

IT_MC_1025_041

KLAMATH DAM REMOVAL
DRAFT EIS/EIR HEARING
OCTOBER 25, 2011

PUBLIC TESTIMONY
ORLEANS, CALIFORNIA

MS. CHICHIZULA: Hello. My name is Regina Chichizola, R-e-g-i-n-a C-h-i-c-h-i- again z-o-l-a.

I have been involved in this Klamath Dam removal processing commenting for the whole time it's been going on since 2004, I think it was, and I've been on the river since about '96. In that time, I've been involved in, probably, about 20 to 45 EIS/EIR processes, and I have written extensive comments on most of them. And I have also seen how much downhill the river has gone in that time, like everyone has said. I don't need to repeat that.

But I have been on the reservoirs before, when they stunk of death so bad that grown men, really tough cops and -- started crying because of how bad they stunk. And these are Native people -- these were Native people, who wanted to be fishing in the river, and, instead, they're standing there trying to not puke while they're trying to see what it's like in the reservoirs.

I have also spent extensive time looking at water quality damage in the Upper Basin, in the farms and the agricultural areas. And I know that in an EIS process that you can have an option, an alternative, where it can be tweaked somewhat in the end. I do

Comment 1 - Approves of Dam Removal

support Alternative 2, but there are parts of the Klamath Basin Restoration Agreement that I think are problem-some. Like Chook-Chook said, why would the Hupa Tribe not be involved just because they don't agree in the restoration process after the dams come down?

Comment 2 - ITAs

Comment 3 - Water Rights

Along with that, I would like to say that I

don't think it's okay for the Upper Basin farmers to have a set amount of water as part of this process. I have seen what goes on in the Upper Basin, and flood irrigation is rampant. And massive chemical use and cows in the river are also rampant. And I believe, as part of this process, some of those things should be dealt with.

Comment 4 - NEPA

I know that -- I'm not sure if it's still the

case, but with the Klamath Basin Restoration Agreement, you used to have the ability to overlook water pollution in Oregon and also endangered species issues. And I really don't believe -- there's a lot of scientific controversy around the Klamath Basin Restoration Agreement. And while I think that it was done in good faith by people who are really trying to get along,

scientific controversy is a big deal in an EIS process.

And I believe that that scientific controversy needs to
be hashed out a little more, perhaps.

Comment 5 -
KBRA

So, what I would like to see, and I know,

obviously, this isn't a perfect world where I'm going to
get what I want, is support for Alternative 2, full dam
removal, which I fully support. However, I do think that
the Klamath Basin Restoration Agreement can be somewhat
of a poison pill within that, and so, I would hate to see
that the Klamath Basin Restoration Agreement make it so
the Klamath dams don't come down because there's going to
be ten years of litigation after this is over.

And as someone who is often involved in
litigation, I see that as something that might happen.
And so, if it's at all possible to try to deal with some
of those issues and try to make sure that the
Upper Basin's pollution issues are not able to be ignored
as part of this process.

And when there is bad water years, the water
is -- the fish is the priority, it would be nice to see,
because I know this year we had a lot of salmon in the
river, and if it wasn't a high water year, we would be
seeing a fish kill this year. And I would hate to see
that happen after the dams come down.

I'll turn in comments. Thank you.

Comment Author Chichizola, Regina
Agency/Assoc. Hoopa Valley Tribe
Submittal Date October 25, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_MC_1025_041-1	Master Response GEN-2 Some People Approve of Dam Removal and Others Oppose Dam Removal.	No
IT_MC_1025_041-2	Master Response TTA-7 Tribal Involvement in Future Discussions of Water Management.	No
IT_MC_1025_041-3	Master Response GEN-1 Comment Included as Part of Record.	No
IT_MC_1025_041-4	<p>Section 1502.12 of the Council on Environmental Quality's (CEQ) regulations for implementing NEPA and Section 15123(b)(2) of CEQA Guidelines state that the Summary of an EIS or an EIR must include areas of controversy (including those raised by the public and agencies). This Controversies and Issues section can be found in the Draft EIS/EIR on p. ES-46 of the Executive Summary (ES). The section presents a table (Table ES-7) that lists the issues of controversy, and where they are addressed in the Draft EIS/EIR. One of the issues in the table is "KBRA effects" and how some have questioned that it may not produce enough social or economic benefits. This issue is addressed in the Socioeconomics chapter of the Draft EIS/EIR (Section 3.15.4.3). Section 1506.6(c)(1) states that one of the reasons Lead Agencies should consider holding public meetings is if there is controversy concerning the Proposed Action. The Lead Agencies held six public meetings on the Draft EIS/EIR to allow the public and other interested parties to voice their concerns. Section 15151 of the CEQA Guidelines states that "Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure."</p> <p>The Lead Agencies have attempted to use the best scientific knowledge and data available, and have noted in the EIS/EIR whenever there are disagreements among experts on specific topics.</p>	No
IT_MC_1025_041-5	<p>Implementation of KBRA actions would not occur unless Klamath dams were removed because many of its provisions, in particular those related to diversion limitations and associated flows in the lower Klamath and lake levels in Upper Klamath lake, are predicated on the ecological benefits of removing Klamath dams.</p> <p>As described in Draft EIS/EIR Section 3.2.4.3.2.10 KBRA (p. 3.3-125 to 3.2-132), resource management actions implemented under KBRA as part of the Proposed Action would accelerate long-term improvements in water quality, including those anticipated under the TMDLs. Trap and haul has been proposed to transport migrating adult fish upstream of the Keno Impoundment</p>	No

