11.4 State Agencies

CA_EM_1003_001

From: Marcelino Gonzalez[SMTP:MARCELINO_GONZALEZ@DOT.CA.GOV]
Sent: Monday, October 03, 2011 1:36:17 PM
To: BOR-SHA-KFO-Klamathsd; KSDcomments
Subject: Sis-5, Sis-96 Klamath River Dam Removal EIS EIR Auto forwarded by a Rule

Caltrans is reviewing the EIR?EIS for potential impacts to the bridges that cross the river at I-5 and State Route 96. As indicated below, we would like to obtain a copy of the HEC-RAS model to see what the modeled water surface elevations are at our bridges.

Comment 1 - Transportation/Roadways

Assistance appreciated,

Marcelino "Marci" Gonzalez
Local Development Review
(530) 225-3369
(530) 225-3020 FAX
----- Forwarded by Marcelino Gonzalez/D02/Caltrans/CAGov on 10/03/2011 12:32 PM -----

Brett Ditzler/D02/Caltrans/CAGov 10/03/2011 11:03 AM		To Marcelino Gonzalez/D02/Caltrans/CAGov@DOT cc Subject Re: Reply: Sis-5, Sis-96 Klamath River Dam Removal EIS EIR(Document link: Marcelino Gonzalez)

Sorry for the confusion...the bedload chapter helped with the sediment transport issues. I still need the HEC-RAS model though in order to see what the modeled water surface elevations are at our bridges.

Thanks,

Brett Ditzler, P.E.
Caltrans North Region Hydraulics & Office Engineer - Redding
(530) 225-3199

Marcelino
Gonzalez/D02/Caltrans/CAGov

10/03/2011 10:59 AM

To
Brett Ditzler/D02/Caltrans/CAGov@DOT

cc

Subject
Reply: Sis-5, Sis-96 Klamath River Dam Removal EIS EIR(Document link: Brett Ditzler)

Did the bedload chapter help or would you like me to still request the model?

Marcelino "Marci" Gonzalez
Local Development Review
(530) 225-3369
(530) 225-3020 FAX

Brett
Ditzler/D02/Caltrans/CAGov

09/30/2011 12:42 PM

To
Marcelino Gonzalez/D02/Caltrans/CAGov@DOT

cc
Steve Thorne/D02/Caltrans/CAGov@DOT

Subject
Re: Sis-5, Sis-96 Klamath River Dam Removal EIS EIR(Document link: Marcelino Gonzalez)

Hi Marci,

We will need their complete HEC-RAS model in order to assess impacts to our Route 96 and I-5 bridges. Can you request this? We need at a minimum, 10, 50, and 100-year flow profiles for before and after the proposed project.

Thanks,

Brett Ditzler, P.E.
Caltrans North Region Hydraulics & Office Engineer - Redding
(530) 225-3199

Marcelino Gonzalez/D02/Caltrans/CAGov
09/23/2011 01:58 PM

To: Brett Ditzler/D02/Caltrans/CAGov@DOT
cc: Steve Thorne/D02/Caltrans/CAGov@DOT
Subject: Sis-5, Sis-96 Klamath River Dam Removal EIS EIR

Attached is the Flooding Chapter and related Appendix for the EIR/EIS for the removal of 4 dams. Potential impacts to I-5 bridge and several bridges on SR 96.

Document says there are many structures that would currently get wiped if dam failure. Since similar impacts would occur from flooding after dams removed impacts are similar to existing.

Comments, concerns or suggestions requested by October 28.

[attachment "Appendix J_Modeled Changes to the 100 year Floodplain.pdf" deleted by Brett Ditzler/D02/Caltrans/CAGov] [attachment "Klamath Dam Removal 3 6_Flood Hydrology.pdf" deleted by Brett Ditzler/D02/Caltrans/CAGov]

Marcelino "Marci" Gonzalez
Local Development Review
(530) 225-3369
(530) 225-3020 FAX

Comment Author	Gonzalez, Marcelino
Agency/Assoc.	California Department of Transportation
Submittal Date	October 03, 2011

Comment Code	Comment Response	Change in EIS/EIR
CA_EM_1003_001-1 &	The HEC-RAS model has been provided through email to the California Department of Transportation (CalTrans) on Oct 11, 2011 to: Brett Ditzler, P.E. Caltrans North Region Hydraulics & Office Engineer - Redding (530) 225-3199.	No

NOV-17-2011 THU 10:22 AM CALTRANS FAX NO. 530 225 3020 P. 01/01

CA_LT_1208_005

STATE OF CALIFORNIA------ BUSINESS, TRANSPORTATION AND HOUSING AGENCY Edmund G. Brown Jr. Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF COMMUNITY PLANNING
1657 RIVERSIDE DRIVE
P. O. BOX 496073
REDDING, CA 96049-6073
PHONE (530) 229-0517
FAX (530) 225-3020
TTY (530) 225-2019

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Flex your power!
Be energy efficient!

IGR/CEQA Review
Sis-5-58
Klamath River Dam Removal EIS/EIR
SCH# 2010062060
ADDENDUM COMMENTS

November 17, 2011

U.S. DOI and California Department of Fish and Game
619 Second Street
Eureka, CA 95501

Dear Mr. Leppig:

Thank you for the opportunity to review the Environmental Impact Statement and Environmental Impact Report (EIS/EIR) prepared for the Klamath River Dam Removal Project. The project includes the removal of Iron Gate, Copco 1 and 2, and J.C. Boyle dams and their associated facilities. The Iron Gate and Copco dams are located in Siskiyou County. Iron Gate Dam is the furthest downstream and is located at River Mile 190.

On Page 3.22-15 the EIS/EIR Section 3.22 Traffic and Transportation includes a discussion of Road Condition Effects. Due to the increase in large trucks necessary for deconstruction and construction, Caltrans requests that the analysis of road conditions include the Interstate 5 (I-5) ramp intersections affected by the project. Consistent with the EIS/EIR impact discussion, we request that following completion of dam deconstruction additional analysis of road conditions at the ramp intersections be completed and where needed, as a result of wear generated by deconstruction that repair or replacement actions be required.

Comment 1 - Traffic and Transportation

If you have any questions, please call me at (530)225-3369.

Sincerely,

MARCELINO GONZALEZ
Local Development Review
Office of Community Planning
District 2

"Caltrans improves mobility across California"

Comment Author	Gonzalez, Marcelino
Agency/Assoc.	California Department of Transportation
Submittal Date	December 08, 2011

Comment Code	Comment Response	Change in EIS/EIR
CA_LT_1208_005-1 &	Text on p. 3.22-15 of the Draft Environmental Impact Statement /Environmental Impact Report (EIS/EIR) has been changed to reflect the potential impacts to the ramp intersections at Interstate 5.	Yes

NOV-17-2011 THU 09:38 AM CALTRANS FAX NO. 530 225 3020 P. 01/01

CA_LT_1208_006

STATE OF CALIFORNIA------ BUSINESS, TRANSPORTATION AND HOUSING AGENCY Edmund G. Brown Jr, Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF COMMUNITY PLANNING
1657 RIVERSIDE DRIVE
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Flex your power!
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IGR/CEQA Review
Sis-5-58
Klamath River Dam Removal EIS/EIR
SCH# 2010062060

U.S. DOI and California Department of Fish and Game
619 Second Street
Eureka, CA 95501

Dear Mr. Leppig:

Thank you for the opportunity to review the Environmental Impact Statement and Environmental Impact Report (EIS/EIR) prepared for the Klamath River Dam Removal Project. The project includes the removal of Iron Gate, Copco 1 and 2, and J.C. Boyle dams and their associated facilities. The Iron Gate and Copco dams are located in Siskiyou County. Iron Gate Dam is the furthest downstream and is located at River Mile 190.

The primary concern for Caltrans is whether Interstate 5, State Route 96, or State Route 263 bridge structures will be negatively affected by the project. Caltrans requested the HEC-RAS model prepared for the project by the U.S. Bureau of Reclamation. Thank you for providing this information during the EIS/EIR review period. The model provides adequate information to assess the potential impacts to the highway structures. We have determined that significant impacts to the structures are not expected to occur.

Comment 1 - Traffic and Transportation

If you have any questions, please call me at (530)225-3369.

Sincerely,

MARCELINO GONZALEZ
Local Development Review
Office of Community Planning
District 2

"Caltrans improves mobility across California"

Comment Author	Gonzalez, Marcelino
Agency/Assoc.	California Department of Transportation
Submittal Date	December 08, 2011

Comment Code	Comment Response	Change in EIS/EIR
CA_LT_1208_006-1	Comment noted. Master Response GEN-1 Comment Included as Part of Record.	No

OA_LT_1130_002

Oregon

John A. Kitzhaber, MD, Governor

Parks and Recreation Department
State Historic Preservation Office
725 Summer St NE, Ste C
Salem, OR 97301-1266
(503) 986-0671
Fax (503) 986-0793
www.oregonheritage.org

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November 30, 2011

Ms. Laureen Perry
Bureau of Reclamation
2800 Cottage Way
Sacramento, CA 95825

RE: SHPO Case No. 10-2640
Klamath Dams Removal Study Proj NO. 09-KBAO-253
FOE/removal of 4 dams along Klamath River (Oregon & California)
Bureau of Reclamation
Multiple legals, , Klamath County

Dear Ms. Perry:

I have recently received a copy of the Klamath Dam EIS and in looking through this document I have several questions. These include:

Comment 1 - Cultural Resources

1). I see a discussion of California state laws and the CEQA process in the EIS but nothing regarding Oregon state statutes. While Oregon does not have a NEPA-like process such as that found in California we do have state laws that protect archaeological sites on non-federal public and private lands which should be addressed in the document.

Comment 2 - Cultural Resources

2). In Section 3.13.4 you state that 36% of the project's APE has been surveyed. Since there was disagreement between the applicant (PacifCorp) and the BLM during the dam relicensing discussions I would like to see a map of the areas currently agreed to as surveyed so that our office is able to see if there is now agreement with this statement or not.

Comment 3 - Cultural Resources

3). While it is understood that the status and possible effect on sites that have not yet been identified can not be determined until the final project design and future investigations are completed, what is the status and potential impact on known sites? You note a known burial along the Klamath River (3.13.26). Will this site be affected by the proposed removal?

Comment 4 - Cultural Resouces

4). The No action alternative (3.13-28) would mean that the dams would need to be relicensed which would entail further study of effects. Such further study would include survey of lands not completed too date and possible mitigation of sites found to be adversely affected. While it is true that the conditions and impacts would remain the same the need for a new look at the effects of the dams could result in changes to current site protection.

Comment 5 - Cultural Resources

5). (3.13-29) 32 known sites located along the shores of the reservoirs could be affected. Several hundred sites along and near the dams could be damaged or exposed from the dam removal. Oregon SHPO will be interested in seeing the CRMP that is designed for this project to address such affects (e.g., complete current survey of shoreline; post drawdown survey; mitigation of adverse effects).

Comment 6 - Cultural Resources

6). (3.13-31) 17 sites could be adversely affected by road construction and disposal. How many of these are in Oregon?

7). (3.13-33) The construction of interim fishing sites for the Klamath near Iron Gate dam are noted here. Are similar sites being considered in Oregon below the Keno or JC Boyle Dams? If so, we would like additional information concerning this rather than simply see it noted in the EIS.

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Comment 7 - Cultural Resources

Comment 8 - Cultural Resources

8). (3.13-39) Mitigation measures note continuing consultation with SHPOs on reaching eligibility determinations and working on a MOA. Our office supports such a step since we haven't really heard much about his project too date. It is regrettable that consultation ended several years ago regarding the dams relicensing process and has never amounted to much with regards to the removal process yet.

9). (3.13-40) Who do you see as being the "dam removal entity"? BOR? (I had heard something about BIA involvement?) I am wondering who will be responsible coordinating the consultation with state agencies for implementing the mitigation measures. What is the current timeline for such a process?

Comment 9 - KHSA

10). Who is the author of the Cultural Resources Report that was prepared for your office (Cardno - 11/19/2010)? It is the basis for a part of the EIS and our office needs to credit such reports to particular authors rather than an agency.

Comment 10 - Cultural Resouces

Our office looks forward to working with you on the proposed removal process and would appreciate any additional information you could get us regarding the current knowledge of project effects and site status. In order to help us track your project accurately, please be sure to reference the SHPO case number above in all correspondence.

Sincerely,

Dennis Griffin, Ph.D., RPA
State Archaeologist
(503) 986-0674
dennis.griffin@state.or.us

Comment Author	Gonzalez, Marcelino
Agency/Assoc.	California Department of Transportation
Submittal Date	December 08, 2011

Comment Code	Comment Response	Change in EIS/EIR
CA_LT_1208_005-1 &	Text on p. 3.22-15 of the Draft Environmental Impact Statement /Environmental Impact Report (EIS/EIR) has been changed to reflect the potential impacts to the ramp intersections at Interstate 5.	Yes

CA_LT_1230_010

California Regional Water Quality Control Board
North Coast Region
Geoffrey M. Hales, Chairman

Matt Rodriquez
Secretary for Environmental Protection

www.waterboards.ca.gov/northcoast
5550 Skylane Boulevard, Suite A, Santa Rosa, California 95403
Phone: (877) 721-9203 (toll free) • Office: (707) 576-2220 • FAX: (707) 523-0135

Edmund G. Brown Jr.
Governor

December 27, 2011

152 ✓ my 12/30

Ms. Elizabeth Vasquez
MP150 – Bureau of Reclamation
2800 Cottage Way
Sacramento, CA 95825

Mr. Gordon Leppig
CA Department of Fish and Game
619 Second Street
Eureka, CA 955501

Dear Ms. Vasquez and Mr. Leppig:

Regarding: Comments on *Klamath Facilities Removal Public Draft Environmental Impact Statement/Environmental Impact Report (DEIS/DEIR)*

The North Coast Regional Water Quality Control Board (Regional Water Board) appreciates the opportunity to provide comments to the Department of Interior, Bureau of Reclamation (DOI), and the California Department of Fish and Game (DFG), on the draft Environmental Impact Statement/Environmental Impact Report (DEIS/DEIR) that evaluates impacts of removing four dams on the Klamath River pursuant to the terms of the Klamath Hydroelectric Settlement Agreement (KHSA). The Regional Water Board was not a party to the KHSA, but did participate in the development of interim water quality measures while these additional studies are conducted on PacifiCorp's Klamath Hydroelectric Project (KHP). Regional Water Board staff has been working with the federal and state lead agencies as a cooperating agency under NEPA and a responsible agency under CEQA.

