sincerely,

Enrique Manzanilla, Director
Communities and Ecosystems Division

Enclosures: Summary of EPA Rating Definitions
EPA Detailed Comments
Substantive Editorial Comments

cc: Gordon Leppig, California Department of Fish and Game
Dennis Lynch, U.S. Geological Survey
Clayton Creager, North Coast Regional Water Quality Control Board
Darrin Thome, U.S. Fish and Wildlife Service, Klamath Falls Office
Steven Edmondson, National Oceanic and Atmospheric Administration
Kelley Reid, U.S. Corps of Engineers, Eureka Office
Dale Morris, Bureau of Indian Affairs
Chris Nota, U.S. Forest Service
Renee Snyder, Bureau of Land Management
Steve Kirk, Oregon Department of Environmental Quality
Matt Rodriguez, California EPA
Tim Hemstreet, PacifiCorp
Chairperson, Klamath Tribe
Chairperson, Yurok Tribe
Chairperson, Hoopa Valley Tribe
Chairperson, Resighini Rancheria
Chairperson, Karuk Tribe
Chairperson, Quartz Valley Tribe

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.

U.S. EPA DETAILED COMMENTS ON KLAMATH FACILITIES REMOVAL ON THE KLAMATH RIVER, KLAMATH COUNTY, OREGON AND SISKIYOU COUNTY, CALIFORNIA, DECEMBER 29, 2011

Introduction

The Department of the Interior, through the Bureau of Reclamation (Reclamation), and the California Department of Fish and Game (CDFG) have evaluated whether to remove four dams on the Klamath River pursuant to the Klamath Hydroelectric Settlement Agreement (KHSA). In accordance with the KHSA, the Secretary shall determine whether facilities removal will advance restoration of the salmonid fisheries of the Klamath Basin and is in the public interest, which includes but is not limited to consideration of potential impacts on affected local communities and Indian Tribes. The Klamath Basin Restoration Agreement (KBRA), linked to implementation of the KHSA, would expand ongoing habitat and fish population programs and establish new habitat restoration, fisheries, water allocation, and monitoring programs. The potential impacts of connected actions, including actions under the KBRA, are analyzed at a programmatic level in the DEIS.

Dams-In Alternatives

Comment 1b - Approves of Dam Removal

Total Maximum Daily Loads (TMDLs) to address impaired water quality for the Klamath River and its tributaries, including the Lost River sub-watershed, confirm the severity of water quality impairments. The waters within the project area do not currently meet the States of California or Oregon water quality standards for temperature, dissolved oxygen, pH, and ammonia toxicity. Project facilities cause or contribute to these adverse water quality conditions. EPA objects to alternatives that would leave dams in place because they would result in continued violation of water quality standards, and would fail to address significant fishery and water quality problems created or exacerbated by the Klamath River dams. We note that PacifiCorp's proposed Water Quality Plan to achieve its TMDL load reductions relies entirely on dam removal.

Comment 5 - Alternatives

EPA comments on the Final EIS (FEIS) for the FERC relicensing of the Klamath Hydroelectric Project identified concerns with the continued effects of the dams on temperature, dissolved oxygen, ammonia and cyanobacteria water quality issues. Our comments expressed concern with the ability of the hydroelectric project to meet water quality standards and called for "development of a comprehensive water quality management plan." The development and implementation of a comprehensive water quality management program, integrated with fish passage and disease management programs, remains an outstanding issue for the current dams-in-place alternatives.

In accordance with the Klamath Hydroelectric Settlement Agreement (KHSA), the Secretary of the Interior shall determine whether facilities removal will advance restoration of the salmonid fisheries of the Klamath Basin and is in the public interest, which includes but is not limited to consideration of potential impacts on affected local communities and Indian Tribes. Thus, the DEIS evaluation focuses on potential impacts of the Proposed Action in Alternative 2: Full Facilities Removal. Our detailed comments below provide recommendations to enhance full disclosure and to further reduce potential impacts of the dams-out alternatives.

Wetland Impacts and Mitigation

Comment 6 - Terrestrial/Wildlife

Wetland losses are not clearly disclosed

The Draft EIS (DEIS) lists wetlands among the habitat types "most likely to be most affected by the project alternatives" and states that "there could be unavoidable impacts on 245 acres of wetland habitat at the J.C. Boyle, Copco 1, Copco 2, and Iron Gate Reservoirs (Table 3.5-2)" (p. 3.5-77). This would constitute a significant impact. The basis for this estimated loss of wetlands is not clearly described. For example, the reservoir wetlands, listed in Table 3.5-2 (p. 3.5-9), total 244.3 acres; however, the table also lists an additional 122 acres of wetlands between Iron Gate and J.C. Boyle Reservoirs. It is unclear whether these additional acres would be affected by the action alternatives, or whether they are part of the "temporary" impacts to 272 acres of wetlands discussed on pps. 3.5-54 and 55. Where temporary impacts would occur, and the basis for the 272 acres estimate, are not disclosed; nor is there a break down of estimated wetland losses by function or habitat type. It is also unclear whether any of these acreage values are based on a US Army Corps of Engineers (Corps)-verified jurisdictional delineation.

In addition, the DEIS states that passive wetland reestablishment may occur in some places, whereby wetlands "could expand down to the river channel at reconnected tributaries" (pg 3.5-43). However, the potential for passive wetland reestablishment is not discussed in detail, even though the DEIS appears to assume passive reestablishment of wetlands could reduce the permanent wetland loss associated with reservoir drawdown.

Recommendations:

EPA concurs that it is acceptable to defer detailed wetland delineations and development of specific mitigation measures until later in the Section 404 Clean Water Act (CWA) permitting process. We recommend that the Final EIS (FEIS) disclose the expected degree of both permanent (drawdown-related) and temporary (construction-related) wetland losses, as well as the basis for the wetland loss estimates. If estimates are not based on a Corps-verified jurisdictional delineation, the FEIS should note that these estimates are preliminary and will be revisited in more detail during the Section 404 permitting phase using standard Corps protocols.

Ecosystem functions provided by the specific wetland areas that could be lost should be discussed. The FEIS should depict the probable areas of wetland loss on maps. If post-removal wetland gains via passive reestablishment cannot be clearly determined, the FEIS should base its effects evaluation on the potential for complete wetland loss, while noting that actual impacts may be less.

Comment 7 - Terrestrial/Wildlife

Mitigation for wetland losses is not adequately addressed

The DEIS is inconsistent in its discussion of mitigation for wetland impacts. For example, specific Best Management Practices (BMPs) and other measures are described to reduce temporary construction-related impacts to "less than significant levels," while mitigation for permanent wetland losses is not as clearly addressed. In at least one location, the need for a Section 404 permit and mitigation for permanent wetland losses appears to be considered optional: *"**If** it is determined that under the Clean Water Act a Section 404 Permit is required, a Compensatory Wetland Mitigation Plan will be developed…"* (emphasis added). As a Cooperating Agency and in our scoping comments submitted under our NEPA Review capacity, EPA stated that a CWA Section 404 permit would be needed for this project. The Section 404 CWA permit will need to address both the dam removal and the wetland impacts. Unavoidable impacts to wetlands must be fully mitigated pursuant to Section 404 requirements.

2

Comment 7 cont.

Note that mitigation should compensate for both permanent losses, and residual temporal losses following application of construction BMPs.

Recommendations:
The potential degree of wetland impacts and the commitment to fully mitigate impacts and the loss of wetlands in a manner consistent with the national EPA-USACE Mitigation Rule (40 CFR part 230, Subpart J) should be clearly stated in the FEIS.