Comment Author Chichizola, Regina
Agency/Assoc. Hoopa Valley Tribe
Submittal Date October 25, 2011

Comment Code	Comment Response	Change in EIS/EIR
	<p>when certain adverse water conditions exist. Additional detail on the interaction of the TMDLs and the Alternatives is provided by the Water Quality SubTeam (2011) (also referred to as the Water Quality SubGroup), as cited in Draft EIS/EIR Section 3.3.5, p. 3.3-241. This document, entitled "Assessment of Long Term Water Quality Changes for the Klamath Basin Resulting from KHSA, KBRA, and TMDL and National Park Service (NPS) Reduction Programs" can be found at http://klamathrestoration.gov/keep-me-informed/secretarial-determination/role-of-science/secretarial-determination-studies.</p> <p>Potential effects of the proposed KBRA programs on fish and wildlife are discussed Sections 3.3 and 3.5. The KBRA strives to balance the uses of water for irrigation with the needs of fish and wildlife. In addition, the KBRA does not supersede existing laws or regulations and does not exempt any actions from compliance with ESA or the California Endangered Species Act (CESA). Project level actions and decisions will continue to be made in compliance with existing laws and regulations.</p>	

IT_FX_1221_091



The Klamath Tribes

Culture & Heritage Department



Facsimile Transmittal Sheet

To: Elizabeth Vasquez From: Penny Chocktoot Jr

Company/Department: Bureau of Reclamation Date: 12-21-11

Fax Number: 1-916-978-5055 Total # of pages including cover 3

Telephone Number: (541) 783-2219 extension Fax #: (541) 783-2095

Regarding: Klamath Dam Removal

Urgent Please Review Please Reply For Your Records

Comments or Instructions

P.O. Box 436 Chiloquin, OR 97624
...sp'keec'a = Thank You...

12/21/2011 12:58 5417832095

CULTURE&HERITAGE

PAGE 02/03



12-19-2011

The Klamath Tribes Culture & Heritage Department

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

Re: Klamath Dam Removal EIS

The Klamath Tribes' Culture and Heritage Department submit the following comments on the Klamath facilities Removal Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) that evaluates the removal of the four Pacific Corp dams on the Klamath River as contemplated in the Klamath Hydroelectric Settlement Agreement (KHSA).

Comment 1 - Cultural Resources

- Cultural resource surveys are needed on areas that will be exposed on both sides of the Klamath River once dams are breached and the water levels drop. These surveys need to be conducted as soon as possible when the dams are removed as the entire area is subject to looting of culturally significant materials.
- To protect against looting of cultural sites along the Klamath River, the tribes request that during the cultural resource surveying process a collection of the artifacts be inventoried and curated in the Klamath Tribes curation facility.

Comment 2 - Water Quality

- The Tribes Culture and Heritage Department has not seen any information that would address the loss of marine nutrients in the waters due to the absence of the anadromous fish for over 90 years. We are very interested in this issue as it relates to the health of the Klamath River and all of the upper basin aquatic resources.

Comment 3 - Recreation

- Recreation activities need to be assessed as they impact cultural sites within the Klamath River Canyon. When exposed the dewatered cultural sites may be significantly impacted by additional recreational activities.

- Upon facility removal there is a possibility of exposing human burials. There needs to be a plan to assure proper handling of burial remains and objects in accordance with the Native American Graves Protection Act.

- The entire Klamath River Canyon is eligible for listing as a Traditional Cultural Property under the National Historical Preservation Act and needs to be evaluated.

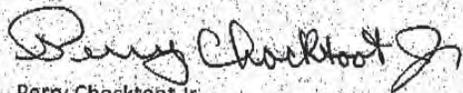
Comment 5 - Cultural Resources

Comment 4 - Cultural Resources

501 Chiloquin Blvd. - P.O. Box 436 - Chiloquin, Oregon 97624
(541) 783-2219 - Fax (541) 783-2029

The Culture and Heritage Department looks forward to future consultation on all issues that have the possibility of impacting cultural resources within the Tribes' aboriginal territories.