The Klamath River is listed as impaired under Clean Water Act section 303(d) because it does not meet water quality standards for the pollutant/stressors of temperature, organic enrichment/low DO, and nutrients. The reach of the Klamath River that includes portions of the KHP, specifically Copco and Iron Gate Reservoirs is also listed as impaired for the bluegreen algae toxin microcystin. The TMDL assigns three load allocations to the KHP in California which are detailed in Chapter 2 of the DEIS/DEIR. While the decision to remove the dams will likely result in achieving the DO objectives and load allocations assigned to the KHP, the decision to move forward with dam removal will be made by several federal and state agencies but not the Regional Water Board. In the event of an affirmative Secretarial Determination and state concurrence, the Regional Water Board will then decide whether dam removal under the KHSA complies with the TMDL, and will rely in part on this environmental analysis for information. Also, a water quality certification to accompany a federal dredge and fill permit must be issued by the State or Regional Water Board, which will also require CEQA compliance.

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The Regional Water Board is currently circulating a proposed Policy for Aquatic Ecosystem Restoration, which is intended to provide guidance on the implementation of ecological restoration projects which may result in temporary water quality impacts but that will in the long-term improve water quality conditions and provide greater support of beneficial uses than currently exists. The Policy articulates the continuing support of the Regional Water Board for the use of aquatic system restoration as one of the several existing tools to be used in the restoration and maintenance of the chemical, physical, and biological integrity of the region's waters. If the Policy is adopted into the Basin Plan, the DEIS/DEIR will provide useful information for the Regional Water Board to evaluate the Facilities Removal project within the context of the Policy.

The DEIS/DEIR is a comprehensive document that will serve the Regional Water Board's needs should the KHSA proceed. The DEIS/DEIR adequately describes the short- and long-term impacts to water quality from the decommissioning of the Klamath dams, including impacts to water chemistry, sediment chemistry, hydrology, biology, and geomorphology. In addition, it properly describes the impacts of the facility in its current condition. KHP conditions contribute to the non-attainment of beneficial uses, including the most sensitive beneficial uses: those associated with the cold water fishery (specifically the salmonid fishery), and those related to cultural uses and practices. The DEIS/DEIR adequately describes applicable and feasible Best Management Practices and mitigation measures designed to minimize soil erosion, surface runoff, and other potential adverse water quality impacts, including cumulative impacts. It also appears that important mitigation has been incorporated into the project description, particularly the timing of facility removal designed in a manner that best avoids and minimizes impacts to fisheries.

Additional, specific water quality comments are attached.

We want to thank you and your team for the impressive work completed to date and look forward to the next phase of this process.

If you have questions regarding this letter, please contact Clayton Creager at (707) 576-2666 or by email: ccreager@waterboards.ca.gov. Written correspondences or inquiries should be addressed to: North Coast Regional Water Quality Control Board, Attn.: Clayton Creager; 5550 Skylane Boulevard; Suite A, Santa Rosa, CA 95403.

Sincerely,

Catherine Kuhlman

Catherine Kuhlman
Executive Officer

111227_CSC_Klamath_EISEIRComment_Transmittal

Enclosure: Comments on *Klamath Facilities Removal Public Draft Environmental Impact Statement/Environmental Impact Report (DEIS/DEIR)*

Klamath Facilities Removal
Draft Environmental Impact / Statement / Environmental Impact Report – 09/ 2011

Commenting Agency: CA North Coast Regional Water Quality Control Board

Commenters: Clayton Creager, David Leland, Bryan McFadin, and Alydda Mangelsdorf

Comment 1 - General/Other

Section & Page Number: ES-9 and ES-10

Comment:

- Consider adding to the Klamath Basin Timeline (pp. ES-9 and ES-10) a few relevant dates associated with water quality control. This is particularly appropriate with respect to Alternatives 1 and 4 in which implementation of the Total Maximum Daily Loads (TMDLs) adopted by the States of Oregon and California, and approved by the U.S. Environmental Protection Agency (USEPA), and the Action Plan adopted by California's North Coast Regional Water Quality Control Board (Regional Water Board) will become more fundamentally key to achieving or moving towards achievement of the stated environmental goals of the project. The dates relevant to water quality control in California include:
  - ✓ 1975, Regional Water Board adopts a comprehensive basin plan for the Klamath River Basin, including designation of the river as providing Cold Freshwater Habitat (COLD); Migration of Aquatic Organisms (MIGR); Spawning, Reproduction, and /or Early Development (SPWN); Water Contact Recreation (REC1); Agricultural Supply (AGR); and Hydropower Generation (POW), among other beneficial uses.
  - ✓ 2003, Regional Water Board adopts Native American cultural use as a beneficial use of the Klamath River from the Seiad Valley Hydrologic Subarea downstream to the Klamath Glen Hydrologic Subarea.
  - ✓ Under Section 303(d) of the Clean Water Act, the USEPA lists the Klamath River as impaired for temperature, dissolved oxygen, and nutrients in , sediment in , and microcystin (Please refer to corrections provided in Table 2-7 for listing dates -- comment below)
  - ✓ In 2010, the Regional Water Board adopts a Total Maximum Daily Load (TMDL) to determine the pollutant load reductions necessary to return water quality to a condition which supports the beneficial uses of the Klamath River. The Regional Water Board simultaneously adopts revised DO objectives and an Action Plan identifying the specific actions and time frames necessary to restore water quality. USEPA approves the TMDL.

Section & Page Number: ES-17

Comment:

- The CEQA project objectives as listed on page ES-17 are consistent with the objectives of the Regional Water Board as defined in its Basin Plan.

Section & Page Number: ES-21 – ES-27

Comment: The selected project alternatives represent a reasonable range of project options.

Comment 2 - Algae

Section & Page Number: Table ES-4, footnote 9, p. ES-30

Comment: First sentence is misleading. Suggest rewording to make it clearer that increased periphyton biomass would not lead to increases in algal toxins in the Klamath River.

Comment 3 - General/Other

Section & Page Number: ES-28 – ES-36

Comment: Table ES-4, Summary of Significant and Unavoidable Impacts, should include mitigation measures already included in the project alternative design plan such as seasonally-timed facility removal plan, activities to ensure access to refugial habitat, and transport of juveniles out of high impact reaches.

Section & Page Number: Section ES.7.2, page ES-41

Comment: Baseline should include "listing under Section 303(d) of the Clean Water Act" as a result of impaired water quality and habitat conditions.

Comment 4 - Water Quality

Section & Page Number: 2.4.3.9, p. 2-44, 4th bullet

Comment: Chronic fine sediment inputs also can be associated with routine road operations, not just road failures.

Comment 5 - Sediment Transport

Comment 6 - Hydrology

Section & Page Number: 2.4.4, page 2-62

Comment: Table 2-21 describes the features to be removed and retained under Alternative 3. Please describe (or reference a discussion elsewhere in the document) the hydrologic consequences of retaining structures within the active channel. Will the natural pattern and range of flows act upon hardened structures in such a manner as to result in excessive or extreme site-specific streambed or streambank erosion? How does the retention of hardened structures affect the ability of the river to ultimately achieve a self-sustaining, dynamic equilibrium?

Comment 7 - Water Quality

Section & Page Number: Table 3.2 – 2 pages: 3.2 – 4 – 3.2 - 6

Comment: The beneficial uses listed for the Pacific Ocean should be modified to better reflect the findings of the California Ocean Plan. For example, the Ocean Plan identifies "fish migration" as a beneficial use, not "migration of aquatic organisms." Also, the Ocean Plan includes "mariculture" as a beneficial use which does not appear to be listed in Table 3.2-2. It is important to note that the 2009 Ocean Plan cited in this section is before the State Board for amendment, including the proposed amendment of information included in Table 3.2-2.

Comment 8 - Water Quality

Section & Page Number: 3.2.2.2.1, Table 3.2-4 page 3.2-9

Comment: The interstate temperature objective should also be presented:

Cold and warm should be all caps in the sentence below:
"The temperature of any cold or warm freshwater habitat shall not be increased by more than 2.8ºC (5ºF) above natural receiving water temperature."

Comment 9 - Water Quality

Section & Page Number: 3.2.2.4.6 page 3.2-17, last sentence.

Comment: The document should reference the Basin Plan, which includes the Scott River TMDL Action Plan. The work plan is not a good reference, and will be removed from the NCRWQCB website soon.

Comment 10 - Water Quality

Section & Page Number: 3.2.3.2 page 3.2-22

Comment: First sentence, third paragraph: It's worth adding sunlight or solar energy as a natural heating factor.

Comment 11 - Water Quality

Section & Page Number: 3.2.3.2 page 3.2-22

Comment: Third paragraph, last sentence:
Dunsmoor and Huntington's report indicates temperature effects of the reservoirs extend past the Salmon River.

Comment 12 - Water Quality

Section & Page Number: 3.2.4.1.1 page 3.2-36

Comment: Third paragraph: The sentence below indicates the T4BSRN simulates attainment of the temperature TMDL, which it doesn't. It does not simulate attainment of the California temperature TMDL.

"The Klamath TMDL model includes a dams-in scenario (T4BSRN) assuming full attainment of the Oregon and California TMDLs with all Four Facilities in place (Tetra Tech 2009), similar to the conditions for the No Action/No Project Alternative."

Comment 13 - Water Quality

Section & Page Number: 3.2.4.1 page 3.2-37

Comment: The EIS/EIR states that suspended sediment concentrations were modeled for the period 1961-2008, identified as background, and for conditions following dam removal. This approach appears appropriate for the purpose of establishing the degree to which suspended sediment discharges impact turbidity, suspended sediment, suspended material, and settable material. This information shows no long-term nuisance or impacts on beneficial uses.

Comment 14 - Water Quality

Section & Page Number: 3.2.4.1.4 page 3-38

Comment: California's threshold of significance for DO is contained as a newly adopted Site Specific Objective for DO in the Klamath River and is based on a spatially and temporally varying percent DO saturation under natural receiving water temperatures. Regional Board staff agrees with the proposal to initiate drawdown during winter months when flows are higher and the

Page 4

Comment 14 cont.

relative water quality impacts are lower than other times of the year. This element of the dam removal alternative seems to be designed as a mitigation but is not listed as such.

Comment 15 - Water Quality

Section & Page Number: 3.2.4.1.1 page 3.2-50

Last Sentence:
The effects of increased tributary flows on lower Klamath River temperatures were evaluated as part of the Klamath TMDL. That analysis indicated very little temperature effect on the Klamath River, and only when the tributaries were assumed to have full natural flows, an unlikely future situation.

Comment 16 - Water Quality

Section & Page Number: 3.2.4.1.1 page 3.2-51

Comment: Second paragraph -- Our review of the Klamath TMDL model results finds a temperature impact from the reservoirs that extends past Seiad Valley. The model results indicate minimal change associated with the reservoirs just upstream of the Trinity River, however. Therefore, we believe it is more accurate to state that the thermal impacts of the reservoirs prevent achievement of the water quality objective for temperature as far down as the Salmon River. This is further supported by information presented in Dunsmoor and Huntington (2006). If the statement that "water temperature from Seiad Valley (RM 129.4) to the Salmon River (RM 66.0) (the approximate location at which the reservoir temperature signal no longer persists under existing conditions), would meet water quality objectives" is based on an interpretation that beneficial uses are supported, despite the change in temperatures, that should be stated and explained.

Comment 17 - Water Quality

Section & Page Number: 3.2.4.3.1.1 (throughout)

Comment: This section doesn't highlight the most acute temperature impact of the reservoirs on salmonids: the approximately three week shift in temperatures and the consequent effect on spawning salmon. This section should clearly distinguish between temperature conditions for juveniles rearing throughout the summer and adults spawning in the fall.

Section & Page Number: 3.2.6 pages 3.2 – 149 – 3.2 - 161

Comment: Table 3.2-14, Suspended Sediment, should consider for Alternative 3, the on-going excessive streambank and streambed erosion resulting from the retention of hardened

Comment 18 - Water Quality

Comment 18 cont.

structures in the stream channel, and propose mitigation measures designed to reduce the impacts.

Comment 19 - Fish

Section & Page Number: 3.3.4.3 page 3.3-53.

Comment: The No Action/No Project Alternative is described as resulting in major stress to migrating adult and juvenile salmonids during winter months, based on the comparison of modeling results to Newcombe and Jensen (1996) Severity Index. Please report the Severity Index Rank in the text.

Comment 20 - Fish

Section & Page Number: 3.3.4.3 page 3.3-54

Comment: The text describes the environmental consequences of the No Action/No Project alternative, including the effects on dissolved oxygen (DO). Section 3.2.2 accurately depicts California's DO objectives for the Klamath River. So, Regional Water Board staff assumes that the description in Section 3.3.4 of the DO objectives being a requirement to meet 85% saturation is simply a short hand. Please add text to this section which clarifies this definition as a short-hand description.

Comment 21 - Fish

Section & Page Number: 3.3.4.3 page 3.3-74

Comment: It would be useful to the reader to make clear that the Interim Measures are measures occurring under KHSA and occur whether or not the dams are decommissioned. It would also add clarity to mention that a truck and haul operation goes hand-in-hand with the habitat improvements described for the J.C. Boyle reach.

Comment 22 - NEPA/CEQA

Section and Page Number: Table 4-4 (General) 4-22

Comment: One of the criteria for being granted an exemption from discharge prohibitions, under the proposed Regional Water Board Restoration Policy, is that "Disturbance to beneficial uses is limited to the absolute minimum by controlling the timing, character, and volume of discharge in accordance with the needs of the most sensitive beneficial uses and/or creating refugia or access to existing refugia, as necessary." (NCRWQCB 2011, page 11) If the dam removal alternative is selected the Regional Water Board staff encourages the coordination of KBRA restoration efforts with the proposed action so as to address the refugia needs of aquatic organisms that are created by the short-term impacts associated with the proposed action.

Comment 23 - NEPA/CEQA

Section and Page Number: Comparison of comments made in Section 4.4.1.1 (p. 4-43) and Section 4.4.1.3 (p. 4-53)

Comment: Section 4.4.1.1 reports that the cumulatively considerable water quality impacts associated with increased SSCs will last 1-2 months during reservoir drawdown. This does not comport with page 4-43 which states "...SSCs in the lower Klamath River would be sufficient (≥30 mg/L) to substantially adversely affect beneficial uses throughout the lower River and the Klamath Estuary for 6-10 months following drawdown (Greimann et al. 2011)." Please clarify.