The FEIS should describe the availability of current or proposed mitigation opportunities in the project area. Mitigation Measure TER-5 emphasizes purchasing credits at an appropriate off-site conservation bank; however, there are no approved mitigation banks in the vicinity and EPA is not aware of applicable proposed wetland mitigation banks. Given the lack of existing mitigation bank opportunities, the time associated with approval of new mitigation banks, and the unlikelihood that sufficient mitigation credits would be available to offset project wetland impacts, the FEIS should focus on permittee-responsible mitigation (i.e., mitigation developed specifically for this project), not on purchase of credits from off-site conservation banks.

Mitigation Measure TER-5 should also be revised to more accurately reflect the existing EPA-USACE Mitigation Rule.

Sediment Releases and Mitigation

Comment 8 - Sediment Transport

Use consistent sediment quantities that will be released from the reservoirs
The quantity of sediment to be released from the reservoirs is reported in different units (e.g., tons vs. cubic yards) and volumes in different parts of the DEIS, making it very difficult for the reader to accurately determine the amount and effect of the released sediment (e.g., p. 3.2-94, Subchapter 3.2). The volume of sediment that will be released, initially or over time, is not known with precision. Thus, EPA believes it is more appropriate for the DEIS to describe the potentially released sediment volume as a range.

Recommendations:
The FEIS should continue to acknowledge the uncertainty in estimates of the volume of sediment that will be released from the reservoirs. The various detailed evaluations in different chapters and appendices should, wherever possible, be based on the same estimated sediment volume (whether most likely, worst case, etc.) and use the same units (or note the conversion used where different units are used).

Use total sediment loads for the effects analysis
The DEIS is misleading when it compares the magnitude of potential sediment releases from dam deconstruction with existing and historic (with-reservoir) sediment loads in the river. The DEIS appears to compare the "new" estimated volume of sediment that will be released by deconstruction against historic averages and flood loads, as opposed to adding the "new" sediment load to that of the average or historic loads (e.g., Figure 3.2-14, pg 3.2-95). It is the total ("new" released sediment plus existing sediment loads) that should be evaluated.

Comment 9 - Sediment Transport

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Comment 9 cont.

Recommendations:
The impacts evaluation needs to be based on the predicted *total* sediment load, which will be the volume of deposited sediment in the reservoirs that will be mobilized, *plus* the "natural" sediment load already carried (as estimated by the historic loads with the dams in place).The FEIS should determine the predicted total sediment loads that will be carried by the river and discharged to the nearshore marine environment based on the reservoir deconstruction sediment releases plus background sediment loads (existing and historic). Based on this total sediment load determination, we recommend a re-evaluation of the potential environmental effects and the level of significance of these effects.

Comment 10 - General/Other

Acknowledge Design Measures to Reduce Project Impacts

In several locations, the DEIS describes potential impacts associated with the proposed project, including releasing sediments from the reservoirs, and states that no mitigation is proposed for these impacts. However, the action alternatives include a number of operational and design features that will substantially reduce the impacts of the proposed project. In particular, the reservoir drawdown method, rates, and timing of water releases (that will flush sediments) have been carefully designed to minimize these anticipated impacts.

Recommendations:
The FEIS should acknowledge project operational measures that are specifically designed to minimize the effects of the proposed project, such as from sediment releases from the reservoirs. We recommend the FEIS include a more detailed discussion of measures that were considered and incorporated to further reduce effects, and reference this discussion particularly where mitigation measures are not proposed to address potential effects (e.g., Chapter 3.2 Water Quality), and in the Cumulative Effects analysis (e.g., Section 4.4.1.3 Mitigation Measures, p. 4-53).

Comment 11 - Algae

Periphyton Effects

The significance determination for Alternative 2 identifies a significant impact due to long-term periphyton growth in the Klamath Hydroelectric Project (KHP) reach (p. 3.4-15 and Table 3.4.1, p. 3.4-24). However, increased hydrologic flow variability is expected to result in scour, counteracting the effect of nutrients released from Upper Klamath Lake and Keno Reach which will no longer be retained by reservoirs. These factors are not well described or evaluated for this reach or downstream reaches. In addition, the sections of the periphyton discussion incorrectly summarize the findings of the Nutrient Numeric Endpoint (NNE) evaluation and hydrodynamic water quality model results for the Total Maximum Daily Loads (TMDLs).

Recommendations:
We recommend the FEIS describe in more depth the potential factors (e.g., scour, nutrient inputs, substrate) that could influence periphyton growth and reevaluate the level of significance of this effect for the KHP reach. If the significance determination is changed, it should be reflected for each affected reach in Table 3.4.1.

Comment 11 cont.

Page 3.4-15, Alternative 2, Hydroelectric Reach, Long-Term Effects, Periphyton, first and second paragraphs, as well as pages. 3.4-9 to 10, Section 3.4.4.1, paragraph 2 should be revised to accurately summarize the findings of the Nutrient Numeric Endpoint (NNE) evaluation and hydrodynamic water quality model results for the TMDLs.

Project Validation Monitoring

Comment 12 - NEPA/CEQA

Provide a detailed mitigation and monitoring plan

Mitigation measures described in the DEIS include monitoring, performance standards and corrective measures if mitigation is not successful. However, it is not clear whether there will be monitoring to verify DEIS assumptions regarding the level of impacts, conclusions that effects will be less-than-significant, or predicted river recovery rates. Comprehensive monitoring and aggressive mitigation measures will be key in reducing unavoidable short-term impacts of dam deconstruction and sediment release.

Recommendations:

We recommend the FEIS include a detailed monitoring and mitigation plan that describes the proposed monitoring and mitigation actions, when the action would be implemented, the responsible party, known effectiveness of the mitigation measure, funding, and success criteria. We recommend monitoring to verify DEIS assumptions and predictions regarding project effects and the rate of recovery from deconstruction impacts.

Tribal Trust Assets

Comment 13 - ITAs

Address Tribal concerns

While fully supporting dam removal, some Indian Tribes within the Klamath Basin have expressed significant concerns with potential adverse effects to tribal trust assets, water rights, water quality, and other tribal interests. Tribes have also voiced concerns regarding the linkage between the Klamath Hydroelectric Settlement Agreement (KHSA) and KBRA.

Recommendations:

The FEIS would benefit from a more detailed discussion of the interplay between the Klamath restoration effort and the Trinity River Restoration Program. We read Section 2.2.12 of the KBRA as an intent to assure that the implementation of the KRBA (and, indirectly, the KHSA) will not adversely affect the implementation of the Trinity River Restoration Program and vice versa. The Department of Interior (DOI) should explain how it intends to concurrently carry out these two restoration mandates on two interconnected rivers that share many of the same hydrologic and fishery resources. In particular, DOI should explain whether it will commit to provide any additional resources (water or financial), if needed, to remedy conflicts that may arise between the two restoration efforts.

Comment 14 - ITAs

More accurately describe and evaluate tribal impacts

The Tribal Trust Section 3.1.2 distinguishes "trust resources" ("legally vested") from "other resources traditionally used by tribes" and states that it documents the effects of the Klamath Hydroelectric Project on these resources, tribal culture, and tribal values (p. 3.12-1). It is unclear whether the focus of the description and evaluation is to objectively highlight project impacts, rephrase impacts tribes raised during a single consultation meeting, or both. Furthermore, the tribe-by-tribe evaluations do not

Comment 14 cont.

distinguish impacts to "trust resources" from impacts to "resources traditionally used by tribes." This appears to be the case in the Quartz Valley and Resighini evaluations which claim the project has no impacts on resources traditionally used by these tribes (pps. 3.12-16 and 3.12-44). The proposed project definitely affects these tribes, much in the same way it affects the Karuk and other tribes in the Klamath Basin.

Recommendations:
We recommend re-writing this section to clarify whether it is intended to document government-to-government discussions. Describe impacts to tribes and their tribal trust assets, even if those impacts were not raised in meetings with the tribes; or if a combination of these two approaches is intended. The FEIS should provide separate evaluations of impacts on "trust" and "traditionally used" resources. The focus of the evaluation should be to clearly and objectively highlight impacts of the action alternatives on both "tribal trust resources" and "resources traditionally used by tribes."