Sincerely,



Perry Chocktoot Jr
Director of Culture and Heritage Department
P.O. Box 436
Chiloquin OR, 97624
(541) 783-2219 x 178

Comment Author Chocktoot, Perry Jr.
Agency/Assoc. The Klamath Tribes
Submittal Date December 12, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_FX_1221_091-1	EIS/EIR Section 3.13, Cultural and Historic Resources, addresses potential impacts to Indian Tribes prehistoric, ethnographic, and ceremonial sites. Mitigation Measures CHR-2, CHR-3, and CHR-4 address these concerns, including the need for additional surveys for identification of surface and submerged resources. Cultural resources management plans would be drafted and implemented in consultations with the Advisory Council on Historic Preservation, the California and Oregon State Historic Preservation Officers, Indian tribes, and other consulting parties. Artifacts would be curated at a facility that meets Federal standards at 36 C.F.R. Part 79.	No
IT_FX_1221_091-2	It was not considered feasible to do an accurate analysis of the loss of marine nutrients upstream of the dams within the scope of the EIS/EIR. As discussed in Hamilton et al. (2011), while dam removal may increase supply of marine derived nutrients provided by the carcasses, eggs, and young of anadromous fish, increasing the supply of nutrients could adversely affect water quality conditions which currently are subject to elevated nutrient loads in the upper basin (Federal Energy Regulatory Commission 2007, as cited in Hamilton et al. [2011]). At the same time, salmon smolts have been identified as important exporters of nutrients, in particular phosphorous (P), from freshwater ecosystems (Scheuerell et al. 2005, as cited in Hamilton et al. [2011]).	No
IT_FX_1221_091-3	EIS/EIR Section 3.13, Cultural Resources, states that impacts could occur to cultural sites as a result of the recreation activities and drawdown of reservoirs. Section 3.13 acknowledges that the affirmative alternatives have the potential to adversely affect historic properties and addresses this in Mitigation Measures CHR-1, CHR-2, CHR-3, and CHR-4. Additional consultations in accordance with the measures identified in CHR-1, CHR-2, CHR-3, and CHR-4, with Advisory Council on Historic Preservation (ACHP), State Historic Preservation Officer(s) (SHPO), Indian Tribes, and other interested parties under NHPA Section 106 will lead to a Programmatic Agreement that sets forth stipulations on how to consult to resolve potential adverse effects associated with a definite plan on how to implement the action alternative selected in the EIS.	No
IT_FX_1221_091-4	EIS/EIR Section 3.13, Cultural and Historic Resources, addresses possible mitigation measures for Alternatives 2, 3, 4, and 5. The Native American Graves Protection and Repatriation Act (NAGPRA) would apply to federal lands and federally recognized Indian lands while Oregon and California State laws would apply in each state. Specific measures would be developed through continued NHPA Section 106 consultations, as applicable, based on the selected alternative.	No

Comment Author Chocktoot, Perry Jr.
Agency/Assoc. The Klamath Tribes
Submittal Date December 12, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_FX_1221_091-5	EIS/EIR Section 3.13, Cultural and Historic Resources, discusses Traditional Cultural Properties. Mitigation Measure CHR-3 is specific to Traditional Cultural Properties, including evaluation of such properties as historic properties through NHPA Section 106 consultations, as applicable.	No

IT_MC_1020_022

PUBLIC HEARING ON THE KLAMATH DAM
REMOVAL DRAFT EIS/EIR
---o0o---
YREKA, CALIFORNIA
THURSDAY, OCTOBER 20, 2011

MS. FORENCE CONRAD: Hello, I'm Florence,

F-l-o-r-e-n-c-e, Conrad, C-o-n-r-a-d, member of the Karuk

Tribe.

Comment 1 - Water Quality

I don't have any scientific data, but I can say

that I have lived above the Itchy Pitchy Falls for the

last 50 years.

I'm a life-long resident of Siskiyou County.

I've lived here all my life, except for the two years that

I was away in the Army. And I came back here, and this is

where I made my livelihood, raised my family with my

husband.

And we have watched the Klamath River decline.

It has -- we used to spend the entire day at the river,

just packing sandwiches and going to the river and

swimming all day.

We can't do that any more because anything past

the middle of June the river isn't very good.

So that's all I had to say. I just wanted to,

like I said, no scientific data, just living.

THE FACILITATOR: Thank you.