Comment 24 - Water Quality

Section & Page Number: 5.5.3, page 5-100

Comment: Effects on periphyton community composition in the Hydroelectric Reach, while significant and unavoidable, would reflect the change from a reservoir to riverine setting, and thus would not necessarily be considered adverse. There are also factors under a free-flowing condition (e.g., scouring flows) that could limit the accumulation of periphyton densities to levels deleterious to water quality.

Comment 25 - Alternatives

Section & Page Number: 5.6, page 5-107, last paragraph

Comment: Suggest that the second sentence be modified to state that both Alternatives 2 and 3 would result in superior long-term beneficial environmental effects, to be consistent with the preceding sentence.

End of Comments

Comment Author	Kuhlman, Catherine
Agency/Assoc.	California Regional Water Quality Control Board, North Coast Region
Submittal Date	December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
CA_LT_1230_010-1	The timeline in the EIS/EIR was revised to include some of these events. The timeline is intended to summarize major actions in the Klamath Basin and does not capture all events. Section 3.2, Water Quality, of the EIS/EIR further describes water quality events and decisions in the Klamath Basin.	Yes
CA_LT_1230_010-2	Consistent with text clarifications in Section 3.4, the footnote has been revised to be the following: "Increased periphyton (attached algae) biomass would not lead to increased algal toxin concentrations in the Klamath River. The primary habitat for supporting seasonal nuisance and/or noxious phytoplankton (suspended algae) blooms in the Hydroelectric Reach would be eliminated and there is little reason to suspect that large blooms of *Microcystis aeruginosa* from Upper Klamath Lake would be successfully transported into the Klamath River downstream from Iron Gate Dam (see Section 3.4). Therefore, the overall occurrence of nuisance and/or noxious phytoplankton and associated toxins in the Klamath River downstream from Iron Gate Dam would be substantially reduced or eliminated."	Yes
CA_LT_1230_010-3	These measures are included in the project description in Chapter 2 d do not fit in the format of the table.	No
CA_LT_1230_010-4	Change has been made.	Yes
CA_LT_1230_010-5	Change has been made	Yes
CA_LT_1230_010-6	As stated on p. 2-61, "The Partial Facilities Removal of Four Dams Alternative would include removal of enough of each dam to allow free-flowing river conditions and volitional fish passage at all times." Alternative 3 would remove a large enough portion of the dams that the hydrology would not be affected. Text has been added to Section	Yes
CA_LT_1230_010-7	Change has been made.	Yes
CA_LT_1230_010-8	The capitalization has been corrected.	Yes
CA_LT_1230_010-9	Change has been made.	Yes
CA_LT_1230_010-10	Change has been made and now reads "Farther downstream, the presence of the Four Facilities exerts less influence and water temperatures are more influenced by solar energy, the natural heating and cooling regime of ambient air temperatures, and tributary inputs of surface	Yes

Comment Author	Kuhlman, Catherine
Agency/Assoc.	California Regional Water Quality Control Board, North Coast Region
Submittal Date	December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
CA_LT_1230_010-11	Change has been made and now reads: "By the Salmon River (River Mile [RM] 66), the effects of the Four Facilities on water temperature are significantly diminished. Downstream of the Salmon River, the influence of the dams on water temperature in the Klamath River is not discernible from the modeled data (PacifiCorp 2004a, NCRWQCB 2010a, Dunsmoor and Huntington 2006)."	Yes
CA_LT_1230_010-12	The reference to full attainment of the California temperature total maximum daily load (TMDL) has been deleted. This issue is discussed correctly in Section 3.2.4.3.1.1 Water Temperature.	Yes
CA_LT_1230_010-13	Comment noted. No change needed.	No
CA_LT_1230_010-14	Draft EIS/EIR Section 3.2.5 Mitigation Measures states that "the timing of reservoir drawdown under the Proposed Action was optimally developed to minimize environmental effects (i.e., high suspended sediment concentrations, low dissolved oxygen concentrations) (see also Section 2, Proposed Action and Description of the Alternatives)."	No
CA_LT_1230_010-15	Revised EIS/EIR as follows: "Within the period of analysis (i.e., 50 years), implementation of the National Oceanic and Atmospheric Administration (NOAA) Fisheries Service 2010 Biological Opinion (BO) mandatory flows and California Department of Fish and Game (CDFG) Code Section 5937 instream flow mandate for tributaries to the mainstem Klamath River (see Section 2.3.1 and Section 3.2.4.1, No Action/No Project Alternative) would increase seasonal stream flow and may result in minor increases in water temperatures in the Klamath River downstream from Iron Gate Dam during summer and fall months." Footnote: 5 The effects of increased tributary flows on lower Klamath River temperatures were evaluated as part of the analyses conducted for the California Klamath River TMDL development. The evaluation indicated little temperature effect on the Klamath River, and only when the tributaries were assumed to have full natural flows (see Section 4.2.4 of North Coast Regional Water Quality Control Board [NCRWQCB] 2010b)."	Yes
CA_LT_1230_010-16	Change has been made to reflect Salmon River rather than Seiad Valley. Paragraph now reads as follows: "The Klamath TMDL model indicates that under the No Action/No Project Alternative (similar to TMDL T4BSRN scenario), water temperatures from Iron Gate Dam (RM 190.1) to the Klamath Estuary (RM 0-2) would improve towards modeled natural conditions (similar to the TMDL T1BSR scenario) (NCRWQCB 2010a). Some delayed warming of springtime water temperatures (February-March) and delayed cooling of late summer/fall (August-November) water temperatures would still occur under the No Action/No Project Alternative due to the large thermal mass of Copco 1 and Iron Gate Reservoirs. This temporal shift may continue to occur under the No Action/No Project Alternative from	Yes

Comment Author	Griffin, Dennis
Agency/Assoc.	Oregon Parks and Recreation Agency
Submittal Date	November 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
	information is not known at this time. Should an affirmative alternative be selected, additional efforts to identify historic properties would be done in consultations under NHPA Section 106.	
& OA_LT_1130_002-7 &	As noted in the Chapter 2 of the Draft EIS/EIR, only one interim fishing site is being proposed in the stretch of the Klamath River between the Iron Gate Dam and Interstate 5. No interim fishing sites are proposed for construction in Oregon.	No
OA_LT_1130_002-8	Master Response GEN-1 Comment Included as Part of Record.	No
OA_LT_1130_002-9	As noted in Chapter 1 of the Draft EIS/EIR, the Secretary of the Interior will designate the Dam Removal Entity (DRE) as a part of an Affirmative Determination. A mitigation, monitoring, and reporting plan will be presented in the Final EIS/EIR that outlines implementation, monitoring and permitting responsibilities for the mitigation measures described in the Draft EIS/EIR.	No
OA_LT_1130_002-10	The Cultural Resources Report was authored by John Nadolski at Cardno.	No

Comment Author	Kuhlman, Catherine
Agency/Assoc.	California Regional Water Quality Control Board, North Coast Region
Submittal Date	December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
CA_LT_1230_010-20	The EIS/EIR text has been revised to be consistent with the Basin Plan, as follows, "Klamath TMDL model results for riverine conditions between Link River Dam and the upstream end of J.C. Boyle Reservoir predict that dissolved oxygen concentrations will meet the 6.5 mg/L objective year round and achieve the modeled natural conditions baseline during the warm summer and fall months (see subsection under Section 3.2.4.3.1, Upper Klamath Basin). Thus, full attainment of the Oregon TMDLs would eventually be beneficial for dissolved oxygen in this reach. Under full TMDL compliant conditions, the California 90 percent saturation (October 1-March 31) and 85 percent saturation (April 1-September 30) objective (based on natural receiving water temperatures; see Table 3.2-4) is also met at state line under the No Action/No Project Alternative (see subsection under Section 3.2.4.3.1). Thus, full attainment of the Oregon and California TMDLs would eventually be beneficial for dissolved oxygen in the Hydroelectric Reach. Full attainment could require decades to achieve and it is highly dependent on improvements in dissolved oxygen in Upper Klamath Lake and the upstream reach from Link River Dam to J.C. Boyle Dam (particularly Keno Impoundment and Lake Ewauna)."	Yes
CA_LT_1230_010-21	Interim measures prescribed in the Klamath Hydroelectric Settlement Agreement (KHSA) and described in Chapter 2 of the EIS/EIR are being completed by PacifiCorp. PacifiCorp initated work on the actions described in these measures following signing of the KHSA and will continue as described in Chapter 2. In the event that the dams are not decommissioned PacifiCorp has no obligation to perform those Interim Measures not included as part of the Interim Conservation Plan (ICP). Those non-ICP Interim Measures are detailed in Appendix C of the KHSA. Master Resposne AQU-34A-Trap and Haul/Keno Water Quality. Master Response WQ-4D-Hydroelectric Project Impacts to Water Quality & Anticipated KHSA/KBRA Improvements. As noted in the Draft EIS/EIR on p. 2-39, trap and haul around Keno is seen as a temporary solution, for a single fish stock (fall Chinook adults) and would only be done seasonally when water quality cannot meet certain criteria (U.S. Department of the Interior [DOI] 2007; NOAA National Marine Fisheries Service [NOAA Fisheries Service] 2007 - modified fishway prescriptions). These conditions generally occur during the period July- October, however they can occur over a broader period on occasion. In some years it may not be necessary. In the long run, implementation of Klamath Basin Restoration Agreement (KBRA) and TMDLs may eliminate the need for trap and	No

Comment Author	Kuhlman, Catherine
Agency/Assoc.	California Regional Water Quality Control Board, North Coast Region
Submittal Date	December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
	haul around Keno Impoundment/Lake Ewauna, or sooner if engineering solutions to the low summer dissolved oxygen (DO) in the Keno reach can be found and implemented.	
CA_LT_1230_010-22	KBRA restoration efforts would be coordinated with the removal of the Four Facilities, whenever feasible, to address refugia needs of aquatic organisms.	No
CA_LT_1230_010-23	The comment author has identified an error on p. 4-53 of the Draft EIS/EIR. Suspended sediment concentrations (SSCs) in the lower Klamath River would be sufficient to substantially adversely affect beneficial uses throughout the lower River and Klamath Estuary for 6-10 months following drawdown (Bureau of Reclamation [Reclamation] 2012d), as described on p. 4-43. The text has been revised on p. 4-53, Section 4.4.1.3 Mitigation Measures, to state “Suspended sediment concentrations would remain a cumulatively considerable water quality impact for up to 6-10 months following reservoir drawdown. DO levels would remain a cumulatively considerable impact for up to 2 years after reservoir drawdown.”	Yes
CA_LT_1230_010-24	Section 5.5.3 is a summary of the analysis presented in Section 3.3. The analysis on algae presented Section 3.3 has undergone revision in response to comments received on the Draft EIS/EIR. These revisions are now also reflected in Section 5.3.3.	No
CA_LT_1230_010-25	In Section 5.8, Environmentally Preferable/Superior Alternative, the second sentence has been deleted because it is redundant.	Yes

STATE OF CALIFORNIA — Edmund G. Brown Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
(916) 657-5390 - Fax

CA_LT_1003_002

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D. F. G. – EUREKA

September 29, 2011

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

RE: SCH# 2010062060 Klamath Facilities Removal Project Draft EIS/EIR: Siskiyou County.

Dear Mr. Leppig:

Comment 2 - Cultural

Comment 1 - Cultural

The Native American Heritage Commission (NAHC) has reviewed the Notice of Completion (NOC) referenced above. The California Environmental Quality Act (CEQA) states that any project that causes a substantial adverse change in the significance of an historical resource, which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA Guidelines 15064(b)). To comply with this provision the lead agency is required to assess whether the project will have an adverse impact on historical resources within the area of project effect (APE), and if so to mitigate that effect. To adequately assess and mitigate project-related impacts to archaeological resources, the NAHC recommends the following actions:

- ✓ Contact the appropriate regional archaeological Information Center for a record search. The record search will determine:
  - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
  - If any known cultural resources have already been recorded on or adjacent to the APE.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.
- ✓ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
- ✓ Contact the Native American Heritage Commission for:
  - A Sacred Lands File Check. . **USGS 7.5 minute quadrangle name, township, range and section required.**
  - A list of appropriate Native American contacts for consultation concerning the project site and to assist in the mitigation measures. **Native American Contacts List attached.**
- ✓ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
  - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
  - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
  - Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Comment 3 - Cultural

Comment 4 - Cultural

Sincerely,

Katy Sanchez

Katy Sanchez
Program Analyst
(916) 653-4040

cc: State Clearinghouse

Native American Contact List
Siskiyou County
September 29, 2011

Quartz Valley Indian Community
Harrold Bennett, Chairperson
13601 Quartz Valley Road Karuk
Fort Jones , CA 96032 Shasta
tribalchair@qvir.com Upper Klamath
(530) 468-5907
(530) 468-5908 Fax

Klamath Tribe
PO Box 436 Klamath
Chiloquin , OR 97624 Modoc
taylor.david@klamathtribes.
(541) 783-2219
541-783-2029

Quartz Valley Indian Community
Evette Lewis, Cultural Resources Coordinator
13601 Quartz Valley Road Karuk
Fort Jones , CA 96032 Shasta
qvirmichelle@yahoo.com Upper Klamath
(530) 468-5907
(530) 468-5908 Fax

Quartz Valley Indian Community
Rebekah Sluss, Environmental Coordinator
13601 Quartz Valley Road Karuk
Fort Jones , CA 96032 Shasta
qvirmichell@yahoo.com Upper Klamath
(530) 468-5907
(530) 468-5908 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH# 2010062060 Klamath Facilities Removal Project Draft EIS/EIR: Siskiyou County.