Revise the FEIS to recognize the potential impacts to resources traditionally used by each different tribe within the Klamath Basin. For example, although the Quartz Valley tribe may not have a reserved Klamath River fishery, it is incorrect to state or imply that the Klamath River salmon fishery was not a resource traditionally used by this tribe (p. 3.12-16). We recommend 3.12 Tribal Trust be reviewed and corrected to clearly and accurately describe and evaluate the resources traditionally used by each tribe within the Klamath Basin.

Comment 15 - ITAs

Remove language that infers trust relationships are based on trust resources
The DEIS implies that trust resources, as they are defined in this document, are necessary to form the basis of a trust relationship (pps. 3.12-19 and 3.12-43). This is not accurate. The federal government has a trust relationship with federally-recognized tribes which extends beyond trust resources and is based on, or otherwise arises from, treaties, statutes, executive orders and the historical relationship between the United States and Indian tribes.

Recommendation:
Language that infers trust relationships are solely based on existence of trust resources should be eliminated.

Description of KBRA Actions

Comment 16 - KBRA

Describe the NEPA Compliance process for the KBRA On-Project Water Management Plan
EPA recognizes that many elements of the KBRA are unknown and not reasonably foreseeable at this time. We agree that a programmatic analysis of the KBRA is appropriate for the current EIS. We note, however, that appropriate NEPA compliance must be completed for the KBRA in the future. Of particular interest to the EPA is future analysis of the KBRA On-Project Water Management Plan (On-Project Plan) which proposes diversion limitations and water management provisions for Reclamation's Klamath Irrigation Project. This plan is a key component in the future management of Klamath Basin water diversions, refuge water allocations, and groundwater resources which, in turn, will be critical in achieving habitat, water quality, and groundwater protection goals described in this Klamath Facilities Removal DEIS.

Comment 16 cont.

For example, the DEIS states repeatedly that until the On-Project Plan is fully implemented, it might not be possible for water to be managed consistent with the diversion limitations in all years (pps. 2-39; 2-51). The limitation of diversions is key to achieving habitat and water quality goals. Furthermore, the DEIS conclusion that water diversions would be managed to benefit water quality (p. 3.2-131) and aquatic resources (p. 3.3-143), is based upon the assumed success of the On-Project Plan (Sections 15.2 and 15.2.4). As the Plan is developed, it will be critical to subject the Plan's elements to rigorous environmental review in order to ensure that these goals are achieved.

Recommendations:
We recommend the FEIS describe the environmental compliance and review process for the On-Project Plan. If feasible, describe actions and studies that will be taken to ensure a robust description and evaluation of the On-Project Plan effects on aquatic resources, water quality and ground and surface water supplies of the Klamath Basin.

Provide description of authorizing legislation
The DEIS states Federal agencies are not parties to KBRA until after the enactment of authorizing legislation. Furthermore, implementation of most KHSA interim period activities are dependent on appropriate authorizing legislation through Congress, including additional funding to enhance ongoing programs (Chapter 2).

Recommendations:
Given the importance of authorizing legislation for KBRA and KHSA, the FEIS should provide a short description of the status and plans for KHSA and the KBRA authorizing legislation. We also recommend a short description of next steps, contingency plans, and possible outcomes if authorizing legislation or funding levels are not achieved as described in the DEIS, KHSA, or KBRA.

Comment 17 - KHSA

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U.S. EPA DETAILED COMMENTS – SUBSTANTIVE EDITORIAL COMMENTS - ON KLAMATH FACILITIES REMOVAL ON THE KLAMATH RIVER, KLAMATH COUNTY, OREGON AND SISKIYOU COUNTY, CALIFORNIA, DECEMBER 29, 2011

Substantive Editorial Comments[1] ← Added to FEIS/R Eratta

Water Resources

Executive Summary

1. The Executive Summary for both the Upper and Lower Klamath Basin describes the decrease in late summer/fall temperatures as an adverse impact. This conclusion is not consistent with the conclusions in Section 3.2, and should be corrected in the Executive Summary (in Table ES-4, Section 3.2, p. ES-28). Specifically, the decrease in late summer/fall temperatures produced by Alternatives 2, 3 and 5 are identified as beneficial in Section 3.2 (pps. 3.2-79 and 3.2-83), while text in Table ES-4 implies that this temperature decrease is a significant adverse impact (e.g., p. ES-28). We recommend text in Table ES-4 regarding the Upper Klamath Basin be revised as follows: "Dam removal and conversion of the reservoir areas to a free-flowing river could cause short-term and long-term increases in spring time water temperatures ~~and decreases in late summer/fall water temperatures~~ in the Hydroelectric Reach downstream of Copco 1 Reservoir." Similarly, text regarding the Lower Klamath Basin should be revised as follows: "Dam removal and conversion of the reservoir areas to a free flowing river could result in short-term and long-term increases in spring water temperatures ~~and decreases in late summer/fall water temperatures~~ in the Lower Klamath River."

   These changes also need to be made to text in Table 5-1 "Summary of Environmental Impacts" on pps. 5-8 and 5-9 that summarizes temperature impacts in the Upper and Lower Klamath Basin.

   In Table ES-6 Summary of Major Long-Term Benefits for Salmonid Restoration and Water Quality, lower fall temperatures in the River is listed under "Water Quality Benefits," and should be included under "Salmonid Benefits" as well. We suggest the following language be added: "Provides significantly cooler water temperatures in late summer/fall benefitting salmonids in the mainstem." This would apply to Alternatives 2 and 3, and 5.

Chapter 1 – Introduction

1. Section 1.3.2 – Klamath Basin Restoration Act (KBRA), p. 1-24, top bullet – In describing compromises made by KBRA water users and irrigators, the last sentence of this bulleted text states: "As reintroductions of currently threatened and endangered fish species are successfully implemented, the KBRA envisions that landowners will benefit from regulatory assurances that their operations would not be additionally burdened by new regulatory restrictions to the extent legally possible." These assurances and Section 15.3 of KBRA pertain to Endangered Species Act (ESA) requirements and are tied to the KBRA expectations, including a future General Conservation Plan

[1] These editorial comments are organized by document section. Within each Section (Chapter or Subchapter), the more substantive comments are listed first, followed by editorial-type comments. Thus, within a section, the comments are not necessarily in sequential page order. Note: Underlined text (e.g., Example) represents suggested additions. Crossed out text (e.g., ~~Example~~) represent suggested deletions. These comments supplement EPA's purely editorial comments previously conveyed via email on 11/23/11.

or a Habitat Conservation Plan. The language in this section should specify that landowners are seeking regulatory assurances regarding the Endangered Species Act, and that these regulatory assurances do not apply to the Clean Water Act, the Porter-Cologne Water Quality Control Act, or to any other authorities beyond the Endangered Species Act.

Chapter 2 – Proposed Action and Description of Alternatives

1. The need for trap and haul is described in Section 2.4.5.5, p. 2-83, as follows: "NOAA Fisheries Service prescriptions include a measure to trap and haul fall-run Chinook salmon upstream and downstream around Keno Impoundment. The prescriptions call for seasonal trap and haul operations from June 15 to November 15 when water quality conditions are not suitable for fish (dissolved oxygen concentration less than 20 mg/l or temperature above 20 degrees Celsius) (DOI and NOAA Fisheries Service 2007)."