Comment Author Conrad, Florence
Agency/Assoc. Karuk Tribe
Submittal Date October 20, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_MC_1020_022-1	<p>As described in the Draft EIS/EIR Section 3.2.2.3 (p. 3.2-13 to 3.2-14), water quality in the Klamath River is impaired for several water quality parameters and does not fully support designated beneficial uses, including recreational contact (e.g., swimming) during summer months.</p> <p>Master Response WQ-4 B, C, and D Hydroelectric Project Impacts to Water Quality & Anticipated KHSA/KBRA Improvements.</p>	No

IT_LT_1031_074

Comment 1 - Approves of Dam
Removal

My name is Norma Cummings. I am an enrolled member of the Klamath Tribes. Thank you for this opportunity to weigh in on such an important issue. I whole heartedly support removing these dams and implementing the Restoration Agreement. For too long Tribes and Project Irrigators have fought over water in this basin. Finally we have an opportunity to settle the dispute. Many of the voices that oppose this agreement don't have their water, their culture, or their fishery at stake. Those who do (the Klamath Tribes and Klamath Project Irrigators) have reached a compromise. It's time take out the dams and balance water use in the Basin so all our communities can survive.

Norma Cummings
2241 Green springs Dr #66
Klamath Falls OR 97601
normajeana1@hotmail.com

Comment Author Cummings, Norma
Agency/Assoc. The Klamath Tribes
Submittal Date October 31, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_LT_1031_074-1	Master Response GEN-2 Some People Approve of Dam Removal, Others Oppose Dam Removal.	No

IT_MC_1019_008

PUBLIC HEARING ON THE KLAMATH DAM

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CHILOQUIN, OREGON
OCTOBER 19, 2011
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MS. NORMA CUMMINGS: Hello, my name is Norma Cummings, C-u-m-m-i-n-g-s. I'm an enrolled member of the Klamath Tribes. Thank you for the opportunity to weigh in on such an important issue.

Comment 1 - Approves Dam Removal

I wholeheartedly support removing these dams and implementing the restoration agreement. For too long, tribes and Project irrigators have fought over water in this basin. Finally, we have an opportunity to settle this dispute.

Many of the voices that oppose this agreement don't have their water, their culture, or their fishery at stake. Those who do, the Klamath Tribes and Klamath Project irrigators, have reached a compromise. It is time we take out the dams and balance water use in the basin so all of the communities can survive.

Thank you.

Comment Author Cummings, Norma
Agency/Assoc. The Klamath Tribes
Submittal Date October 19, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_MC_1019_008-1	Master Response GEN-2 Some People Approve of Dam Removal and Others Oppose Dam Removal.	No

IT_MC_1018_005

Klamath Falls Hearing - 10-18-2011

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STATEMENT PROVIDED BEFORE PUBLIC HEARING
(Directly to Court Reporter)

MS. TAYLOR DAVID: Taylor David, D-a-v-i-d.

(Statement in Native language.)

Greetings and good evening. It is good to see you all here in (Native language), Klamath Falls, homeland of the Klamath, Modoc and Yahooskin Paiute people. My name is Lamina Wac-Thunder Horse. My Christian name is Taylor (Tupper) David.

I am an enrolled member of the Klamath Tribes, born and raised here in the Sprague River Valley and Klamath County. My family was avid ranchers and rodeo people. We are horsemen. I left to attend college, and returned to work for my tribe as the public relations manager. I've been in this position for the past 18 years.

There are main reasons that you should consider making your final determination.

Comment 1 - ITAs

You must always take into consideration the trust responsibility to the tribes with regards to our Treaty Rights of 1864. In the words of two great men and leaders, Mr. Walter Echo Hawk and Supreme Court Justice Hugo Black, who said, "The tribal way of life and Treaty

of 1864 is protected by the Supreme Law of the Land,"
which is simple but true. Great nations, like great men,
should keep their word.

Take into consideration the unbelievable hours of
time and hard work that has already been done by the
entities that support the KBRA and KHSa. Realize that act
alone is a miracle in itself. These agreements should

Comment 2 - Approval of Dam Removal

move forward along with the full or partial removal of the
four dams on the Lower Klamath River.

Comment 3 - Economics

I hope over this last year you've done your
research, since last I spoke at one of these meetings, in
regards to the economic success of Klamath Basin because
before when the tribes and the natural resources were
healthy, the Basin was healthy.

Comment 4 - ITAs

Finally, I would ask that you take a look at this
from a spiritual standpoint as our people and God knows
all things come full circle. We believe this is true for
the salmon and steelhead. We hope that you recognize this
as an opportunity of a lifetime to set precedence for our
nation, maybe even the world.

Our generation has been chosen to make changes that
will benefit our ecosystem so we can ensure the success of
generations to come so everyone has a better future, not
just us tribal people but everyone.

Our ancestors said it best: (Native language),

which simply means we help each other, we will all live
good.

Thank you, and have a good evening.