Comment Author	Sanchez, Katy
Agency/Assoc.	California Native American Heritage Commission
Submittal Date	October 03, 2011

Comment Code	Comment Response	Change in EIS/EIR
CA_LT_1003_002-1 & &	As presented in EIS/EIR 3.13, Cultural and Historic Resources, record searches were conducted at the appropriate Information Centers to obtain information on known cultural resources within the study area. The level of additional surveys required will be determined based on the selected alternative, its specific area of potential effect, and mitigation measures, through the NHPA Section 106 consultations if applicable, during the subsequent planning phases.	No
CA_LT_1003_002-2	If the U.S. DOI selects an alternative other than the No Action Alternative, cultural resource studies would follow state and federal guidelines for archaeological studies. Reports will be prepared to the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, Oregon and California State Historic Preservation reporting guidelines, and other professional standards. Site records will be completed on the appropriate state forms as available from Oregon and California State Historic Preservation Offices (SHPO). All survey reports and site records will be filed with the appropriate California Historic Resources Information Center and with the Oregon SHPO.	No
CA_LT_1003_002-3	The Native American Heritage Commission (NAHC) was contacted and they conducted a Sacred Lands File Check and provided Indian Tribes contacts. This information is incorporated as appropriate in EIS/EIR Section 3.13, Cultural and Historic Resources. The DOI conducted Indian Tribes consultations throughout the NEPA process.	No
CA_LT_1003_002-4	Project related impacts and potential mitigation measures for archaeological resources are presented in EIS/EIR Section 3.13, Cultural and Historic Resources, and include the development of agreements, cultural resources management plans, plan of action for burials, and inadvertent discovery plans, all through consultations with Indian Tribes. Federal and/or State laws pertaining to historic preservation and human remains will be followed as applicable.	No

&

CA_LT_1230_008

STATE OF CALIFORNIA—NATURAL RESOURCES AGENCY

EDMUND G. BROWN, JR., GOVERNOR

CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE (415) 904-5200
FAX (415) 904-5400
TDD (415) 597-5885

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December 27, 2011

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

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

SCANNED

Subject: Klamath Facilities Removal DEIS/EIR

Dear Ms. Vasquez and Mr. Leppig:

Comment 1 - General/Other

The following comments on the Draft Environmental Impact Statement/Report for the proposed Klamath Facilities Removal project are provided by the California Coastal Commission.

Chapter 6 of the document states that "The removal of The Four Facilities would be subject to multiple federal and state statutes and local planning regulations. Table 6.1 lists the federal statute or requirement, the section it is described in, any relevant permits or processes required, and the status of compliance. Table 6.2 provides the regulatory requirements of the State of California . . . ." Table 6.1 lists the Coastal Zone Management Act and states that the relevant permits and processes are the EIS/EIR and a coastal zone consistency certification. Table 6.2 lists the California Coastal Management Act and states that the relevant permits and processes are a consistency determination.

Chapter 6 also states that "Some questions remain over the ultimate applicability of local regulations depending on the selection of the Dam Removal Entity (DRE)(responsible for dam deconstruction) or Hydropower Licensee (responsible for taking over the dams and operations). Future environmental analysis and compliance documentation of the Definite Plan and the Klamath Basin Restoration Agreement (KBRA) will specify the applicable regulations with greater certainty once the selection of the Dam Removal Entity or hydropower licensee is made."

These comments serve to clarify the potential regulatory role of the California Coastal Commission given the present uncertainty of the proposed project and the implementing and/or

Elizabeth Vasquez and Gordon Leppig
Page 2

Comment 1 cont.

permitting federal agency. If the Klamath Facilities Removal project becomes a federal agency activity (e.g., Bureau of Reclamation, Corps of Engineers) which would affect the coastal zone (notwithstanding the activity's location inland of the coastal zone), then it is the federal agency's responsibility for complying with federal Coastal Zone Management Act (CZMA) federal consistency requirements (i.e., prepare and submit to the California Coastal Commission a consistency *determination*).

However, if the Klamath Facilities Removal project becomes a non-federal agency activity and a federal agency is issuing a permit or license or authorization to another entity, then that entity is responsible for CZMA compliance (i.e., prepare and submit to the California Coastal Commission a consistency *certification*); in addition, the federal agency cannot issue the permit/license/authorization until the Commission has concurred with the consistency certification. Under this scenario, because the project is located inland of the coastal zone, the Commission would first need to obtain permission from NOAA's Office of Ocean and Coastal Resource Management (OCRM) to review the project under the CZMA. This permission would be sought once the Commission receives notice that an application has been made to a federal agency for the non-federal agency project. This scenario would also be applicable should the Klamath Facilities be retained and a hydropower licensee apply for federal authorization (e.g., from the Federal Energy Regulatory Commission) to take over the Klamath River hydropower facilities and operations (i.e., a consistency certification would need to be prepared by the proposed hydropower licensee and submitted to the Coastal Commission, should the Commission be granted permission by OCRM to review the proposed hydropower license).

Therefore, the Commission suggests that: (1) the language in Table 6.1 be modified to state that the relevant permits and processes are the EIS/EIR and a **consistency determination or consistency certification**; and (2) the language in Table 6.2 be modified to state that the statute is the **California Coastal Act** and the relevant permit and processes are a **consistency determination or consistency certification**.

Comment 2 - Approves of Dam Removal

While the Commission staff has not been able to comprehensively review the voluminous DEIS/R, our review of the Executive Summary and selected chapters indicates that the preferred alternative (removal of dams and related facilities) would improve and protect coastal resources, particularly water quality, fisheries, aquatic habitat, recreation, and archaeological resources. As stated in our July 21, 2010, comment letter to the Bureau and the Department on the Notice of Intent and Notice of Preparation to prepare an EIS/EIR for implementing the Klamath Hydroelectric Settlement Agreement, the Commission staff believes that the removal of the PacifiCorps dams on the Klamath River would affect the coastal zone and will require Commission review of a federal consistency determination (if the project is a federal activity) or a consistency certification (if the project is licensed, permitted, or assisted by a federal agency). The federal consistency submittal should include a finding that the proposed project is consistent with the California Coastal Management Program and should contain sufficient information for the Commission to assess the project's effect on the coastal zone.

Please contact me at (415) 904-5288 or lsimon@coastal.ca.gov should you have any questions regarding the preparation and submittal of a consistency determination or certification.

Sincerely,

Larry Simon
Federal Consistency Coordinator

cc: Robert Merrill, CCC – North Coast District

Comment Author	Simon, Larry
Agency/Assoc.	California Coastal Commission
Submittal Date	December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
CA_LT_1230_008-1 &	The following changes will be made to Draft EIS/EIR: (1) the language in Table 6.1 will be modified to state that the relevant permits and processes are the EIS/EIR and a consistency determination or consistency certification; and (2) the language in Table 6.2 will be modified to state that the statute is the California Coastal Act (CCA) and the relevant permit and processes are a consistency determination or consistency certification.	Yes
&		
CA_LT_1230_008-2 &	Comment Noted. Master Response GEN-2 Some People Approve of Dam Removal, Others Oppose Dam Removal.	No
&		
&		

CA_LT_1130_003

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

NOV 30 2011

NOV 28 2011

Ms. Elizabeth Vasquez
MP150 – Bureau of Reclamation
2800 Cottage Way
Sacramento, CA 95825

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

Dear Ms. Vasquez and Mr. Leppig:

COMMENTS ON *KLAMATH FACILITIES REMOVAL PUBLIC DRAFT ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT* (DEIS/DEIR)

The State Water Resources Control Board (State Water Board) appreciates the opportunity to comment on the DEIS/DEIR prepared by the United States Bureau of Reclamation and the California Department of Fish and Game (CDFG). The comments focus primarily on resource areas under the jurisdiction of the State Water Board. In addition to general comments in this letter, more specific comments are provided in the attachment.

The DEIS/DEIR was developed to fulfill the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements for environmental review to support the upcoming Secretarial Determination that is required as part of the Klamath Hydroelectric Settlement Agreement (KHSA). The Secretarial Determination involves a decision by the Secretary of the Department of Interior regarding whether removal of the four dams on the Klamath River, which are part of the Klamath Hydroelectric Project (KHP), will advance salmon restoration and is in the public interest. The Klamath Basin Restoration Agreement (KBRA) is considered a connected action for the purpose of NEPA and CEQA and a programmatic level environmental review of the KBRA is included in the DEIS/DEIR. For purposes of the KHSA, the State Water Board is a responsible agency under CEQA.

It is clear from the DEIS/DEIR and the additional technical studies completed as part of the Secretarial Determination process that substantial effort has gone into providing a comprehensive analysis of environmental impacts associated with KHSA implementation. The DEIS/DEIR incorporates the extensive analysis performed to develop the Klamath River Total Maximum Daily Load (TMDL). The TMDL was developed by the North Coast Regional Water Quality Control Board, in cooperation with the Oregon Department of Environmental Quality, to address Klamath River water quality impairments that include temperature, organic enrichment/low dissolved oxygen, nutrients, and microcystin toxins. The DEIS/DEIR builds on the TMDL and additional studies to augment the large amount of information generated during the Federal Energy Regulatory Commission (Commission) relicensing process.

SCANNED

Ms. Elizabeth Vasquez
Mr. Gordon Leppig

NOV 28 2011

State Water Board staff submitted scoping comments during the initial NEPA/CEQA scoping process. Issues raised in those comments have, for the most part, been addressed in the DEIS/DEIR. In general, the DEIS/DEIR covers a reasonable range of alternatives to the Proposed Action (i.e., removal of Iron Gate, Copco 1, Copco 2 and J.C. Boyle Dams). Although a three dam removal alternative (i.e., Iron Gate, Copco 1 and Copco 2 Dams) is not analyzed in the DEIS/DEIR, the document states, and State Water Board staff agrees, that sufficient information is provided to enable this option to be analyzed, if necessary. The significance criteria utilized in the DEIS/DEIR for resources under the State Water Board's jurisdiction (i.e., water quality, algae, water rights/water supply and aquatic resources) are well-defined and appropriate. State Water Board staff also agrees that, notwithstanding the impacts on water quality associated with the hydroelectric facilities, the presence of the dams is considered the baseline condition for the purpose of NEPA and CEQA.

For the CEQA No Project alternative, the DEIS/DEIR correctly states that the appropriate alternative is existing conditions and what would reasonably be expected to occur if the proposed project is not approved. If the proposed project is not approved, the facilities will operate under the current license for an unspecified period of time, and the water quality certification process for the Commission's relicensing proceeding will continue. Because federal agencies have set mandatory conditions requiring modifications to the hydroelectric facilities, it is reasonable to anticipate that the relicensing process would result in structural differences from the current configuration. The state water quality certification agencies and the Commission have not yet issued their decisions. These decisions could obviate the need for some of the modifications required by the federal agencies' mandatory conditions. The water quality certification agencies and the Commission also have authority to deny approval of the project. Accordingly, the ultimate result of the Commission's relicensing proceeding is uncertain. The DEIS/DEIR's alternatives include the likely range of potential outcomes of the Commission's relicensing proceeding. Therefore, although the NEPA No Action alternative does not describe a long-term outcome to project denial, the DEIS/DEIR as a whole adequately addresses the range of reasonably foreseeable long-term outcomes.

Comment 1 - CEQA

In some instances, the language in the DEIS/DEIR is unclear regarding actions that have been or will be taken in California. The KHSA specifically defines the state of California to mean the California Natural Resources Agency (Resources Agency) and CDFG. The Resources Agency and CDFG are signatories to the KHSA and KBRA. The State Water Board is not a party to either agreement and maintains its independent authority and jurisdiction over water quality and water rights in California. The State Water Board also retains authority to address issues related to public trust and the waste and unreasonable use of water in California. The DEIS/DEIR should be more clear that the State Water Board is not a signatory and is not and cannot be bound by the terms of the agreements.

The State Water Board is designated as the state water pollution control agency for all purposes stated in the Federal Water Pollution Control Act. (33 U.S.C. § 1251, et seq.) (Wat. Code, §13160.) As a participant in the Commission proceeding to relicense the KHP, the State Water Board is required to issue water quality certification under Section 401 of the Clean Water Act (33 U.S.C. § 1341) prior to the issuance of any new Commission license. The State Water Board adopted Resolutions No. 2010-0024, No. 2010-0049, and No. 2011-0038, which hold the KHP water quality certification process in abeyance contingent upon ongoing progress towards KHSA implementation, including a positive Secretarial Determination by April 30, 2012. If a positive Secretarial Determination is issued and the other requirements of the KHSA are met, no new Commission license will be required because the decision-making and implementation processes outlined in the KHSA will replace the Commission's relicensing process for the KHP. We look forward to the upcoming Secretarial Determination resulting from the KHSA and final DEIS/DEIR.

If you have questions regarding this letter, please contact Ms. Jennifer Watts at (916) 341-5397 or by email: jwatts@waterboards.ca.gov. Written correspondences or inquiries should be addressed to: State Water Resources Control Board, Division of Water Rights, Attn.: Jennifer Watts, P.O. Box 2000, Sacramento, CA, 95812-2000.

Sincerely,

Caren Trgovcich
Chief Deputy Director

Enclosure: Attachment A

cc: Ms. Catherine Kuhlman
Executive Officer
North Coast WQCB
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403

Attachment A: State Water Resources Control Board's Specific Comments on *Klamath Facilities Removal Public Draft Environmental Impact Statement/Environmental Impact Report*, dated September 2011

Section or Page No.	Comment
Page 1-23	Footnote 12 specifies the federal agencies involved in KBRA negotiations. A similar note for state agencies would be appropriate.
Page 2-38	Additional clarification is needed in the discussion of the CEQA specific analysis for KBRA implementation. The text should use "CDFG" rather than "California."
Page 2-38	The DEIS/DEIR states that CDFG, as the CEQA lead agency, has agreed to consider those portions of the KBRA elements located within California in a programmatic fashion. Table 2-15 provides an overview of programs included in the KBRA. To better understand how future actions associated with the KBRA could cause impacts to resources under the jurisdiction of the State Water Board, additional detail should be added to identify KBRA measures that either will take place in California or that could affect resources in California.
Page 2-19	The Project Description (Chapter 2) provides a graphical representation of the projected flow conditions downstream of Iron Gate Dam in Figure 2-8 for an average year, a dry year, and a wet year. Additional detail regarding how the projected Klamath River stream flows (i.e., KBRA flows) are estimated and the underlying assumptions on which the flows are based should be added to the DEIS/DEIR.
Page 2-19	A footnote to Figure 2-8 indicates that minimum flows may change in the future due to the final Drought Plan required by the KBRA or future actions associated with the Endangered Species Act. Clarify the extent to which the Drought Plan may affect stream flow conditions in California and provide, if possible, an estimate for the range of stream flows expected to occur during drought conditions.
Section 3.2	Various models are used to assess the effects on water quality that result from the alternatives examined in the DEIS/DEIR. Some models utilize flows projected under the KBRA and other models utilize flows that correspond with baseline conditions. For example, the predictions for water temperature and dissolved oxygen utilize baseline flow conditions based on the TMDL water quality model output. Clarify the degree to which changes to stream flow expected under the KBRA are incorporated into the effects analysis for water quality, algae, and aquatic resources.