   The DEIS addresses trap and haul measures for Alternatives 4 (Fish Passage at Four Dams) and 5 (Fish Passage at J.C. Boyle and Copco 2, Remove Copco 1 and Iron Gate). Although the KBRA discussion for Fisheries Reintroduction Plans acknowledges the need for trap and haul under Alternatives 2 and 3 (pg 2-45), it is not addressed as a mitigation for fisheries due to inadequate water quality; additionally, it does not include specifics on what release and rearing strategies might be included. We recommend the description of Alternatives 2 and 3 include a discussion of the need for trap and haul, and describe specific release and rearing strategies that may be used until conditions are suitable for fish.

2. Section 2.4.3.1 Deconstruction Actions, pps. 2-21 through 2-30, combined with Table 2.8 (p. 2-20), provides estimates of actual volumes of sediment expected (by modeling) to be released from the J.C. Boyle, Copco 1 and Iron Gate reservoirs.[2] The differences in sediment volumes to be released by these three reservoirs should be incorporated into the analyses informing the more general statements. It needs to be clear, in describing the sediment chemistry investigation and interpretation reports (DOI 2011 and CDM 2011), that the released sediments from all reservoirs will be subject to mixing and averaging during release, so that upon ultimate deposition Copco sediment properties are expected to dominate (will make up 68-71% of the total), and thus sediment quality in Copco is more important than the others. The J.C. Boyle thalweg sediments will be the most diluted/mixed, thus, any discussion of potential toxicity concerns related to these sediments should be qualified as contributing less to overall sediment quality than is presented in the sediment interpretive reports (DOI 2011 and CDM 2011) which do not consider proportional contribution (this is finally adequately reflected on p. 3.2-121).

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[2] J.C. Boyle: "Modeling studies indicate that drawdown would erode and flush 41 to 65 percent of the stored sediment downstream during the drawdown period (DOI 2011)." (1 MCY total per Table 2.8 = 0.41-0.65 MCY).
Copco 1: "Modeling studies indicate that the initial drawdown would flush 46 to 81 percent of the7,440,000 yd^3 of silts and clays behind the dam (DOI 2011)." (7.4 MCY total per Table 2.8 = 3.40-5.99 MCY)
Iron Gate: "DOI modeling studies indicate that this drawdown would flush 25 to 38 percent of the trapped sediments in the reservoir (primarily silts and clays)." (4.7 MCY total per Table 2.8 = 1.18-1.79 MCY)
Total volume flushed, range: 4.99 MCY – 8.43 MCY.

Chapter 3 – Affected Environment/Environmental Consequences:
SubChapter 3.2 – Water Quality

1. Table 3.2-2.Designated Beneficial Uses of Water in the Area of Analysis, pps. 3.2-5 & 3.2-6 – This table lists the designated beneficial uses established by Oregon, California and the Hoopa Valley Tribe. However, there is no discussion of "FISH" (Subsistence Fishing) as a California beneficial use. California's North Coast Basin Plan identifies FISH as an existing beneficial use of waters in the North Coast region, but does not designate specific areas where this use exists. Nonetheless, the Basin Plan establishes this as an existing use that must be protected. In California's Klamath River Total Maximum Daily Load (TMDL) staff report, FISH is identified as an existing beneficial use for the Klamath River, which is listed as impaired under Section 303(d) of the Clean Water Act (CWA). Thus, Table 3.2-2 should identify FISH, under "Aesthetics and Cultural", as an existing beneficial use in California.

2. Sections 3.2.3.4 Nutrients and Section 3.2.3.5 Dissolved Oxygen – The discussions on nutrients and low dissolved oxygen (DO) issues in Keno impoundment do not acknowledge contributions of organic matter from Klamath Straits Drain and Lost River Diversion Channel. The nutrient discussion (p. 3.2-24) should address nutrient loads to Keno Reach, and identify Klamath Straits Drain and the Lost River Diversion Channel as sources, which together contribute the second highest nutrient loads to Keno impoundment after Upper Klamath Lake.

3. Dissolved Oxygen, p. 3.2-26, 3rd paragraph – The last sentence of this paragraph should be amended, and a fourth sentence added, as follows: "Decomposition of algae transported from Upper Klamath Lake appears to be ~~the~~ a primary driver of low oxygen in the Keno Impoundment (including Lake Ewauna). Organic matter and nutrient inputs from the Lost River Basin via Klamath Straits Drain and the Lost River Diversion Channel also contribute to low dissolved oxygen levels in this reach (Sullivan et al. 2009, et al. 2011; Kirk et al. 2010). This comment also applies to a similar sentence in Section 3.2.4.3.1.4 Dissolved Oxygen, p. 3.2-61, first paragraph, 2rd sentence - "The primary cause of low summertime dissolved oxygen in the Keno Impoundment (including Lake Ewauna) is settling and decomposition of algae exported from Upper Klamath Lake (see Section 3.2.2.5)."

4. P. 3.2-34 - The last paragraph and the footnote state that the Iron Gate Turbine Venting work is already complete; however, the footnote states: "Though not final, this environmental analysis in NOAA Fisheries 2011 found no significant impact from implementation." We are not aware of the turbine venting studies being completed or available. This language should be revised to correctly reflect the status of Turbine Venting Studies. If, in fact, all feasibility and effectiveness studies for Iron Gate Dam's turbine venting are final, these studies should be made available for public review with the referenced studies reflected in the DEIS References.

5. P. 3.2-65 - The discussion references Hoopa Valley Tribe's dissolved oxygen (DO) objectives and a natural conditions clause adopted by the Tribe regarding this numeric water quality objective. Text should be amended to acknowledge that US EPA has not yet approved the mechanism to implement the natural conditions clause. We recommend adding the following sentences in the 2nd paragraph, following the 3rd sentence: "The Hoopa Valley Tribe's Water Quality Control Plan, has been approved by US EPA; however, this natural conditions clause has not yet been approved. US EPA

requires that a method be developed for determining that the DO objectives are not achievable due to natural conditions and presented for approval."

6. In Section 3.2.4.3.1.6 Chlorophyll-a and Algal Toxins - FISH (Subsistence Fishing) should be included in the list of beneficial uses adversely affected by algal toxins for both the Upper Klamath Basin (p. 3.2-68) and the Lower Klamath Basin (p. 3.2-70).

7. The discussion on p. 3.2-70 regarding the beneficial cultural uses (CUL) is misleading and should be amended to reflect that the CUL beneficial use applies not just to the Hoopa Valley Tribe's Reservation (under their EPA-approved Tribal Water Quality Control Plan), but also applies to State lands in the Klamath Basin where tribal uses occur and have been impaired, such as Karuk trust, fee and ancestral lands. The beginning of the sentence that starts with "Although the CUL beneficial use has only been approved for the Hoopa Valley Tribe thus far (see Table 3.2-2), known or perceived risks ..." should be corrected.

8. P. 3.2-94, Section 3.2.4.3.2.2 - The discussion of sediment to be released switches units (from MCY to tons) and states very different volume estimates to be released: "The results of model predictions for sediment transport following dam removal under the Proposed Action indicate that dam removal would cause a release of less than 3 million tons of fine sediment to the Klamath River downstream of Iron Gate Dam (see Figure 3.2-14)." (A similar but different volume - 5.3-8.6 MCY - is cited on p. 3.3-75.) This same paragraph goes on to list yet another value for the volume of sediment to be released: "The predicted sediment release due to dam removal under the Proposed Action ranges from 1.5 to 2.6 million tons depending on water year type" and again references Figure 3.2-14. The text and tables of the EIS should be revised to use consistent sediment units and report the same sediment values. For example, Figure 3.2-14 should be revised to be consistent with values and units reported in the text.

   P. 4-44, Section 4.4.1.1, Suspended Sediments – The second paragraph states that an estimated three million tons of sediment may be released, then calls that value a "relatively small magnitude of SSCs[3] released to the nearshore environment." This statement presumably draws on the comparison to "normal" river sediment loads discussed in Chapter 3.[4] We recommend the cumulative effects analysis clearly state that these three million tons of sediment are in addition to what would normally be carried by the river. Neither here, nor in Chapter 3, is the total sediment load during drawdown, compared clearly against sediment loads during other normal vs. flood years.