Comment Author David, Taylor
Agency/Assoc. The Klamath Tribes
Submittal Date October 18, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_MC_1018_005-1	<p>The United States acknowledges the treaty-protected fishing rights of The Klamath Tribes, and believes the KBRA and KHSa provide the best opportunity to restore the Klamath Basin and its fishery.</p> <p>Information on The Klamath Tribes' Treaty Rights is contained in Section 3.12.3.1.</p> <p>Master Response TTA-3 Federal Trust Responsibilities and Fisheries,</p> <p>AQU-5 Will Benefit All Salmonids,</p> <p>AQU-26 Increased Abundance for Harvest and Tribes.</p>	No
IT_MC_1018_005-2	Master Response GEN-2 Some People Approve of Dam Removal and Others Oppose of Dam Removal.	No
IT_MC_1018_005-3	<p>Section 3.15 of the Draft EIS/EIR evaluates economic effects of the Proposed Action and alternatives. The section is primarily based on multiple economic studies posted at http://klamathrestoration.gov/keep-me-informed/secretarial-determination/role-of-science/secretarial-determination-studies under Economic Studies and Information. Economic effects were evaluated relative to:</p> <ul style="list-style-type: none"> • Dam decommissioning, O&M, mitigation • Commercial fishing • Reservoir recreation • Ocean sport fishing • In-river sport fishing • Whitewater recreation • Tribal economies • KBRA Fisheries, Water Resources and Tribal Programs • Irrigated agriculture related to KBRA actions • Refuge recreation related to KBRA actions • Local government revenues, including property and sales taxes • Property values • Utility rates 	No
IT_MC_1018_005-4	Master Response GEN-1 Comment Included as Part of the Record.	No

PUBLIC HEARING ON THE KLAMATH DAM

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CHILOQUIN, OREGON

OCTOBER 19, 2011

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MS. TAYLOR DAVID: Taylor Tucker David, D-a-v-i-d.

(Native language) Once again, that is hello and good evening. It is good to see you here (Native language.)

As I spoke last night about other things I trust like responsibility and the ecosystem and about the economical impacts, of the tribe being healthy, once the tribe is healthy, the natural resources being healthy.

I won't mention that again tonight.

One thing I do and will say, as a member of this community, I live here in Chiloquin, graduate here of Chiloquin high school. I know that what we need is our fish to be healthy. We are told as native people that if the fish die we will die.

Comment 1 - ITAs

And that is something that's not just science, that's tribal law and that's spiritual law. So that doesn't just mean the tribal people and what we are doing here, it is for everyone in this community.

Last night in the hallway we was told by one individual that all us Indians should just be put on a

train and shipped back to Oklahoma. A few years ago that might have really upset me. But now I know we're still progressing. We have good common sense, we're smart people. We are all starting to work together on the KBRA and KHSA.

Comment 2 - Approves Dam Removal

We all support dam removal. And so what I have to say about that is they could put me on the train again like they did my ancestors, the Modocs after the Modoc War.

But in 1907 my great great grandfather came home, and I will still come home, just like I believe the dam removal will bring the salmon home.

Thank you.

Comment Author David, Taylor
Agency/Assoc. The Klamath Tribes
Submittal Date October 19, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_MC_1019_010-1	Information on the effects of loss of fish in The Klamath Tribes' diet is contained in Section 3.12.3.1.	No
IT_MC_1019_010-2	Master Response GEN-2 Some People Approve of Dam Removal and Others Oppose Dam Removal.	No

IT_WI_1021_014

From: taylor.david@klamathtribes.com [SMTP: TAYLOR.DAVIDD@KLAMATHTRIBES.COM]
Sent: Friday, October 21, 2011 8:28:15 PM
To: BOR-SHA-KFO-KlamathSD; werner@wrinkledog.com
Subject: Web Inquiry: EIS/EIR Comments
Auto forwarded by a Rule

Name: Taylor David
Organization: Klamath Tribes

Subject: EIS/EIR Comments

Comment 1 - Approves Dam Removal

Body: I support full dam removal within these documents or partial at a minimum. I also support the KBRA and KHSR to be moved thru legislation so we can uphold the Trust Responsibility to the Klamath Tribes and the Treaty of 1864, which should be upheld by the Constitution of the United States of America -The Supreme Law of the Land.

Comment 2 - ITAs

Comment Author David, Taylor
Agency/Assoc. The Klamath Tribes
Submittal Date October 21, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_WI_1021_014-1	Master Response GEN-2 Some People Approve of Dam Removal and Others Oppose Dam Removal.	No
IT_WI_1021_014-2	<p>The United States acknowledges the treaty-protected fishing rights of The Klamath Tribes, and believes the KBRA and KHSAs provide the best opportunity to restore the Klamath Basin and its fishery.</p> <p>Information on The Klamath Tribes' Treaty Rights is contained in Section 3.12.3.1.</p> <p>Master Response TTA-3 Federal Trust Responsibilities and Fisheries.</p> <p>Master Response AQU-5 Will Benefit All Salmonids.</p> <p>Master Response AQU-26 Increased Abundance for Harvest and Tribes.</p>	Yes

IT_LT_1029_027

SHASTA INDIAN NATION



October 23, 2011

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

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

Ms. Vasquez and Mr. Leppig:

Subject: Klamath Facilities Removal Environmental Impact Statement
California State Clearinghouse: 2010062060

The Shasta Indian Nation is an Indian Tribe located in Siskiyou County, California. The following comments are in response to the Environmental Impact Statement that evaluates potential impacts that would occur if four dams and related facilities on the Klamath River were removed.