Comment 2 - KBRA

Comment 3 - CEQA

Comment 4 - KBRA

Comment 5 - Hydrology

Comment 6 - Water Quality

Attachment A: State Water Resources Control Board's Specific Comments on *Klamath Facilities Removal Public Draft Environmental Impact Statement/Environmental Impact Report*, dated September 2011

Section or Page No.	Comment
Page 3.2-116	Figures 3.2-24 and 3.2-25 depict TMDL model predictions that indicate pH may exceed water quality standards during the summer months in the Klamath River downstream of Iron Gate Dam to the confluence with the Scott River. The discussion of pH states that the high pH values are based on model results that predict increased periphyton growth and increased photosynthesis below Iron Gate Dam, but that increased scour due to high spring flows could reduce periphyton at that site. Clarify how changes in stream flow under the Proposed Action lead to increased scour in both the Hydroelectric Reach and the Klamath River downstream of Iron Gate Dam.
Section 3.8	The effects assessment for water supply for several of the KBRA elements (e.g., Off-Project Water Reliance Program, Water Use Retirements Program, Water Diversion Limitations) mentions how the geographic separation between these elements and the hydroelectric facility removal eliminates negative effects to water supply beyond those effects already identified for facilities removal. The water supply analysis does not cover changes to hydrology within and downstream of the hydroelectric facilities. To improve clarity, describe the relationship, if any, between the KBRA elements discussed in this section and stream flows within and/or downstream of the Hydroelectric Reach.
Page 3.3-87	Interim Measure 16 provides for the removal of screened diversions on Shovel Creek and Negro Creek and relocation of these diversions to the Klamath River to provide additional flow that will benefit anadromous fish, resident redband trout, and benthic macroinvertebrates. Clarify how far upstream the current diversions are located to better quantify the extent of habitat improvement in those tributaries.
Page 3.8-14	The section on water supply and water rights describes the measures that will be taken to relocate the City of Yreka water supply pipeline and states that the pipeline will need to be disconnected for "a short amount of time." Describe what is meant by "a short amount of time" and, if possible, estimate the water storage supply needed by the City of Yreka during the water supply pipeline relocation to ensure that water supplies are not decreased beyond what is needed for public health and safety.
Page 3.8-17	The Water Rights/Water Supply section describes how Interim Measure 16 calls for the relocation of PacifiCorp Energy's (PacifiCorp) point of diversion for Shovel Creek and Negro Creeks, which will require modification of PacifiCorp's water rights. PacifiCorp is required to submit a petition to the State Water Board, Division of Water Rights to request modification of the point of diversion.

Comment 7 - Water Quality

Comment 8 - Water Rights/Supply

Comment 9 - Fish

Comment 10 - Water Supply/Rights

Comment 11 - Water Supply/ Rights

Attachment A: State Water Resources Control Board's Specific Comments on *Klamath Facilities Removal Public Draft Environmental Impact Statement/Environmental Impact Report*, dated September 2011

Comment 12 - Groundwater

Section or Page No.	Comment
Page 3.8-26	Mitigation Measures Associated with Other Resource Areas states "Water supplies for the campgrounds would most likely be supplied through wells placed on the new sites as appropriate. There would be no impact to water rights or supplies from the implementation of REC-1." If wells are placed on the new sites for campgrounds, there could be an impact to the groundwater supply from implementation of REC-1. Describe what measures will be taken to assure that groundwater quality is suitable for use at the campground, and explain how implementation of REC-1 would not impact the groundwater supply. If needed, discuss any additional mitigation measures that may be necessary.

Comment Author	Trgovcich, Caren
Agency/Assoc.	California State Water Resources Control Board
Submittal Date	November 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
CA_LT_1130_003-1	The Lead Agencies recognize the California State Water Resources Control Board (SWRCB) maintains its independent authority and jurisdiction over water quality and water rights in California. Table 6-1 lists the laws, rules, regulations, executive orders, and other authorities the project must comply with, including Sections 401 and	No
CA_LT_1130_003-2	The non-Federal parties to the KBRA are listed in Table 2-14 of the	No
CA_LT_1130_003-3	This text has been revised. California has been replaced with “CDFG” on p. 2-38.	Yes
CA_LT_1130_003-4	A column indicating the state where each KBRA program if known would be undertaken has been added to Table 2 15 as requested.	Yes
CA_LT_1130_003-5	Additional details about the hydrology modeling assumptions are included in Reclamation (2012d), “Hydrology, Hydraulics and Sediment Transport Studies for the Secretary’s Determination on Klamath River Dam Removal and Basin Restoration,” Technical Report No. SRH-2011-02. Prepared for Mid-Pacific Region, Bureau of Reclamation, Technical Service Center, Denver, CO. This report is available on informed/secretarial-determination/role-of-science/secretarial-determination-studies The drought plan was completed subsequently to the publication of the draft EIS. In lieu of the completed drought plan, Reclamation made assumptions of its content as stated in Appendix E of Reclamation (2012d). A wide range of hydrologic conditions were simulated in Reclamation (2012d), included projected conditions under climate change. The projected stream flows under several conditions are given in the report.	No
CA_LT_1130_003-6	KBRA hydrology is included in the one-dimensional sedimentation and river hydraulics model (SRH-1D) used to determine short-term suspended sediment concentrations under the Proposed Action and dam removal alternatives. Details can be found in Reclamation (2012d). KBRA hydrology in also included in RBM10 water temperature modeling conducted for the Klamath Dam Removal Secretarial Determination Studies (Perry et al. 2011). Additional details of the models used in the water quality analyses (and associated analyses in Section 3.3 Aquatic Resources and Section 3.4 Algae) are presented in Draft EIS/EIR Section 3.2.4.1 (p. 3.2-36 to 3.2-40) and Appendix D. KBRA hydrology is not included in the Federal Energy Regulatory Commission (FERC) or TMDL numeric models, which are used to	No

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Submittal Date	November 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
	analyze the effects of the Proposed Action and alternatives on various water quality parameters (e.g., water temperature, dissolved oxygen, pH) and were developed prior to the KBRA. Recognizing that implementation of many elements of the KBRA are unknown and not reasonably foreseeable at this time, the connected action analysis is being undertaken at a programmatic level. The KBRA analysis in the Draft EIS/EIR is programmatic, as described in Section 15168 of the California Environmental Quality Act (CEQA) Guidelines. A program-level document is appropriate when a project consists of a series of smaller projects or phases that may be implemented separately. At a programmatic level of analysis, increasing flows in the Upper Klamath Basin would be likely to decrease the potential solar heating of stream flows during critical summer months (Section 3.2.4.3.2.10 - Water Diversion Limitations). Under the programmatic EIR approach, future projects or phases may require additional, project-specific environmental analysis including an evaluation of compliance with federal laws such as the Clean Water Act (CWA) and the Endangered Species Act (ESA). Consequently, appropriate NEPA compliance will be completed for the separate KBRA components in the future.	
CA_LT_1130_003-7	The discussion of anticipated pH effects has been revised to provide additional background regarding pH changes due to periphyton colonization in the Klamath River downstream from Iron Gate Dam. The revised text is as follows: “Similar to the pH analysis for the Upper Klamath Basin (see prior section), the changes in daily fluctuations for pH indicated by the Klamath TMDL modeling efforts immediately downstream from Iron Gate Dam are not entirely certain because the role of photosynthesis and community respiration from periphyton growth in the free-flowing reaches of the river replacing the reservoirs at the Four Facilities is not well known. The final Klamath TMDL targets and allocations are based on several lines of evidence and results from a number of different analytical tools; this is a particularly important consideration for the reach immediately downstream from Iron Gate Dam because the modeled pH changes are relatively larger than those predicted further upstream in the Hydroelectric Reach (see above discussion). The Klamath River mainstem periphyton target (150 ug/m^2 chlorophyll-a) was developed using the California Nutrient Numeric Endpoints (NNE) framework and calculation tools (Creager et al. 2006, Tetra Tech 2008). Building on the NNE analysis, Butcher (2008) determined that the periphyton target is met for the TMDL dams-out model scenario nutrient concentration targets (Total Phosphorus [TP] and Total Nitrogen [TN] targets are presented in Section 3.2.4.2.2.2, p. 3.2-44). Because it uses a slightly different periphyton biomass estimate than the NNE framework tool, the TMDL model may overestimate summertime pH levels and variability immediately downstream from Iron Gate Dam. Additionally, based on	No

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Comment Code	Comment Response	Change in EIS/EIR
	the NNE analysis, pH is not expected to exceed the NCRWQCB Basin Plan objective of pH 8.5 on a regular basis for the dams out condition. Mitigating factors that could potentially limit periphyton densities to levels below the TMDL model estimate include increased scour and alterations in nutrient dynamics in the free flowing river due to retention from periphyton growth further upstream – see Section 3.4, Algae). As discussed under the No Action/No Project Alternative (see p. 3.2-61), adaptive management strategies will be employed to refine efforts toward achieving water quality objectives and targets as part of the TMDL process. Given that there are multiple lines of evidence suggesting potentially different responses to pH from dam removal, adaptive management monitoring under the Proposed Action should include provisions for monitoring periphyton density in the reaches downstream from where Iron Gate Dam is currently located. Overall, the weight of evidence suggests that the potential for long-term pH increases during the summer months immediately downstream from Iron Gate Dam is less than significant. Additionally, increased scouring in the Klamath River under the Proposed Action would occur primarily due to greater movement of gravel, cobble, and coarse sediment downstream from Reclamation's Klamath Project dams, rather than as a result of dramatic changes in the flow regime. Master Response AQU-20 Bedload Sediment and Fish Habitat.	
CA_LT_1130_003-8	The hydrologic modeling addressed flow-related charges associated with the KBRA, including the programs mentioned in this comment. A sentence will be added to Section 3.8.4.1 (Environmental Effects Determination Methods) to indicate that any flow changes downstream from the Four Facilities from KBRA actions are incorporated into the modeling analysis of removal of the Four Facilities.	Yes
CA_LT_1130_003-9	Shovel Creek is of particular interest to fish managers because it has cold water temperatures (Beyer 1984) and it was used by salmon historically. PacifiCorp is replacing unscreened gravity-fed diversions in the J.C. Boyle peaking reach with screened pump systems and is eliminating existing diversions on Shovel Creek and its tributary, Negro Creek (United States 2008) to reduce entrainment and to increase instream flows. Up to 15 cfs has historically been diverted from Shovel Creek and Negro Creek (a tributary of Shovel Creek) for irrigation purposes by PacifiCorp during the summer (FERC 2007). Based upon available information, the upstream most diversion on Shovel Creek is apparently just over 1 mile upstream of the confluence with the Klamath River. Based on the SWRCB Water Rights Web site, the	No

Comment Author	Trgovcich, Caren
Agency/Assoc.	California State Water Resources Control Board
Submittal Date	November 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
	Negro Creek diversion is just upstream of the Shovel Creek diversion and diverts 5 cfs.	
CA_LT_1130_003-10	Master Response WSWR-10 Effects on City of Yreka Water Supply.	Yes
CA_LT_1130_003-11	Comment noted. Any modification to water rights in California would need to be submitted to the SWRCB. As stated on p. 3.8-17 of the Draft EIS/EIR, Interim Measure 16 “would eliminate three screened diversions... and would seek to modify PacifiCorp’s water rights to move the points of diversion to the mainstem Klamath River."	No
CA_LT_1130_003-12	Mitigation measure REC-1 would serve to replace existing water supply wells with a new well. Additional ground water supply would not be added through REC-1. All state and local regulations that would pertain to this type of supply well would be followed, including, if required, water quality testing. Furthermore, REC-1 would not impact ground water supply. Any new well developed under mitigation measure REC-1 would replace an existing water supply well. Additional water supply would not be added through REC-1.	No

OA_LT_1122_001

Oregon
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November 22, 2011

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BY ELECTRONIC FILING

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Subject: Oregon Agencies' Comments for the Klamath Hydroelectric Facilities Removal Public Draft EIS/EIR

Dear Ms. Vasquez and Mr. Leppig:

The purpose of this letter is to provide comments from the Oregon Water Resources Department (OWRD), Oregon Department of Environmental Quality (ODEQ), Oregon Department of State Lands (DSL), and Oregon Department of Fish and Wildlife (ODFW), (Oregon Team), on the September 2011 draft Klamath Facilities Removal Environmental Impact Statement /Environmental Impact Report (EIS/EIR). The EIS/EIR document evaluates the potential impacts of the removal of the four PacifiCorp dams on the Klamath River as contemplated in the Klamath Hydroelectric Settlement Agreement (KHSA).

The stated need for the Proposed Action is to advance the restoration of the salmonid fisheries in the Klamath Basin consistent with the KHSA and Klamath Basin Restoration Agreement (KBRA). The purpose is to achieve a free flowing river condition and full volitional fish passage as well as other goals expressed in the KHSA and KBRA.

Comment 1a - Approves of Dam Removal

Introduction

The Oregon Team regards the removal of the four dams associated with the PacifiCorp Hydroelectric Facilities to be of critical importance to fish and wildlife resource protection and restoration in the Klamath River Basin. Based on review of the EIS/EIR, the Oregon Team is supportive of alternatives 2 and 3, in that they are the only alternatives which explicitly meet the stated purpose and need. Both alternatives 2 and 3 provide for removal of all four dams and thus both provide for the most success in terms of re-introduction of native anadromous steelhead trout and Chinook salmon into the Oregon reaches of the Klamath River and its upper tributaries. In addition, these two alternatives provide for the most benefits in regard to the native redband trout populations in the river reaches currently affected by the PacifiCorp hydropower facilities.

Unimpeded connectivity, without dam-associated reservoirs and upstream and downstream fish passage structures, in addition to the improved flow conditions and water quality are the same in alternatives 2 and 3 and thus supported and recommended by the Oregon Team as options for the final action alternative. Alternative 2, should it be accomplished within the State Cost Cap, has the additional benefits of leaving no structures or facilities in place that might result in future maintenance or liabilities. However, should cost considerations arising from the complete removal of the associated dam facilities and structures result in Alternative 2 being less likely to succeed, then Alternative 3 with a few qualifications from the Oregon Team is a favorable path forward. One such consideration would provide for removal of the 638 feet of steel pipe (14 foot diameter) which extends over the Klamath River below J.C. Boyle Dam as part of the Alternative 3 package.