SubChapter 3.4 - Algae

1. Pps. 3.4-1 and -2, Section 3.4.2, paragraph 1 – Several regulations have been incorrectly paraphrased. We suggest revising the text to quote the water quality standard, and then describing linkages with algae. For example, the California bio-stimulatory objective does not allow nuisance conditions; however, it does not explicitly identify the parameters to be controlled to address those nuisance conditions. California's Klamath River TMDL addresses bio-stimulatory nuisance conditions by limiting nutrient levels. Additionally, California's Klamath River TMDL chlorophyll targets, specific to riverine conditions (150 ug/m2) or the reservoirs (10 ug/L), are not correctly summarized.

[3] suspended sediment concentrations

[4] Section 3.2.3.8.2, p. 3.2-31, and Section 3.2.4.3.2.2, p. 3.2-94.

2. P 3.4-7, Section 3.4.3.5, Klamath River downstream of Iron Gate Dam – This section should describe the public health postings in recent years for blue-green algae exceeding California state and World Health Organization thresholds for recreational uses, including the 2010 posting when the entire Klamath River from Iron Gate dam to the estuary was posted. Additionally, the findings of significantly elevated cyanotoxins in mussels from riverine reaches below Iron Gate Dam should be disclosed.

3. Section 3.4.3.6, Klamath Estuary and Section 3.4.3.7 – Marine Near Shore Environment – While impacts in the estuary and near shore environment from cyanobacteria have not been documented, information should be included addressing studies of effects in other estuary or near shore environments (e.g., Monterey Bay, where Miller et. al. have reported lethal effects from microcystins to sea otters). In addition, Alternative 2, for Klamath River Downstream of Iron Gate Dam (p. 3.4-17), Klamath Estuary (p. 3.4-18) and Marine Nearshore Environment (p. 3.4-19) should state that removal of the four hydroelectric dams would largely eliminate cyanobacteria blooms. Therefore releases of cyanobacteria downstream would be prevented, as well as, the potential impacts of cyanobacteria blooms (which could potentially be significant, if they approach the adverse effects seen in sea otters in Monterey Bay).

4. P. 3.4-13 to -22, Alternative 2 – The Water Quality Sub-team developed an analysis of the water quality trends anticipated from KHSA, KBRA, TMDLs, and other efforts to improve water quality and the Klamath Basin environment. That document should be consulted and incorporated into the summary of effects from KBRA and TMDL actions. The report is available at the following link: http://klamathrestoration.gov/sites/klamathrestoration.gov/files/Final%20Klamath%20WQ%20Changes%20Analysis%20Approach_08_18_2011.pdf

5. P. 3.4-2, Section 3.4.3, first paragraph, sentence 7 – While periphyton data are limited for the Klamath River, some are available, and efforts are ongoing to collect additional information. For example, as part of KHSA Interim Measure-15, periphyton has been monitored during 2011 in the Klamath River with a focus on reaches downstream of Iron Gate Dam (see: 2011 KHSA Klamath River, Periphyton Pilot Study Plan, dated 2-3-11). The discussion in this section should reference these monitoring results as well as the additional monitoring effort. (See also p. 3.4-18, Alternative 2, for Klamath River downstream of Estuary and Klamath Estuary, Long Term Effects, for Periphyton which includes the same sentence: "Moreover, the biological significant of potential increases in periphyton biomass is unknown due to uncertainty regarding the magnitude of increase in biomass required to generate a significant reduction in habitat quality for aquatic resources (NCRWQCB 2010a, Appendix 2).")

Chapter 4 – Cumulative Effects

1. P. 4-40, Section 4.4.1.1 Alternative 2: Full Facilities Removal of Four Dams; Temperature – The impact statement for long term should include the KHP reach ("…long-term (2-50 years following dam removal) alterations in daily water temperatures in and below the KHP and fluctuations in the J.C. Boyle Bypass and Peaking reaches.").

2. The cumulative effects assessment states that the Proposed Action would create an incremental effect on water temperatures which would be cumulatively considerable for spring water temperatures in the Hydroelectric Reach from Copco 1 Reservoir to Iron Gate Reservoir because it

would increase daily maximum temperatures in May and June. Spring temperature downstream of Iron Gate under Alternatives 2 and 3 would increase as compared to baseline condition, and thus are identified as an impact where the loss of extended cool periods contribute to a "significant" cumulative effect. However, the discussion should more extensively (see Section 4.4.1.1, pg 4-42) acknowledge that this increase in spring temperature brings the temperature regime closer to natural conditions and explain that, while this thermal change must be described as a NEPA cumulative effect, it is in fact, restoring temperature regimes to those characteristic of a free flowing river (instead of an altered hydrologic regime), and would benefit salmonids by reducing impacts associated with altered thermal regimes.

3. Pps. 4-51 to -52, Section 4.4.1.1, Inorganic and Organic Contaminants - In the final paragraph, the statement "Results from the 2009–2010 Secretarial Determination sediment chemistry analyses indicate that sediment deposits associated with the Proposed Action would cause no adverse effects on humans (CDM 2011)" should include reference to the conditions that qualify this statement. The No Action Alternative has no human health risk from sediments because it is assumed there is no sediment exposure. However, the Proposed Action, which could result in minimal risk of exposure at river banks or at the remaining lake terrace deposits, could result in some Regional Screening Levels being exceeded. We recommend replacing "would cause no adverse effects on humans" with "One or more chemicals are present, but at levels unlikely to cause adverse effects based on the lines of evidence."

   Additionally, the following edits are suggested for the first two full sentences on page 4-52: "Implementation of BMPs for deconstruction and re-vegetation activities that would occur in or adjacent to the Klamath River would minimize ~~eliminate~~ the potential for ~~toxic substances~~ chemicals in sediments to enter the water. With respect to bioaccumulation potential, ~~there are~~ no detected chemicals ~~exceedances of~~ exceeded applicable marine bioaccumulation screening levels (CDM 2011)."

Appendix C- Water Quality Supporting Technical Information

1. Appendix C, Section C.7 (Inorganic and Organic Contaminants), Sediment Contaminants, p. C-70. This discussion incorrectly describes the field-collected fish tissue study as a "bioaccumulation" study. The field fish collection effort was a survey only, and does not reflect controlled exposure to sediments as the contaminant source. In fact, the source of the contaminants in the field-collected fish is unknown, and cannot be correlated with sediments given the limit data available in the sediment interpretive report (CDM 2011).

Tribal Assets

3.12.3.1 Quartz Valley Tribe

1. Consider using the formal/official name for the tribe; "Quartz Valley Indian Reservation." We suggest the project team ask the Quartz Valley Tribe whether this section should describe Shasta and Karuk culture, since members are of Shasta and Karuk descent, or if the Tribe would prefer this section to remain focused on Karuk culture only.

2. Under the **Quartz Valley Tribe History** section, reference is made to the "Tribal Environmental Protection Agency." The correct title for the program is "Tribal Environmental Protection Department." The document lists some functions of the department, which appear correct. However,

please add "water quality monitoring" to the list of functions, since the Tribe collects crucial surface water information under a systematic water quality monitoring program.

3. We recommend the following changes to the cultural practices section "**Quartz Valley Tribe Cultural Practices Fishing, Trade and Barter, Religious Practices, and Oral Traditions**": ~~The Indians~~ Members of the Quartz Valley Indian Reservation are ~~related to~~ of Karuk and Shasta descent. ~~people and thus share their~~ Cultural practices and values of Karuk peoples are ~~with the general culture~~ described under 3.12.3.3. ~~for the Karuk Tribe.~~

3.12.3.3 Karuk

1. The title of this section should be "Karuk Tribe."

2. In the paragraph titled "Fishing," authors indicate Coho are called dog salmon. Chum salmon are called dog salmon, but we have not heard Coho referred to as dog salmon.