← Comment 1 - Cultural Resources

§3.12.3.2 of the Environmental Impact Statement (EIS) / Environmental Impact Report (EIR) describes the Quartz Valley Indian Reservation (QVIR) and states the QVIR represents people of Shasta Indian ancestry. This statement is incorrect. The Shasta Indian Nation has an elected governing body that is comprised of Shasta Tribal members, none of whom live within the boundaries of the QVIR. Each Tribe is distinctly different and members are not dually enrolled.

Comment 2 -
Cultural Resources

The Shasta have lived along the Shasta, Scott, Salmon, and Klamath Rivers since time immemorial. In order for Copco 1 to be built, Kitty Ward, a full-blooded Shasta Indian was tricked into leaving her home so her land could be taken.

50 Years on the Klamath. Author: John C. Boyle

"Kitty Ward, a full-blood Indian, lived in a tall log cabin which she and her white husband Tim built for a home. It was beautifully located on the lower end of the proposed reservoir beside flowing springs ample to irrigate some of the lands.

The cabin was below the flow line so when time to fill the reservoir came, Kitty was told it was necessary for her to move. She certainly knew how to put the white man in his place. Between

Comment 2 cont. - Cultural Resources

sobs and tears, she refused again and again to leave her home saying "I no move, let water come, I die here." Tim had been dead for several years, but Andy Marlow, as a ranch foreman and keeper of her wampum cooperated in getting Kitty to visit in Hornbrook, a visit from which she never returned."

Kitty Ward is one example of a Shasta Indian losing their land for the purpose of developing hydroelectric power on the Klamath River. History provides numerous accounts of Shasta families that were relocated to distant reservations and isolated from their culture to facilitate building the dam facilities. Many current members of the Shasta Indian Nation have family members that were part of the relocation and taking of land. My family lived in a Kammatwa village on the Klamath River west of present day Beswick, California prior to the development of Copco. Construction of the Klamath River dams caused the destruction of entire Shasta villages. Thus, the sites at Copco 1 & 2 and Iron Gate have special significance to the Shasta Indian Nation. It is worth noting that the Shasta were not included in the development of the Klamath Basin Restoration Agreement (KBRA) and have not participated in discussions since the termination of the 2005 Federal Energy Regulatory Commission (FERC) relicensing process.

Comment 3 - KBRA

The National Historic Preservation Act (NHPA) Section 106 provides "an adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association (36 CFR Section 800.5(a)(1))."

Pursuant to the California Environmental Quality Act (CEQA), a substantial adverse change in the significance of an archaeological resource or an historical resource is defined as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource is materially impaired, as defined in PRC Section 21083.2 and CCR 15064.5.

§3.13.3.3 - Daniels (2003) identified 47 ethnographic sites (e.g., habitation, hunting, fishing, gathering, and spiritual/ceremonial sites) along the Klamath River and at least 5 village sites submerged by the formation of Copco 1 Reservoir that have cultural value to the Shasta. Theodoratus et al. (1990) also identified 24 sites along the Klamath River between J.C. Boyle Dam and Scott River that have "cultural value" to Shasta. Additionally, the Bureau of Land Management (BLM) has previously identified **a culturally significant area along the Upper Klamath River for a proposed National Register District.**

"Reservoir drawdown associated with the Proposed Action could affect/impact archaeological and historic sites, TCPs, and cultural landscapes that are eligible for inclusion on the National Register and/or California Register and possibly Indian human remains."

The draft EIS/EIR recognizes the existence of ethnographic records that identify Shasta village sites, including burials, located along the previous riverbanks prior to dam construction; and Shasta sites that are submerged in the reservoirs that likely include human remains.

Comment 4- Cultural Resources

Comment 4 cont. -
Cultural Resources

Additionally, numerous **Shasta** sites along and near the Klamath River downstream from the dams may be exposed or damaged from temporary increase in flows during reservoir drawdowns.

Dam removal and reservoir drawdown would result in a reduction of water levels in the existing reservoirs; temporarily increase flows along the Klamath River; and expand the limits of the 100 year floodplain. The EIS/EIR discloses that increased flows along the Klamath River could "undercut, erode, or flood sites along or near the banks of the river, affecting elements of the potentially significant cultural landscape". **"However, sites associated with it could be adversely affected through erosion, exposure, and vandalism."** It would be an egregious injustice to the Shasta people and cause irreversible harm to the Shasta Indian Nation if dam removal occurred and the Tribe was denied the ability to preserve and protect sensitive sites.