The No Action Alternative 1 is not a viable option and Alternatives 4 and 5, in which all four dams are not removed, would not provide a free-flowing river and would result in the KBRA as signed by the parties not being implemented. Importantly these last two alternatives also provide much less fisheries benefits. The Oregon Team strongly urges against Alternatives 1, 4, or 5 being chosen as the preferred option.

The Oregon Team agrees with the need to analyze the proposed alternatives in the EIS/EIR to determine whether dam removal would be in the public interest and would advance restoration of the salmonid fishery. The Oregon Team also agrees that the five alternatives studied in the EIS/EIR reflect an appropriate range of options for EIS/EIR evaluation, and that the significant impacts are adequately disclosed and discussed. It is the Oregon Team's opinion following review of the EIS/EIR document that it is comprehensive and that the science appears to have been held to a high standard. Peer reviewed studies and independent panels of scientists engaged to help thoroughly scrutinize studies and findings adds credence to the quality of work contained in the EIS/EIR. The document provides a fair discussion of the proposed action and a full and fair discussion of the environmental impacts associated with the proposed action. The Oregon Team supports the proposed measures offered in the EIS/EIR to mitigate for effects to aquatic resources, to cultural and historic resources, to air quality and to noise and vibration effects and concurs with the general analysis of the EIS/EIR that the short

term impacts of the proposed action of dam removal will be far outweighed by the long term perpetual benefits of dam removal to all aquatic life in the Klamath River.

The Oregon Team appreciates the scale of the task undertaken by the Department of Interior (DOI) and California Department of Fish and Game to complete the EIS/EIR in the timeframe established through the agreement.

The combined Agencies of the Oregon Team thank you for the opportunity to provide comments on the Klamath Hydroelectric Facilities Public Draft EIS/EIR. Specific comments of the Individual Agencies of the Oregon Team follow.

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ATTACHMENT A

OREGON TEAM INDIVIDUAL AGENCY COMMENTS

Oregon Department of Water Resources

Comment 2a - KHSA

Executive Summary p. ES-10, third paragraph: The KHSA was not an outcome of FERC's Alternative Dispute Resolution Procedures outlined in 18 CFR 385.601 et seq.

ES-21, last paragraph: The Clean Water Act reference for the TMDL should be "Section 303(d)" not Section 401.

Comment 3 - Water Quality

Table ES-5, p. ES-37, row regarding property values surrounding Iron Gate and Copco reservoirs, third column: The footnote reference should be "3" not 2.

Comment 4 - Real Estate

Chapter 1 p. 1-18, second paragraph: The KHSA was not an outcome of FERC's Alternative Dispute Resolution Procedures outlined in 18 CFR 385.601 et seq.

Comment 2b - KHSA

For Alternative 3 – Partial Facilities Removal of Four Dams
This alternative would include removal of enough of each dam to allow free-flowing river conditions and volitional fish passage for all Klamath River anadromous species at all times. Under this alternative, portions of each dam facility would remain in place, including ancillary buildings and structures such as powerhouses, foundations, tunnels, and pipes. Some of these remaining features would require perpetual maintenance and security measures to prevent unauthorized entry and safety hazards. All tunnel openings would be sealed and all potentially hazardous materials found in powerhouses and machinery would be removed prior to final decommissioning and securing of buildings.

Under the Partial Facilities Removal Alternative, the Dam Removal Entity would not remove the water intake structure, left abutment concrete gravity section, concrete headgate structure, intake screen, steel pipeline or supports at the J.C. Boyle dam and reservoir site. This option would leave 638 feet of steel pipe (14 foot diameter) extending over the Klamath River. The State is particularly concerned about the liabilities associated with this pipeline whether the State or a private entity may be the future owner of this property.

The Oregon Team would like more information on the cost estimate for removing the pipe and supports that cross the river and would like to have DOI maintain the option to have these items removed should Alternative 3 be selected as the preferred option. The Oregon Team will evaluate the necessity for removal of this pipeline and prefers to maintain this as an option (or requirement) under the State Cost Cap.

Comment 5 - Alternatives

Oregon Department of State Lands

Comment 6 - Land Use

Upon removal of the facilities on the Klamath River, any structure remaining in, on or over, and any facilities added (i.e. boat ramps, docks, etc.) to the submerged and submersible lands of the navigable waters of the State will need to be authorized appropriately through Oregon Department of State Lands. State ownership of the Klamath River is between R.M. 208 and 233, at and below the ordinary high water line of the original river channel.

Under the Oregon Removal-Fill Law (ORS 196.800 - 196.990), removal, filling, or alteration of 50 cubic yards or more of material within the bed or banks of the waters of this state or any amount of material within waters designated Essential Salmonid Habitat or State Scenic Waterway requires a permit from the Department of State Lands. Waters of the state include the Pacific Ocean, rivers, lakes, most ponds and wetlands, and other natural water bodies.

Comment 7 - Sediment Transport

Section 3.3.2.2 and 3.5.2.2- Oregon Scenic Waterways Act. The Klamath River from below the J.C. Boyle Powerhouse downstream to the California border is a designated Oregon State Scenic Waterway. This program is overseen by the Oregon Parks and Recreation Department.

Comment 8 - National W&S Rivers

Section 3.5.4.4- TER-5- paragraphs 1 and 2: A Compensatory Wetland Mitigation Plan may be required in accordance with Oregon Removal-Fill Law. If so, DSL will be a regulatory agency to review and approve this Compensatory Wetland Mitigation Plan and subsequent monitoring.

Section 4.4.4.1 Wetlands: A Compensatory Wetland Mitigation Plan may be required in accordance with the Oregon Removal-Fill Law.

Comment 9 - Proposed Project/Action

Section 6-7 Table 6-3: An authorization from DSL may be required for removal or fill within waters of this state, including but not limited to, dam removal and aquatic/terrestrial resource impacts.

Comment 10 - Sediment Transport

Oregon Department of Environmental Quality

Comment 11 - Water Quality

Page 3.2-32: First paragraph: The comment that no reservoirs appeared to be consistently more or less contaminated may not be true for polychlorinated dibenzodioxins and debenzofurans. There does appear to be a general trend of increasing levels, as measured on a TEQ adjusted basis from the lower watershed to the upper watershed. Overall, levels remain relatively low, even in the uppermost reservoir. However, the reason for this possible concentration gradient is unknown. This information is appropriately discussed in Appendix C.

Comment 12 - Water Quality

Page 3.2-33, section 3.2.3.8.3: Aquatic Biota: The text indicates that 2, 3, 7, 8-TCDD was detected in tissue. The project database shows that this congener was not detected in

Comment 12 cont

tissue, but several other congeners were. It would be more informative to report those that were detected, and the sum on a TEQ normalized basis.

Comment 13 - Algae

Section 3.4.3.3 Upper Klamath Basin Upstream of the Influence of J.C. Boyle Reservoir Phytoplankton. The description of historic conditions in Upper Klamath Lake needs to consider peer reviewed research by USGS and others regarding paleolimnology of Upper Klamath Lake. The EIS/EIR only cites studies used to support the development of the Total Maximum Daily Load for Upper Klamath Lake. This section should not be limited to the TMDL but should include a more complete description of what is known about the paleolimnology of Upper Klamath Lake. The peer reviewed research conducted by Eilers, Kann, Cornett, Moser and St. Amand presented in the journal *Hydrobiologia* (Eilers, J. M., Kann, J., Cornett, J., Moser, K., & St. Amand, A. (2004). Paleolimnological evidence of change in a shallow, hypereutrophic lake: Upper Klamath Lake, Oregon USA. *Hydrobiologia, 520*, 7-18.). The peer reviewed research by Eilers et al has been supported by additional research of Upper Klamath Lake by Colman et al. (S M Colman, J P Bradbury and J Grosenbaum, Paleolimnology and paleoclimate studies in Upper Klamath Lake, Oregon, *Journal of Paleolimnology* 31: 129–138, 2004.). Based on more than 40,000 years of continuous paleo climate record for Upper Klamath Lake, Colman et al. concluded that both diatoms and remains of blue–green algae mark progressive eutrophication of the lake in the 20th century, especially after about 1920.Colman et al stated: "These conclusions are compatible with a parallel study of recent limnological changes by Eilers et al." Further, Colman et al. concluded: "The results also provide a comparison between natural conditions in Upper Klamath Lake and current, anthropogenically disturbed conditions, and show that the lake has been significantly impacted by human activities."

Comment 14 - NEPA

Table 4-3, on pg 4-16 states that the Upper Klamath Lake Drainage Total Maximum Daily Load and Water Quality Management Plan schedule is "through 2006". The schedule is incorrect. Implementation of the Upper Klamath Lake Drainage TMDL/WQMP is ongoing.

Comment 15 - Water Quality

Appendix C, Table C-6: Mercury levels in bass are elevated in reservoir tissue, but the reason is unknown. It could be that there are naturally occurring sources in the watershed, as evidence by geothermal activity in the Klamath Falls area. Another area with volcanic Geothermal activity (Newberry Crater) has quite significant mercury levels in East Lake fish tissue, as shown by data in DEQs LASAR database. Presumably, there will be less opportunity for mercury to methylate in sediment after dams are removed, and conditions would be improved over time.

Comment 16 - Water Quality

Appendix C, Table C-8: Appendix C, Table C-8: Levels of PCBs are elevated in sediment in the reservoirs relative to the Klamath Estuary. PCBs were detected in fish tissue from fish collected in reservoirs, however the origin of the PCB's are currently unknown. It is unknown how these may compare to PCB levels in fish tissue in the estuary where the sediments will be deposited. Theoretically, there could be some minor impact, although released reservoir sediments would be subject to dispersion and dilution, and as such the net impact in tissue (in California) would likely be low.

Oregon Department of Fish and Wildlife

Comment 1b - Approves of Dam Removal

ODFW concurs with the general analysis of the draft EIS/EIR that short term impacts of the proposed action of dam removal will be far outweighed by the long term perpetual benefits of dam removal to all aquatic life in the Klamath River. ODFW appreciates the difficult task of predicting the possible impacts to fish populations in the short term due to dam removal. In most cases ODFW believes impacts to fish populations will be less than predicted due to the various life history and behavioral adaptations to the dynamic environment of the Klamath River. The fish in the system have evolved and survived with various stochastic disturbance events as recently as 1964, 1997 and 2006. Furthermore, current fish populations survived through hydraulic gold mining in the late 1800's which likely had much more significant impacts than dam removal.

ODFW believes an immediate benefit of dam removal will be to the redband trout in the Klamath River hydroelectric reach from the current location of JC Boyle Dam downstream to Iron Gate Dam. The current Project operations constrain the productivity of redband trout. The project also confines the resident trout population between the Project dams and associated reservoirs thereby impairing their utilization of the full range of life history strategies and spawning productivity. The resulting fishery on redband trout in the new productive habitat of the hydroelectric reach will provide increased economic and recreational benefits to citizens of Oregon. The Klamath River in the peaking reach will once again support redband trout spawning and redband trout fry rearing and survival will once again occur in the Oregon section of power peaking reach. Minnow species will likely increase in abundance providing food for redband trout and other aquatic life. Redband trout in the hydroelectric section of the river will be larger in size, more robust, show an increase in iteroparity, and increase in age.

ODFW recognizes that having free and volitional upstream and downstream fish passage restores access to 420 miles of high quality upper basin anadromous fish habitat. The ability for steelhead trout and Chinook salmon to access hundreds of miles of additional high quality spawning and rearing habitat is a significant benefit. The upstream migrations of Klamath River steelhead trout and Chinook salmon are currently blocked by the dams. Removal of the dams will restore access to coldwater springs above the dams and in the long term these coldwater habitats will help mitigate the effects that climate change may have on fish spawning and rearing habitats.

The removal of the dams re-opens 68 miles of quality habitat for Coho salmon. This benefits the Klamath River Coho population by extending the range and distribution of the species which increases the populations reproductive potential thus increasing the population abundance and increasing genetic diversity in the stock.

Increases in fish biomass in the Klamath River and tributaries due to dam removal will have positive impacts throughout the ecosystem with increases in predators such as river otters, black bears, mink, Caspian terns, bald eagles, kingfisher, various lamprey species, North American dipper and other wildlife.

Comment 1b cont.

The Klamath River should also see an increase of macroinvertebrates and mussel species with the proposed action of dam removal. Work completed by Addley in 2005 demonstrated that food was a limiting factor for fish in the hydroelectric reach. Increases in macroinvertebrate abundance will benefit both fish and wildlife species. Sessile organisms such as caddis flies, clinger-crawler type mayflies (Heptageniidae and Ephemerellidae), blackflies and midges will benefit with elimination of power peaking on the Klamath River. The most common macroinvertebrate found after flow reductions in the Klamath River was net spinner caddisflies (Hydropsychidae). Large numbers of scuds (amphipods) were also found. Diet studies of redband trout in the more stable bypass reach showed their diet was dominated by blackflies and midges. Macroinvertebrates will also benefit from the increased productivity that spawning will bring to the hydroelectric reach. Salmon carcasses and eggs will provide food resources for macroinvertebrates.

Increases in macroinvertebrates should translate into excellent opportunities for high value fly fisheries. The salmonfly and golden stonefly hatches in May and June. Salmonfly hatches around the western United States have shown a strong following and have become world renowned on the Deschutes River in Oregon and Rock Creek in Montana.

The new flow regime following dam removal will provide more fishing opportunity than currently exists under the power peaking scenario. During most legal fishing hours of the year the Klamath River is unfishable due to the flow released during peaking. Increased fish abundance will provide excellent angling opportunity in winter as the bypass springs will keep water temperatures slightly warmer. Additional angling opportunities for spring Chinook, fall Chinook, winter steelhead, summer steelhead and Coho salmon as a result of dam removal in the future make the Klamath River as a destination fishery.

ODFW concurs with the EIS/EIR analysis on endangered suckers in JC Boyle, Copco, and Iron Gate Reservoirs. There is little or no recruitment in the lower four reservoirs and the habitats for endangered suckers in these areas are not essential for recovery of the species and are not currently contributing to sucker populations in Upper Klamath Lake. It is important to note that should the dams be removed and implementation of the KBRA proceeds there will be significant benefits suckers.

ODFW concurs with the assessment on the risk of disease to the fish of the Upper Klamath Basin. Currently, there are no diseases below Iron Gate Dam that would pose a risk to fish populations above Iron Gate Dam. In general the EIS/EIR needs to be more specific about areas where *C. shasta* genotype exists in the Upper Basin. Currently only the Klamath River, Williamson River, Upper Klamath and Agency Lakes have been shown to infect fish with *C. shasta*. All other tributaries do not have the infective stage of *C. shasta*. The high *C. shasta* spore load in the Williamson River was due to a highly susceptible stock of rainbow trout stocked in Spring Creek. This rainbow trout had no resistance to *C. shasta* whereas Chinook and Coho salmon have some level of resistance. Stocking of hatchery rainbow trout in Spring Creek was discontinued in 2011.