Hoopa Valley Indian Tribe

1. A section number is missing. This portion of the document should be labeled "3.12.3.4 Hoopa Valley Indian Tribe."

Yurok

1. A section number is missing. This portion of the document should be labeled "3.12.3.5 Yurok Tribe."

3.12.3.4 Resighini Rancheria

1. This section appears to be mis-numbered, apparently because section numbers were not provided for the Hoopa and Yurok sections.

General Editorial Comments

1. Chapter 2. The Action alternatives include Interim Measures and KBRA without a description of funding sources or oversight process to ensure the actions are fully implemented. We recommend the FEIS include information on potential funding sources and an implementation and management process for the Interim measures and KBRA actions.

2. Procedurally, there is a need to improve the environmental consequences description for both Alternatives 4 and 5. The level of evaluation should be comparable to that provided for Alternatives 2 and 3. The FEIS should provide a more rigorous and equitable treatment of all alternatives which provides a similar level of data and analysis for each alternative. For example, the Socioeconomic Chapter should provide specific statistics for Alternatives 4 and 5 for decommissioning, instead of stating that these alternatives increase or decrease effects when compared to Alternative 1: No action (p. 3.15-89). Of specific interest to EPA, is a comparable analysis of water quality and algae effects for all alternatives.

Comment Code	Comment Response	Change in EIS/EIR
FA_LT_1230_005-1	Master Response GEN-2 Some People Approve of Dam Removal and Others Oppose Dam Removal.	No
FA_LT_1230_005-2	The Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) will include revised information on wetland losses and mitigation in Section 3.5, Terrestrial Resources, and revised information on the expected quantity of sediment released through dam removal in Section 3.2, Water Quality. The Final EIS/EIR will also contain a next steps section (See Chapter 10) to outline the next steps that will occur in accordance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). All editorial comments received by the Environmental Protection Act (EPA) have been considered and incorporated into the EIS/EIR where appropriate. As described in Klamath Hydroelectric Settlement Agreement (KHSA) Section 3.2.1(i), the Federal Energy Regulatory Commission (FERC) record is used to form the project description for Alternatives 4 and 5. Alternatives 4 and 5 were analyzed to ensure that the review of reasonable fish passage alternatives was comprehensive. In addition, at the time of developing a reasonable range of alternatives, the Lead Agencies recognized that the inclusion of Alternatives 4 and 5 would provide an assessment of the short- and long-term effects from a broader range of reasonable alternatives. Alternatives 4 and 5 are outside the authority of the U.S. Department of the Interior (DOI), the four facilities proposed for removal are privately owned structures, and there was no provision in the KHSA to include them in the Detailed Plan for Facilities Removal (Detailed Plan). The result is differing levels of available information for alternatives carried forward in the EIS/EIR consistent with the elements of each action alternative. The editorial recommendations submitted by the comment author have been incorporated as appropriate in Volumes I and II of this Final EIS/EIR.	Yes
FA_LT_1230_005-3	A mitigation, monitoring, and reporting plan will be adopted at the time of project approval.	No
FA_LT_1230_005-4	Master Response WQ-22 Total Maximum Daily Loads (TMDLs) and the No Action/No Project Alternative (and Alternative 4). Master Response WQ-4 C and D Hydroelectric Project Impacts to Water Quality & Anticipated KHSA/Klammath Basin Restoration Agreement (KBRA) Improvements. The Trinity River total maximum daily loads (TMDLs), which are outside the area of analysis for the proposed action and alternatives, are briefly discussed with respect to water quality improvements in the Lower Klamath River, in the Draft EIS/EIR in Section 3.2.4.3.1.2,	No

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Comment Code	Comment Response	Change in EIS/EIR
FA_LT_1230_005-1 &	Master Response GEN-2 Some People Approve of Dam Removal and Others Oppose Dam Removal.	No
& FA_LT_1230_005-2 &	The EIS/EIR will include revised information on wetland losses and mitigation in Section 3.5, Terrestrial Resources, and revised information on the expected quantity of sediment released through dam removal in Section 3.2, Water Quality. The EIS/EIR will also contain a next steps section (See Chapter 10) to outline the next steps that will occur in accordance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). All editorial comments received by the Environmental Protection Act (EPA) have been considered and incorporated into the EIS/EIR where appropriate. As described in Klamath Hydroelectric Settlement Agreement (KHSA) Section 3.2.1(i), the Federal Energy Regulatory Commission (FERC) record is used to form Reclamation's Klamath Project description for Alternatives 4 and 5. Alternatives 4 and 5 were analyzed to ensure that the review of reasonable fish passage alternatives was comprehensive. In addition, at the time of developing a reasonable range of alternatives, the Lead Agencies recognized that the inclusion of Alternatives 4 and 5 would provide an assessment of the short- and long-term effects from a broader range of reasonable alternatives. Alternatives 4 and 5 are outside the authority of the U.S. Department of the Interior (DOI), the four facilities proposed for removal are privately owned structures, and there was no provision in the KHSA to include them in the Detailed Plan for Facilities Removal (Detailed Plan). The result is differing levels of available information for alternatives carried forward in the EIS/EIR consistent with the elements of each action alternative. The editorial recommendations submitted by the comment author have been incorporated as appropriate in Volumes I and II of this Final EIS/EIR.	Yes
& FA_LT_1230_005-3 &	A mitigation, monitoring, and reporting plan would be adopted at the time of Reclamation's Klamath Project approval.	No
& FA_LT_1230_005-4 &	Master Response WQ-22 Total Maximum Daily Loads (TMDLs) and the No Action/No Project Alternative (and Alternative 4). Master Response WQ-4 C and D Hydroelectric Project Impacts to Water Quality & Anticipated KHSA/Klamath Basin Restoration Agreement (KBRA) Improvements. The Trinity River total maximum daily loads (TMDLs), which are outside the area of analysis for the proposed action and alternatives,	No

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Comment Code	Comment Response	Change in EIS/EIR
	are briefly discussed with respect to water quality improvements in the Lower Klamath River, in the Draft EIS/EIR in Section 3.2.4.3.1.2, p.3.2-56. Master Response GEN – 27 Interplay between Trinity River Restoration Program (TRRP) and KBRA	
& FA_LT_1230_005-1b &	Master Response GEN-2 Some People Approve of Dam Removal and Others Oppose Dam Removal. Master Response WQ-22 Total Maximum Daily Loads (TMDLs) and the No Action/No Project Alternative (and Alternative 4). It is noted that PacifiCorp's proposed Water Quality Plan to achieve its TMDL load reductions relies entirely on dam removal.	No
FA_LT_1230_005-5 &	Meeting TMDL requirements has been included under the No Action/No Project Alternative. Though a specific plan to achieve the TMDL has not been specified in the EIS/EIR, Section 3.2 does state: "The model (*Klamath TMDL model*) -predicted lack of compliance from Iron Gate Dam to the Salmon River underlies the TMDL requirement for PacifiCorp to address water temperature and dissolved oxygen improvements (NCRWQCB 2010). The timeframes for achieving water temperature allocations required under these TMDLs will depend on the measures taken to improve water quality conditions. It is anticipated that full attainment of the TMDLs would require decades to achieve." For ammonia and chlorophyll-a and algal toxins there is a discussion of the Klamath River TMDL with the caveat that the timeframes for achieving TMDLs will depend on the measures taken to improve water quality conditions and that it is anticipated that full attainment of the TMDLs would require decades to achieve. Though a specific "comprehensive water quality management plan" has not been identified in the EIS/EIR, the EIS/EIR analysis reiterates the need for TMDL related water quality problems be addressed by the Hydroelectric Licensee. Under the No Action/No Project this entity would be PacifiCorp. The Lead Agencies acknowledge that development and implementation of a comprehensive water quality management program remains an outstanding issue for current existing conditions and would be needed under the No Action/No Project Alternative to meet TMDL requirements. Master Response WQ-22 Total Maximum Daily Loads (TMDLs) and the No Action/No Project Alternative (and Alternative 4).	No