The Shasta Indian Nation previously provided a confidential list with locations of village sites located along the Klamath River from the Oregon border to present day Seiad Creek. Our historical existence along the Klamath, Shasta, Scott and Salmon Rivers is well documented along with the many Shasta villages around Jenny, Shovel, Fall, Yreka, and Butte Creeks. To suggest this area holds the same cultural significance to other Tribes, tribal group, or government entity is inaccurate and offensive. Our ceremonies occurred at ceremonial sites and in villages like the Ah-wi'-mah on the Klamath River at the mouth of the Shasta River and Ko-watch'-ah-hah' on the Klamath River at the mouth of the Scott River. There is no other Tribe or group that has legitimate claim to these areas from a cultural or historical perspective.

The influx of trappers from Hudson Bay began the demise of the Shasta culture. It seems the agreements (KHSA and KBRA) that were developed to purportedly restore fish habitat and populations are a step further in that direction.

Alternative 1 – No Action/No Project Alternative

Multiple Shasta Village sites, including burial, remain submerged at Copco 1 & 2, Iron Gate and JC Boyle. The No Action /No Project Alternative would not have an immediate impact to the historic value of the submerged sites. If the water level drops and the village sites are exposed, and burials, there is no mechanism in place for the Shasta to protect or preserve the historic properties and there would likely be incidents of looting and vandalism. In fact, the KBRA requires PacifiCorp to transfer the land containing Shasta sites to the States of Oregon and California respectively. If the sites remain submerged this would not occur. Additionally, Alternative 1 would prevent the implementation of the KBRA and cause the FERC relicensing process to resume. FERC relicensing means the dams stay in place and historic properties are not exposed causing no further impact.

Alternative 1 – No Action / No Project is the preferred option.

Alternative 2 – Full Facilities Removal of Four Dams (Proposed Action)

The implementation of the KBRA along with removal of the four dams would call for elimination of the hatcheries on the Klamath River which would affect our tribal fishery and impede the ability of Shasta people to practice our native culture. Lower water levels in the reservoirs, increased water flow in the Klamath River would result in exposed village and burial sites of the Shasta. The KBRA does not provide the ability for the Tribe to protect, preserve, or restore the sites. It is well documented in Siskiyou

Comment 4 cont. -Cultural Resources

County that Shasta sites located on government and private land have been desecrated and artifacts stolen. The removal of four dams and implementation of the KBRA would cause irreversible harm to the Shasta Indian Nation's cultural and historical resources.

For Alternative 2 to be feasible the land containing village and burial sites that are currently submerged would need to be transferred to the Shasta Indian Nation and cultural resource management agreements with the Tribe would need to be in place.

Alternative 2 would negatively impact Shasta cultural and historic resources and therefore is not recommended.

Alternative 3 – Partial Facilities Removal of Four Dams

The partial removal of four dams creates the same concerns and issues as full removal in relation to the Shasta Indian Nations village and burial sites. As stated above, lower water levels in the reservoirs and increased water flow in the Klamath River will result in exposed village and burial sites. Again, this would cause the implementation of the KBRA which does not provide any mechanism for the Shasta Indian Nation to protect cultural and historic resources.

Alternative 3 would negatively impact Shasta cultural and historic resources and therefore is not recommended.

Alternative 4 – Fish Passage at Four Dams

The construction of fish passage facilities at each of the four dams would cause the FERC relicensing process to resume and the hydropower generating facilities to remain in place. This would cause no impact to the submerged sites and is therefore considered a desirable option from a historic preservation perspective. The Shasta Indian Nation prefers the sites to remain submerged indefinitely rather than have them exposed, robbed, and exploited.

Alternative 4 is the preferred Action after the No Action Alternative because it will not impact pre-historic sites or burial sites to become exposed.

Alternative 5 – Fish Passage at J.C. Boyle and Copco 2, Remove Copco 1 and Iron Gate

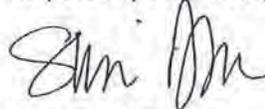
This Alternative requires the removal of two dams that will result in lower water levels and will have the negative impact described in Alternative 2 & 3 analysis.

Alternative 5 is not recommended because of the negative impact to cultural and historic resources.

The Shasta Indian Nation is opposed to any action that causes the implementation of the KBRA. We disagree with the provision that allows the establishment of an interim fishing right between Iron Gate and Interstate 5; and we do not support neighboring Tribes developing or operating fish hatcheries on the Klamath tributaries. The Shasta and Scott Rivers are traditional Shasta areas and have village, ceremonial, and burial sites that would most likely experience negative impact if the KBRA is implemented as it currently exists.