Comment 17 - Fish

ODFW believes the document would benefit from more text describing how salmonids have adapted to persist during times of natural disasters. For example, this behavior was apparent during the Mt. St. Helens eruption when adult steelhead strayed away from their natal Toutle River. Dam removal will occur during the winter months when tributary flow will be higher and thus there will be substantial refuge areas in the tributaries or at the confluence of the tributaries. Typically salmon select areas for redds in tailouts of pools where there is increased water velocity. These areas are not typically sediment deposition areas. One would expect sediment to push through areas with redds and deposit in pools and slower habitat areas. While ODFW believes estimates of mortalities are high considering the mobility of anadromous fish, especially steelhead, we understand the prudence in being conservative in the face of uncertainty as to how fish may or may not respond to sediment from dam removal.

ODFW agrees that redband trout and salmon commonly occur sympatrically with benefits to both species. Unlike the Columbia River system the Klamath Basin does not have competition from whitefish which can be the dominant salmonid in many Columbia River tributaries. Additionally, the Klamath Basin lacks redside shiners that have been shown to competitively exclude juvenile steelhead trout and spring Chinook salmon. The Klamath River also lacks the large predatory northern pike minnow commonly found in the Columbia River and tributaries which is both a competitor and predator on salmonids.

Bull trout are at a high risk of extinction in the Klamath River Basin. Habitat improvements that would occur with dams removed and the implementing of KBRA will help decrease the likelihood of extirpation of Klamath basin bull trout populations.

ODFW's position is that trap and haul is the least preferred option for fish passage at Keno Dam and that should it only be necessary on a limited seasonal basis when water quality might be impaired and unsuitable for upstream migration through the Keno Reach. Trap and haul facilities are primarily intended to benefit fall-run Chinook as the upstream migrating species migrate when when water quality is not as impaired. Volitional fish passage at this structure is the preferred method.

Comment 18 - Alternatives

The EIS/EIR should clarify in Alternative 1 that there is no low level outlet to release cold water below Iron Gate Dam. As such no tailwater fisheries exist below Irongate dam as at Shasta Dam or other hydroelectric facilities with low level outlets.

Comment 19 - Alternatives

ODFW believes that Alternative 5, which leaves JC Boyle and Copco 2 Dams in place, has more significant impacts than discussed. Alternative 5 will result in no change to the existing significant impacts on fish and wildlife as described below:

1) Reduced amounts of low gradient spawning and rearing habitat for Coho, chinook, steelhead, redband trout and Pacific lamprey occurring under Topsy Reservoir. The resulting lack of high quality habitat is especially important at the confluence with Spencer Creek
2) JC Boyle Reservoir will continue to provide habitat for an abundance of non-native fish including largemouth bass, goldfish, crappie, yellow perch, fat head

Comment 20 - Alternatives

Comment 20 cont.

minnows, pumpkinseed sunfish resulting in competition and exclusion of habitats for native salmonids.

3) JC Boyle Reservoir's diminished water quality as a result of increased water temperature, pH, and ammonia levels and dissolved oxygen levels will remain unchanged.
4) Increased predation of salmonids and lamprey by birds and warmwater fish in JC Boyle Reservoir and the bottleneck at JC Boyle and Copco 2 Dams will not change.
5) Passage at the JC Boyle and Copco Dam would delay fish would could result in pre-spawn mortality. Downstream migrating fish could be more exposed to *C. shasta* spore loads and the temperature regime that causes higher infection rates as well as mortality.
6) The lack of sediment supply would reduce habitat quality downstream of JC Boyle Dam and Copco 2 dam.
7) Spawning habitat would continue to compromised by lack of gravel recruitment below JC Boyle Reservoir and Copco 2 Dam.

Comment Author	Various
Agency/Assoc.	Oregon Department of Fish and Wildlife, High Dessert Region
Submittal Date	November 22, 2011

Comment Code	Comment Response	Change in EIS/EIR
OA_LT_1122_001-1 &	Master Response GEN-2 Some People Approve of Dam Removal, Others Oppose Dam Removal.	No
OA_LT_1122_001-2	The text of the Final EIS/EIR has been revised to address this comment.	Yes
OA_LT_1122_001-3	The incorrect reference to Section 401 has been replaced with the correct reference to Section 303(d) in the Final EIS/EIR.	Yes
OA_LT_1122_001-4	This change has been incorporated.	Yes
OA_LT_1122_001-5	Detailed cost estimates for Alternatives 2 and 3 are included in Attachment D of the Detailed Plan Report posted on the project website. The estimated potential construction cost savings to the project by retention of the 14-foot-diameter pipeline and associated features (represented by pay items 64 and 79), including contingencies and markups, is over $1 million. However, estimated life cycle costs for security fencing and maintenance of the pipeline over 50 years could approach that amount, resulting in little overall potential savings to the project. Additional features such as the pipeline can be removed under Alternative 3 if shown to be in the best interests of the project, after consideration of all factors.	No
OA_LT_1122_001-6	Bullet point added to Draft EIS/EIR Section 3.14.2.2 to address this state authority.	Yes
OA_LT_1122_001-7	The Oregon Department of State Lands Authority (DSL), Oregon Removal-Fill Requirement is listed in Table 6-3 in the Final EIS/EIR.	No
OA_LT_1122_001-8	These rules have been added as a bullet point in Section 3.20.2.2 of the Draft EIS/EIR, as follows: • Oregon Parks and Recreation Department, Oregon Scenic Waterways Act This change has also been made in Sections 3.3, Aquatic Resources and 3.5, Terrestrial Resources.	Yes
& OA_LT_1122_001-9 &	Text in Section 3.5.4.4 was revised to state that the Compensatory Wetland Mitigation Plan would comply with the Oregon Removal-Fill Law, and that the Plan would be reviewed and approved by Oregon Department of State Lands (DSL).	Yes
OA_LT_1122_001-10	Department of State Lands Authority under the Oregon Removal-Fill Law has been clarified in Table 6-3 of the Final EIS/EIR.	Yes

Comment Author	Various
Agency/Assoc.	Oregon Department of Fish and Wildlife, High Dessert Region
Submittal Date	November 22, 2011

Comment Code	Comment Response	Change in EIS/EIR
OA_LT_1122_001-11 &	The comment appears to be referring to the following statement on p. 3.2-32 of the Draft EIS/EIR: “No consistent pattern of elevated chemical composition was observed across discrete sampling locations within a reservoir and no single reservoir was observed to be consistently more or less contaminated.” This statement is taken from Camp Dresser and McKee (CDM) (2010) and is repeated in Draft EIS/EIR (Appendix) Section C.7.1.1 on p. C-65. The sentence on p. 3.2-32 is also followed by the qualifying statement “Where elevated concentrations of chemicals in sediment were found, the degree of exceedance based on comparisons of measured detected chemical concentrations to SLs was small and in several cases (i.e., arsenic, mercury, 2,3,7,8-TCDD, total PCBs) may reflect regional background conditions (CDM 2011; see Section C.7.1.1 for more detail).” Source identification was beyond the scope of the Klamath Sediment Contamination study. However, since the Oregon Department of Environmental Quality (ODEQ) appears comfortable with the level of detail presented in Appendix C, the text in the main EIS/EIR has been revised to be the following: “No consistent pattern of elevated chemical composition was observed across discrete sampling locations within a reservoir and no single reservoir was observed to be consistently more or less contaminated with respect to the large suite of chemicals analyzed. Sediment in J.C. Boyle Reservoir does have marginally higher chemical concentrations and more detected chemicals of potential concern (COPCs) as compared to Copco 1 and Iron Gate Reservoir and Klamath Estuary sediments, including some dioxin, furan, and dioxin-like PCBs (see Section C.7.1.1). However, in the case of J.C. Boyle Reservoir and other instances where elevated concentrations of chemicals in sediment were found, the degree of exceedance based on comparisons of measured detected chemical concentrations to screening levels (SLs) was small and in several cases (i.e., arsenic, mercury, 2,3,7,8-TCDD, total polychlorinated biphenyls [PCBs]) may reflect regional background conditions (CDM 2011; see Section C.7.1.1 for more detail).”	Yes
& OA_LT_1122_001-12 &	The reference to 2,3,7,8-TCDD has been removed from the Final EIS/EIR. As reported in CDM (2011) Table 24, 2,3,7,8-TCDD (tetrachlorodibenzodioxin) was estimated since the analytical result was less than the laboratory method detection limit (MDL). CDM (2010) Table 24 does not include other dioxin or furan congeners because there were no available toxicity reference values (TRVs) for those congeners.	Yes
& OA_LT_1122_001-13 &	The Draft EIS/EIR Section 3.4.3.3 discussion of phytoplankton in Upper Klamath Basin cites Eilers et al. (2001). Citations for Eilers et al. (2004), Bradbury et al. (2004), and Coleman et al. (2004) have been added to Section 3.4.3.3 along with the statement that “These studies provide a comparison between natural conditions (i.e., prior to human	Yes

Comment Author	Various
Agency/Assoc.	Oregon Department of Fish and Wildlife, High Dessert Region
Submittal Date	November 22, 2011

Comment Code	Comment Response	Change in EIS/EIR
	settlement) in Upper Klamath Lake and current, anthropogenically disturbed conditions and show that the lake has been significantly impacted by human activities (see Appendix C, Section C.3 for additional detail).” Eilers et al. (2004) and Bradbury et al. (2004) were already cited in Draft EIS/EIR Section 3.2 and Appendix C, Section C.3; a citation for Coleman et al. 2004 has been added to these sections as well. The following sentences have been added to Appendix C, Section C.3: “However, research published in peer reviewed journals demonstrates that although levels of naturally occurring phosphorus are elevated in Upper Klamath Lake, historical land use activities in the Upper Klamath Basin resulted in increased nutrient loading to the lake, subsequent changes in its trophic status, and associated degradation of water quality (Bradbury et al. 2004, Coleman et al. 2004, Eilers et al. 2004). While Eilers et al. (2004) focused on relatively recent limnological changes in Upper Klamath Lake (i.e., changes over the past 1,000 years), Coleman et al. (2004) studied more than 40,000 years of the continuous paleo-climate record for Upper Klamath Lake and concluded that both diatoms and remains of blue-green algae mark progressive eutrophication of the lake in the 20th century, especially after approximately 1920. Both studies are compatible, but because Coleman et al. (2004) includes a longer historical record, it provides a comparison between natural conditions (i.e., prior to human settlement) in Upper Klamath Lake and current, anthropogenically disturbed conditions, and shows that the lake has been significantly impacted by human activities.”	
& OA_LT_1122_001-14 &	Changed to "Ongoing".	Yes
& OA_LT_1122_001-15 &	The Draft EIS/EIR includes mercury among the set of reservoir sediment contaminants for which there are potentially elevated background levels (see p. 3.2-33). While there are multiple potential sources of mercury in the Klamath Basin, identification of these sources was beyond the scope of the Draft EIS/EIR. For the No Action/No Project Alternative effects determination, mercury is discussed with respect to methylation in anoxic bottom sediments of the Project reservoirs (see Section 3.2.4.3.1.7, p. 3.2-73 and 3.2-75 to 3.2-78). We agree that conditions supporting mercury methylation would be less without the dams in place.	No
& OA_LT_1122_001-16 &	Table C-8 reports PCB levels in fish tissue data collected by PacifiCorp in the Project reservoirs and Upper Klamath Lake. PCB levels in sediments from the Project Reservoirs and the Klamath River Estuary are described in Shannon and Wilson Inc. (2006) and CDM (2010) and summarized in the Draft EIS/EIR in Section 3.2.3.8 Inorganic and Organic Contaminants (p. 3.2-30 to 3.2-33) and Section (Appendix) C.7 (p. C-63 to C-72). As discussed in Section 3.2.4.3.2.7 (see p. 3.2-121 to 3.2-125), there were no positive exceedances of	No

Comment Author	Various
Agency/Assoc.	Oregon Department of Fish and Wildlife, High Dessert Region
Submittal Date	November 22, 2011

Comment Code	Comment Response	Change in EIS/EIR
	applicable freshwater, marine, or human health screening levels with respect to PCBs. Elutriate samples representing the water that results when sediments are re-suspended did exceed freshwater quality criteria and human health criteria for some chemicals, including total PCBs; however, the expected dilution and mixing that would occur during reservoir drawdown is likely to be sufficient such that the minimum relevant criteria would be met and these chemicals would not be problematic. An additional consideration, as indicated by CDM (2011), is that estuarine sediment sampling was only minimally successful at finding depositional sediment and the proportion of fine or organic material in the estuarine samples was much smaller than in the reservoir samples. This difference makes comparison of the estuary and reservoir results difficult; it also appears to reflect the higher energy and more dynamic nature of sediments in the Klamath Estuary, implying that deposition of fine sediments and associated contaminants in the estuary is likely to be minimal. The comment is also in agreement with CDM (2011), which states (Chapter 7, p. 7-8) that inclusion of riverine fish as a "line of evidence" for evaluation of tissue-based TRVs is a "conservative line of evidence for riverine fish because exposures would be greatly reduced from those experienced by reservoir fish". The report goes on to state (p. 7-9) "Furthermore, the composition of the food web including invertebrate and fish species colonizing the newly formed riverine sections will be very different from those inhabiting the reservoirs; thus, extrapolation of reservoir results to this pathway provides a conservative estimate of exposure."	
& OA_LT_1122_001-17 &	As noted in the Draft EIS/EIR on p. 3.3-114, "steelhead are highly mobile species that have been known to stray to avoid habitat degradation (Bisson et al. 2005), and regularly occur in environments with high SSC, and therefore the predictions described here are likely more dire than would occur. It is likely that at least some would enter tributaries if conditions within the mainstem were adverse."	No
& OA_LT_1122_001-18 &	The Proposed Action and Alternative 3 include trap and haul under the conditions described by the comment author (under a limited seasonal basis when water quality might be impaired and unsuitable for upstream migration through the Keno Reach), This is noted in the draft EIS/EIR on p. 2-78, 2-81,3.3-85, 3.3-95, 3.3-101, 3.3-146, 3.3-153, 3.3-155, 3.3-157, 3.3-158, 3.3-162, and 3.3-170. Alternative 4 similarly calls 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 6 mg/l or temperature above 20 degrees Celsius).	No
OA_LT_1122_001-19 &	Text added to Section 3.3, Aquatic Resources in the analysis of Water	Yes