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Comment Code	Comment Response	Change in EIS/EIR
FA_LT_1230_005-6	An additional evaluation of wetland losses was added to the text of the EIS/EIR. A description of wetland habitat types as classified by PacifiCorp in 2004 was added, and acreages were clarified. Historic maps of J.C. Boyle, Copco 1 and 2, and Iron Gate Reservoir wetlands were added along with a description of anticipated losses from the Proposed Action. Text was clarified that wetland habitat acreages are preliminary and based on habitat mapping conducted by PacifiCorp in 2004 and not jurisdictional wetland delineations. Text was added to clarify the expected acreages of wetland/riparian habitat to be restored based on the Reservoir Area Management Plan (Reclamation 2011). Figures from that Plan were added to show the anticipated restoration areas. A table was added to provide wetland habitat acreages for historic, existing, and amount to be restored per the Reservoir Area Management Plan.	Yes
FA_LT_1230_005-7	Text of Mitigation Measure TER-5 for permanent loss of wetlands, was revised to clarify that a Clean Water Act (CWA) 404 permit would be required and that the Compensatory Wetland Mitigation Plan consistent with EPA-USACE Mitigation Rule (40 CFR part 230, Subpart J) would be developed. The Compensatory Wetland Mitigation Plan would be based on Federal and State no-net-loss policies with an emphasis on on-site and in-kind restoration and enhancement of wetlands.	Yes
FA_LT_1230_005-8	To clarify the description of sediment quantities presented in the EIS/EIR, see text box in Chapter 2, titled “Existing and Future Sediment Weight and Volume in the Four Facilities with Projected Erosion Following Dam Removal." This text box has been added to the EIS/EIR to clarify the types and amounts of sediment associated with the Four Facilities. Within this text box, Table 2-8 and Table 2-9 show sediment quantities in both cubic yards and tons.	Yes
FA_LT_1230_005-9	The impact analysis is indeed based upon total sediment loads and not just the new sediment. Section 9.2.1 of U.S. Bureau of Reclamation (Reclamation) (2012d) details how the background sediment loads were computed. These background sediment loads were also included in the EIS/EIR assessments of sediment transport after dam removal.	No
FA_LT_1230_005-10	On p. 2-20 of the Draft EIS/EIR, there is a discussion of the careful consideration that went in to a drawdown schedule for the Proposed Action. Though these actions are technically part of Reclamation’s Klamath Project description, this information will be reiterated in the applicable mitigation measure sections such as Section 3.2, Water Quality, and Chapter 4, Cumulative Effects. To meet the Purpose and	Yes

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Comment Code	Comment Response	Change in EIS/EIR
	Need (Section 1.4.2) of a project meant 'to advance restoration of the salmonid fisheries in the Klamath Basin' certain mitigation measures, which are usually included as a way for a project to reduce impacts to the environment, where incorporated in the project description.	
& FA_LT_1230_005-11 &	The discussion of the Nutrient Numeric Endpoint (NNE) analysis has been removed from Draft EIS/EIR Section 3.4.4.3.2 p.3.4-15 because it does not apply to the Klamath River in Oregon. The discussion of the NNE analysis has been modified and moved to the discussion of conditions downstream of Iron Gate Dam in California, where it is directly relevant. The request/recommendation to describe or provide additional evaluation regarding the potential effects of increased flow variability and scour on periphyton biomass in the Hydroelectric Reach under the Proposed Action is not possible given the available information. The dependence of the significance call on future scouring and flow variability under the Proposed Action is qualitative but is based on an understanding of general periphyton ecology and is appropriate given the level of information available. There is no change to the significance determination.	Yes
& FA_LT_1230_005-12 &	A mitigation, monitoring, and reporting plan would be adopted at the time of Reclamation's Klamath Project approval.	No
& FA_LT_1230_005-13 &	Master Response GEN-27-Interplay between Trinity River Restoration Program (TRRP) and KBRA.	No
& FA_LT_1230_005-14 &	Revisions to the EIS/EIR Section 3.12 have been made to describe the government-to-government discussions with the Klamath Basin tribes that informed the two background technical reports: Current Effects of Implementing the KHSA and KBRA on Indian Trust Resources and Cultural Values (DOI 2012a); and 2) Potential Effects of Implementing the KHSA and KBRA on Trust Resources and Cultural Values[1] (DOI 2011). Clarifying language has been added to EIS/EIR Section 3.12 to more clearly identify when effects were evaluated on only traditionally used resources and when impact analysis included both tribal trust resources and resources traditionally used by tribes. Also Section 3.12 has been updated to include clarifying information on the resources traditionally used by the Quartz Valley Community.	Yes
& FA_LT_1230_005-15 &	The Supreme Court has held that there is only a trust responsibility where there is a trustee (the United States), a beneficiary (an Indian tribe or individual), and a trust corpus. Thus, there is no trust responsibility, as a matter of law, without a trust resource. The "relationship" mentioned by the comment author is not a	Yes

[1] Unless otherwise cited the information in this section is drawn from these reports.

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Submittal Date	December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
	"trust responsibility", but rather the government-to-government relationship of the United States to Indian tribes. EIS/EIR Section 3.12.2, Regulatory Framework, lists several Federal regulations and executive orders applicable to Tribal Trust including the following: American Indian Religious Freedom Act (AIRFA) Federal Power Act (FPA) Executive Order (EO) 13007 EO 13084 Language has been added to Section 3.12, Tribal Trust, stating that, in addition to trust responsibility associated with trust resources, the Federal Government has a government-to-government relationship with federally-recognized tribes based on, or otherwise arising from, treaties, statutes, executive orders and the historical relationship between the United States and Indian tribes.	
& FA_LT_1230_005-16 &	The process for development and approval of the On-Project Plan is described in KBRA Section 15.2.2.B. The On-Project Plan would need to go through any required environmental reviews prior to approval by Reclamation including NEPA and the Endangered Species Act (ESA) coordination if appropriate. The KBRA describes groundwater technical studies as a required element of the development of the On-Project Plan and this is described in the EIS/EIR. However, the potential requirements for other studies that may need to be conducted to develop the On-Project Plan would be speculative and are beyond the scope of the analysis of this EIS/EIR.	No
FA_LT_1230_005-17 & &	After the Draft EIS/EIR was published, legislation was introduced in Congress on November 10, 2011 (Senate Bill 1851 and House Bill 3398) to authorize restoration in the Klamath Basin in accordance with the KHSA and the KBRA. The text of the legislation can be found at http://thomas.loc.gov. As of November 2012, these two bills had been referred to committees. If the legislation granting the Secretary of the Interior the authority to make a determination and enter into the KBRA does not pass, the agreements which are KHSA and KBRA would not be implemented as originally envisioned. Without an Affirmative Determination, dam removal as described under KHSA would not move forward. Without Federal authorization and Federal funding many components of the KBRA would not be implemented and the Federal Government would not be a party to that agreement. Relicensing of the Klamath Hydroelectric Project (KHP) under the authority of the FERC is an	Yes

Comment Author	Manzanilla, Enrique
Agency/Assoc.	U.S. Environmental Protection Agency
Submittal Date	December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
	active proceeding (see comment). Without a clear direction from Congress, there would be increasing pressure by Klamath Basin stakeholders to return to the FERC process. Recall that the FERC has issued a Final EIS/EIR for the long-term relicensing of the KHP and a biological opinion has been issued for a long-term license consistent with FERC's Final EIS/EIR. Before the FERC can issue a long-term license for the operation of the KHP would need to obtain a 401 from both California's SWRCB and Oregon's DEQ. Because of the promise of the KHSA and KBRA to advance salmonid fisheries and improve water quality and PacifiCorp's good faith effort to implement the Interim Measures as described in KHSA, California and Oregon have delayed taking action on PacifiCorp's applications for Water Quality Certification pursuant to Section 401 of the CWA. The California SWRCB sent a letter to PacifiCorp extending the CWA Section 401 abeyance until June 30, 2013. The Oregon DEQ sent a letter to PacifiCorp extending the CWA Section 401 abeyance until December 31, 2012. If legislation passed and the Secretary of the Interior is given the authority to make a determination, that determination would be part of a Record of Decision based on the analysis and record for this EIS/EIR. If there is an Affirmation Determination, the States of Oregon and California would then need to concur with that determination. For additional details on what would be entailed in a Secretarial Determination and the next steps in dam removal as described in KHSA see Section 1.4.1.3.	