Comment Author	Various
Agency/Assoc.	Oregon Department of Fish and Wildlife, High Dessert Region
Submittal Date	November 22, 2011

Comment Code	Comment Response	Change in EIS/EIR
	Temperature in the Lower Klamath River under the No Action/No Project Alternative.	
OA_LT_1122_001-20	As noted in the EIS/EIR in the Aquatic Resources Effects, Critical Habitat Sections for Coho salmon and the Species-Specific Impacts Sections for Chinook salmon and steelhead, dam removal will create access to habitat currently under reservoirs. The EIS/EIR has been revised to clarify that much of the habitat under reservoirs is low gradient habitat of critical importance for spawning and rearing for salmon, steelhead, redband trout, and Pacific lamprey. The upstream half of the J.C. Boyle reservoir is shallow and considered low gradient (Federal Energy Regulatory Commission [FERC] 2007, p 3-185). FERC also considered the Copco No. 2 bypassed reach and reaches inundated by Iron Gate and Copco reservoirs to be low gradient. For these reaches, they estimated that the density of Chinook salmon spawners per mile for mainstem habitat was twice that of high gradient habitat (FERC 2007; p 3-315). The potential of this habitat now under the reservoirs for the production of anadromous salmonids, redband trout, and Pacific lamprey would be reached under Alternatives 2 and 3. The EIS/EIR has also been revised to clarify that the potential of this habitat under the two remaining reservoirs for the production of anadromous salmonids, redband trout, and Pacific lamprey would not be reached under Alternative 5. As noted in the EIS/EIR in the Aquatic Resources, Species-Specific Impacts Sections for Introduced Resident Species, dam removal under Alternative 5 would reduce habitat for these introduced species and benefit native species. The Alternative 5 impacts on water quality, fish predation, passage, fish disease, and sediment supply are also disclosed in the EIS/EIR in the Aquatic Resources Sections. The EIS/EIR has been revised to clarify that spawning gravel recruitment below J.C. Boyle and Copco 2 dams would continue to be compromised under Alternative 5.	Yes

CA_LT_1230_009

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY

EDMUND G. BROWN JR., Governor

DEPARTMENT OF WATER RESOURCES
1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791

DEC 29 2011

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

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

SCH #2010062060, Public Draft Environmental Impact Statement/Environmental Impact Report for the Klamath Facilities Removal Project
Siskiyou County

Comment 1 - General/Other

We have reviewed the subject report addressing the potential environmental impacts which would result from the removal or alteration of four dams on the Klamath River. Three of the four dams are located in northern California and the fourth is in southern Oregon. All three dams in California are under our jurisdiction for dam safety; they include Copco No. 1, Copco No. 2, and Iron Gate, Dam Nos. 91, 91-2, and 91-3 respectively.

The study outlines five alternatives, including a No Action/No Project Alternative. Alternative 2, Full Facilities Removal of Four Dams (the proposed action) and Alternative 3, Partial Facilities Removal of Four Dams (to allow free-flowing river conditions), would both require removal applications for each of the three dams located in California. Alternative 4, Fish Passage at Four Dams, would require an alteration application for each of the three dams located in California. Alternative 5, Fish Passage at J.C. Boyle and Copco No. 2 along with the Removal of Copco No. 1 and Iron Gate, would require an alteration application for Copco No. 2 and removal applications for Copco No. 1 and Iron Gate.

All applications must be submitted to the Division of Safety of Dams together with plans, specifications, and the appropriate filing fees. All dam safety related issues must be resolved, and the applications must be approved prior to commencing construction. Sharon Tapia, our Design Engineering Branch Chief, is responsible for the application process and can be reached at (916) 227-4660.

SCANNED

Classification

Ms. Elizabeth Vasquez
Mr. Gordon Leppig
DEC 29 2011
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If you have any questions or need additional information, you may contact Office Engineer Randy Fessler at (916) 227-4601 or Regional Engineer Y-Nhi Enzler at (916) 227-4604.

Sincerely,

Michael Waggoner

Michael G. Waggoner, Chief
Field Engineering Branch
Division of Safety of Dams

cc: Ms. Nadell Gayou
Resources Agency Project Coordinator
Environmental Review Section
Division of Statewide Integrated Water Management
901 P Street
Sacramento, California 95814

Governor's Office of Planning and Research
State Clearinghouse
Post Office Box 3044
Sacramento, California 95812-3044

Comment Author	Waggoner, Michael
Agency/Assoc.	California Department of Water Resources
Submittal Date	December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
CA_LT_1230_009-1	The DRE will comply with all State requirements, should the Secretary make an Affirmative Determination for dam removal.	No

CA_LT_0113_014

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

JAN 13 2012

Ms. Elizabeth Vasquez
MP150 – Bureau of Reclamation
2800 Cottage Way
Sacramento, CA 95825

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

Dear Ms. Vasquez and Mr. Leppig:

ADDITIONAL COMMENTS ON *KLAMATH FACILITIES REMOVAL PUBLIC DRAFT ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT* (DEIS/DEIR)

Upon further review of the DEIS/DEIR for the Klamath Facilities Removal, State Clearinghouse No. 2010062060, State Water Resources Control Board (State Water Board) staff has additional comments to the Water Resources section of the document. The State Water Board is a responsible agency for purposes of review under the California Environmental Quality Act, and is the agency charged with administering water rights in California, among other responsibilities. While these comments are outside of the extended comment period provided, State Water Board staff is submitting them because they may provide additional helpful information and clarifications.

Clarifications of Water Rights Law

Section 3.8.2.2 generally condenses a complex field into material that is relevant to the environmental review in a well thought-out and accessible manner. However, there are a few clarifications that would make the overview more accurate. A description of the clarifications and suggested text to implement them follows:

Comment 1 - WR/S

- Because California administers not only riparian and appropriative water rights, but also pueblo rights, the first sentence of the section should state that: "States administer water resources within their boundaries *mainly* in accordance with . . ."
- Because appropriative rights acquired without a permit prior to the 1914 effective date of the Water Commission Act are still valid, the last sentence of the second paragraph in the section should read: "In California, . . . appropriative rights may be acquired *after 1914* only by permit."

Comment 2 - WR/S

- Because some appropriative water rights do carry a higher priority than some riparian rights (as between an appropriative right and a riparian right, priority is determined by whether the priority date for the appropriative right is before or after the patent date for the land that is the place of use for the riparian right), the second sentence in the last paragraph on page 3.8-2 should read: "*In general*, ~~R~~riparian rights continue to have higher priority in California . . ."

Comment 3 - WR/S

Ms. Elizabeth Vasquez
Mr. Gordon Leppig

- 2 -

JAN 18 2012

Comment 4 - WR/S

- Because the State of California is not the only entity that can initiate a comprehensive adjudication, and because such an adjudication is not the only means to quantify a federal reserved right, the third sentence in the last paragraph on page 3.8-2 should be amended to read: "An adjudication may be initiated to determine relative rights to use water from a specific source, but *no one* ~~California~~ has ~~not~~ initiated a comprehensive Klamath Basin Aadjudication which includes all federal reserved water rights, *or any other proceeding to quantify such rights in California*." A similar change should be made in the reference to an adjudication in the last sentence of the Hoopa Valley and Yurok Tribes section of the Indian Tribes section on page 3.8-12.

Comment 5 - WR/S

- Because California water rights law depends on case law and statues as well as regulations, and because the section refers to water rights law, the first full paragraph on page 3.8-3 should read: "California's water *rights* law is contained in *case law, the California Water Code, and* the California Code of Regulations, Title 23."

Comment 6 - WR/S

- To clarify that the ongoing Klamath Basin Adjudication does not address all rights on the river, the first title on page 3.8-3 should read: "*Upper* Klamath Basin Adjudication" and the first sentence of that section should read: "If an appropriation of water was initiated . . . , a*n Oregon* water user may have a "vested" water right."

- Additionally, in section 3.8.3.2, in the Indian Tribes section, starting on page 3.8-11, the emphasis on fishing rights and concomitant water rights could be read to indicate that such rights are the only potential federal reserved rights for the tribes. Federal reserved rights may cover other uses, as well, and we recommend clarifying this in the text.

Comment 7 - WR/S

Supplemental Information and Corrections on Water Rights

Comment 8 - WR/S

- The DEIS/DEIR notes on page 3.8-10 that the City of Yreka's municipal water right on Fall Creek is less than the face value of the permit, but does not provide information on current use. According to the City of Yreka's annual reports to the State Water Board, the highest amount of annual use for City of Yreka has been 1020.41 million gallons, reported in 2004. The maximum rate of diversion reported in 2010 (the first year for which such information was requested) was 10.1 cfs. It may also be relevant to the study that the right has a 15 cfs bypass requirement.

Comment 9 - WR/S

- Page 3.8-10 also references a California Department of Fish and Game (CDFG) water right on Fall Creek, under the heading "Municipal Water Rights City of Yreka." It is unclear why the hatchery right is included under that heading.

- The discussion of the CDFG water right on page 3.8-10 should note that the right is non-consumptive.

Comment 10 - WR/S

- Because state-filed water rights were not filed by the State Water Board and because it is helpful to note that they are not active, the last full sentence in the last paragraph on page 3.8-10 should read: "Ten appropriative water rights are a state filing*s which have not yet been assigned or developed*; these state filings *all have priority dates* ~~were all filed~~ in 1956 ~~by the SWRCB~~." For the same reason, the second sentence in the Shasta Valley Irrigators section on page 3-8.11 should read:

Comment 11 - WR/S

Comment 11 cont.

"Application A016958 *for a state filing* was submitted in 1956 ~~on behalf of the SWRCB~~."

- Section 3.8.4.2, page 3.8-16 has two typos. The italicized text describing the potential impact should read: "Dam removal could cause ~~be affected by the~~ changes in water supply compared to the No Action/No Project Alternative." In the paragraph under that heading, the second sentence states that PacifiCorp holds two appropriative water rights in the affected reach. PacifiCorp has only one in that reach.

Comment 12 - WR/S

Requests for Additional Clarification

Comment 13 - WR/S

- In section 3.8.4.2, it would be helpful to further clarify significance criteria number one. Given the larger context discussed in the previous sections, State Water Board staff understands the reference to "existing" water rights or adjudication claims to refer to water currently being used to serve water rights, in addition to water which the water right holders have put the state on notice that they intend to develop (either through filing an application or by filing a statement of use for an inactive right). However, the phrase could also be understood as referring only to water actually being used. It is unclear if the phrase applies to the unquantified or unevaluated federal reserved rights discussed.

Comment 14 - WR/S

- Section 3.8.4.3, pages 3.8-14 through 3.8-16, provides and analyzes data that show projected flow changes on the lower river with Project implementation, including the combined flow impacts of dam removal and Klamath Basin Restoration Agreement (KBRA) implementation. Because the effects analysis for other alternatives relies on this information, the flow information for the impacts of dam removal and of KBRA implementation should be separated. Alternative 5, for example, includes some dam removal but no implementation of the KBRA. This specific request for clarification is within the broad scope of the State Water Board's request for clarification of the KBRA elements in the water supply section in our prior comment letter. State Water Board staff wish to request this specific type of analysis within that broader request for clarification.

Thank you for the opportunity to comment on the DEIS/DEIR. If you have questions regarding this letter, please contact Jennifer Watts at (916) 341-5397 or by email at: jwatts@waterboards.ca.gov. Written correspondences or inquiries should be addressed to: State Water Resources Control Board, Division of Water Rights, Attn: Jennifer Watts, P.O. Box 2000, Sacramento, CA 95812-2000.

Sincerely,

Jennifer Watts

Jennifer Watts, PhD
Environmental Scientist
Water Quality Certification Unit

cc: See next page.

cc: Ms. Catherine Kuhlman **[via email only]**
Executive Officer
North Coast Regional Water Quality
Control Board
5550 Skylane Blvd, Ste. A
Santa Rosa, CA 95403

Comment Author	Watts, Jennifer
Agency/Assoc.	California State Water Resources Control Board
Submittal Date	January 13, 2012

Comment Code	Comment Response	Change in EIS/EIR
CA_LT_0113_014-1	Text changed.	Yes
CA_LT_0113_014-2	Text changed.	Yes
CA_LT_0113_014-3	Text changed.	Yes
CA_LT_0113_014-4	Text changed.	Yes
CA_LT_0113_014-5	Text changed.	Yes
CA_LT_0113_014-6 & CA_LT_0113_014-7 &	Text changed has been made to add "Upper Klamath Basin Adjudication." However, the text was not revised to include "Oregon" before "water user" given the potential for confusion in the case of water diverted in Oregon and used in California (a "California water user" could be using Oregon water). This primarily includes the Lower Klamath National Wildlife Refuge (NWR) and irrigated lands in Tule Lake Irrigation District (TID). No change has been made because the analysis in Section 3.8.3.2 of the Draft EIS/EIR focuses on water rights, and it is unclear to what other federally reserved rights the comment author is referring to.	Yes No
CA_LT_0113_014-8	Master Response GEN-1 Comment Included as Part of Record.	No
CA_LT_0113_014-9	This information is included with the City of Yreka information (Section 3.8) because CDFG has an existing water right for the Fall Creek fish hatchery located near the City of Yreka diversion.	No
CA_LT_0113_014-10	Text added.	Yes
CA_LT_0113_014-11	Text changed.	Yes
CA_LT_0113_014-12	Text changed.	Yes
CA_LT_0113_014-13 & CA_LT_0113_014-14 &	Section 3.8.4.2 of the Draft EIS/EIR has been revised to clarify that an existing water right or adjudication claim is one that was either being used or was part of an existing claim at the time of the Notice of Preparation (NOP). Master Response ALT-4 Elimination of Alternative 8 - Dam Removal without KBRA from Detailed Study. The flows assumed under Alternative 5 currently do not include KBRA actions. The analysis requested by the comment author would not change the significance findings related to Alternative 5 and therefore, it has not been included.	Yes No

Comment Author	Watts, Jennifer
Agency/Assoc.	California State Water Resources Control Board
Submittal Date	January 13, 2012

Comment Code	Comment Response	Change in EIS/EIR
	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 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. The result is differing levels of available information for alternatives carried forward in the EIS/EIR consistent with the elements of each action alternative.	