FA_LT_1221_004

USDA United States Department of Agriculture | Forest Service | Pacific Southwest Region

Regional Office, R5
1323 Club Drive
Vallejo, CA 94592
(707) 562-8737 Voice
(707) 562-9240 Text (TDD)

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CODE	ACTION	SURNAME & DATE
152	✓	

File Code: 2600/2350
Date: DEC 1 2 2011

Ms. Elizabeth Vasquez
Bureau of Reclamation
2800 Cottage Way
Sacramento, CA 95825

Dear Ms. Vasquez:

The Forest Service (FS) has reviewed the Klamath Facilities Removal Draft Environmental Impact Statement/Environmental Impact Report (DEIS/EIR) and has determined that the proposed action is consistent with the Klamath National Forest and Six Rivers National Forest Land Resource Management Plans. We provide the following comments.

Comment 1 - W&SR

The Klamath Basin includes several river segments designated as National Wild and Scenic Rivers (WSR). Under Section 7(a) of the WSR Act, the FS, Bureau of Land Management (BLM), and National Park Service (NPS) have federal responsibility for making a determination whether the proposed action and other action alternatives are consistent with the Act's requirements. Whether the project alternatives invade the designated WSR or diminish the scenic, recreational, fish or wildlife values present at the date of designation is the focus of the determination. To make this determination, it is necessary to assess the magnitude of effects to the WSR values.

For the proposed action, full facilities removal, the DEIS/EIR adequately provides the information needed to assess the magnitude of effects to the WSR values, including information addressing the evaluation criteria specific to each resource. However, the DEIS/EIR did not consistently provide a similar description of effects for each of the other action alternatives. In order for us to complete a WSR Section 7(a) determination responsive to all action alternatives, we request that you provide a comparable description of effects on scenic, recreational, fish or wildlife values present at the date of designation for each action alternative in the final EIS/EIR.

The WSR managing agencies understand that under the "No-Action Alternative" there is no project proposal, resulting instead in the recommencement of the Federal Energy Regulatory Commission (FERC) relicensing process. If the No-Action Alternative is chosen, a WSR Act Section 7(a) determination will be made at a later date in response to alternatives developed through the FERC relicensing process.

In January 2012, the BLM, FS, and NPS will provide a WSR Act Section 7(a) Preliminary Determination in response to the DEIS/EIR proposed action alternatives.

SCANNED

Classification	ENV-6.00
Project	12
Control No.	11094102
Folder ID	1190948
Date Input & Initials	12/21/2011 J.S.

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Thank you for the opportunity to comment. If you have questions, please contact Jerry K. Bird, Klamath Basin Coordinator, at (530) 841-4403 or Christina Boston, Pacific SW Region Wilderness and Wild and Scenic Rivers Program Leader, at (707) 562-8837.

Sincerely,

RANDY MOORE
Regional Forester

cc: Gordon Leppig, California Dept. of Fish and Game, 619 Second St., Eureka, CA 95501, Jerry K Bird, Christina J Boston

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Comment Author	Moore, Randy
Agency/Assoc.	U.S. Forest Service
Submittal Date	December 21, 2011

Comment Code	Comment Response	Change in EIS/EIR
FA_LT_1221_004-1 &	The river managing agencies have completed a Preliminary Section 7(a) Determination (Determination) on the California and Oregon Klamath Wild and Scenic Rivers based on the analysis in the Draft EIS/EIR. The Determination was completed on the Proposed Action Alternative (Alternative 2) and found, if the Preferred Alternative is somehow different than the Proposed, a supplement will be prepared on the Preferred prior to signing of a Record of Decision (ROD) and the findings will be incorporated.	No

FA_EM_1017_001

From: Schoessler, Michael
Sent: Monday, October 17, 2011 12:22:04 PM
To: BOR-SHA-KFO-Klamathsd
Subject: Requesting CD copy of DEIS for Klamath Dam Removal
Auto forwarded by a Rule
My address is:

Comment 1 - General/Other

Michael Schoessler
USDOI, Office of the Solicitor, PNW Region
805 SW Broadway, Suite 600
Portland, OR 97205

Thanks!

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Michael Schoessler

Attorney Advisor

(503) 231-2140

(503) 231-2166 (fax)

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Comment Author	Schoessler, Michael
Agency/Assoc.	U.S. Department of Interior, Office of Solicitor, PNW Region
Submittal Date	October 17, 2011

Comment Code	Comment Response	Change in EIS/EIR
FA_EM_1017_001-1 &	We thank you for your interest in the Draft EIS/EIR. A CD with a copy of the complete Draft EIS/EIR was sent to the address included in your comment on October 17, 2011.	No
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&		

FA_LT_1123_003

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CODE	ACTION	SURNAME & DATE
150		11/28

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC 20426
November 18, 2011

OFFICE OF ENERGY PROJECTS

Project No. 2082-027 – California
and Oregon
Klamath Hydroelectric Project
PacifiCorp

Ms. Elizabeth Vasquez
Bureau of Reclamation
2800 Cottage Way
Sacramento, CA 95825

Mr. Gordon Leppig
California Department of Fish and Game
619 Second Street
Eureka, CA 95501

RE: Comments on Klamath Facilities Removal Draft EIS/EIR

Dear Ms. Vasquez and Mr. Leppig:

Comment 1 - FERC

I am writing to request correction of a mischaracterization contained in the Draft EIS/EIR regarding the status of the Commission's relicensing proceeding for the Klamath Hydroelectric Project (P-2082). Contrary to the assertion, first made on page 1-17 of the document, that "the relicensing proceeding is in abeyance," the relicensing of the Klamath Hydroelectric Project is an active Commission proceeding. Further, PacifiCorp cannot "re-enter the FERC process," [1] because it has never left.

The Draft EIS/EIR correctly discloses that the Commission's Final EIS for the relicensing was issued in November 2007. At this time, four years later, we continue to wait for California and Oregon to take action on PacifiCorp's applications and either issue, deny, or waive Water Quality Certification for the project, pursuant to section 401 of the Clean Water Act. At such time, the Commission will be able to issue a licensing decision for this project.

SCANNED

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Project
Control No.
Folder I.D.
Date Input & Initials

[1] See Draft EIS/EIR at page ES-25 and elsewhere.

If you have any questions concerning this matter, please contact John Mudre at (202) 502-8902 or john.mudre@ferc.gov.

Sincerely,

Jeff C. Wright
Director
Office of Energy Projects

cc: Public Files
Mailing List

Comment Author	Wright, Jeff
Agency/Assoc.	U.S. Office of Energy Projects, Federal Energy Regulatory Commission
Submittal Date	November 23, 2011

Comment Code	Comment Response	Change in EIS/EIR
FA_LT_1123_003-1 & & & &	Here and elsewhere the EIS/EIR has been revised to read "remains active," instead of using the term "abeyance."	Yes