Comment 5 - Disapproves of Dam Removal

Respectfully Submitted,



Sami Jo Difuntorum
Culture and Historic Preservation

Comment Author Difuntorum, Sami Jo
Agency/Assoc. Shasta Indian Nation
Submittal Date October 29, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_LT_1029_027-1	The Quartz Valley Community does have members that are of Shasta Indian Ancestry. Therefore the statement that the Quartz Valley Community represents people of Shasta Indian decent is correct. Nowhere is it alleged that the Quartz Valley Community represents all people of Shasta Indian Ancestry.	No
IT_LT_1029_027-2	Master Response CUL-1 Shasta Nation Participation.	No
IT_LT_1029_027-3	Federal executive orders require government-to-government consultation with federally recognized tribes on decisions that could affect tribes and those consultations will continue, including with tribes that are not parties to the KBRA.	No
IT_LT_1029_027-4	<p>Master Response CUL-1 Shasta Nation Participation.</p> <p>Mitigation Measures CHR-2, CHR-3, and CHR-4 address consultations under NHPA Section 106 and agreements and plans for treatments of burial grounds should Alternatives 2, 3, or 5 be selected.</p> <p>Master Response HYDG-1 Flood Protection.</p> <p>Master Response WQ-1 Sediment Deposits Behind the Dams and Potential Contaminants.</p> <p>As described in Chapter 3.6 of the EIS/EIR and the Detailed Plan, the reservoir drawdown plans are intended to minimize flood risks from catastrophic dam failure or a natural hydrologic event. The Dam Removal Entity (DRE) would control reservoir drawdown to maintain flows that would not cause dam embankment overtopping. Additionally, drawing down the reservoirs would increase the available storage in J.C. Boyle, Copco 1, and Iron Gate Reservoirs. Thus, if a high water year event occurred during drawdown, the DRE would be able to retain high flows during initial reservoir drawdown using the newly available storage capacity and continue drawdown after the flood risk ended. There are two different time periods during reservoir drawdown and dam removal, which could result in flood risks:</p> <p>Initial reservoir drawdown. Flood risks stem from an overly rapid drawdown rate, resulting in embankment instability. Instability occurs as the soil strength of the embankment decreases from rapidly increasing pore pressure during drawdown, which creates failure or slumping of the exposed dam face. Bureau of Reclamation (Reclamation) (2012b) describes the controlled releases that would commence at the beginning of January 2020 in order to drain the reservoirs safely. The drawdown rate for J.C. Boyle Reservoir would be 1 foot per day and the drawdown</p>	No

Comment Author Difuntorum, Sami Jo
Agency/Assoc. Shasta Indian Nation
Submittal Date October 29, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_LT_1029_027-5	<p>rate for Iron Gate Reservoir would be 3 feet per day (subject to confirmation by a more detailed slope stability analysis conducted for the Definite Plan).</p> <p>To address this risk, sufficient reservoir storage space would have to be maintained at all times between the excavated embankment surface and the reservoir to prevent embankment overtopping and potential failure.</p> <p>The amount of reservoir storage would be dictated by the amount of flood protection that is desired during the removal operation. The frequency of floods for the period of embankment excavation has been developed to help assess this risk.</p> <p>Dam excavation. As the embankment is removed, reservoir storage is decreased. Flood risks during this period stem from the possibility of flows from a large flood event exceeding the available water bypass capacity and overtopping the lowered dam embankment, or at the point during excavation when the embankment is removed below the level of the spillway, thus making the spillway unavailable during this period of time. To address this risk, Reclamation (2012b) would not permit any excavation of the embankment section at Iron Gate Dam until June 1, 2020, and would require excavation to be complete by September 15, 2020. The drawdown plans do not permit any excavation of the embankment section at J.C. Boyle Dam until after July 1, 2020, and require completion by September 30, 2020. The timing of dam excavation and removal has been designed to occur when river flow is at its lowest point. During this period, outlet structures for the reservoirs would have sufficient capacity to pass river flows. The 100-year frequency flood hydrograph for July could be routed through the reservoirs and available outlets and spillways. At J.C. Boyle Dam, an upstream cofferdam would be provided for flood protection for flows through the excavated left abutment up to about 3,500 cubic feet per second (cfs). At Iron Gate Dam, a minimum flood release capacity of about 7,700 cfs would be maintained in June, 7,000 cfs would be maintained in July, and 3,000 cfs would be maintained in August and September, before final breach of an upstream cofferdam. Each of these capacities would be able to accommodate a flood event having a minimum return period of 100 years for that time of year, based on historical streamflow records.</p> <p>Under the KBRA Section 34.1, a petition for the Klamath Tribes' Interim Fishing Site is intended to be filed within 3 months of the Effective Date. The interim fishing site would provide that Chinook salmon fishing in this reach of the river would be open to the Klamath Tribes each salmon season immediately after the</p>	No

Comment Author Difuntorum, Sami Jo
Agency/Assoc. Shasta Indian Nation
Submittal Date October 29, 2011

Comment Code	Comment Response	Change in EIS/EIR
	<p>hatchery at Iron Gate Dam achieves egg take goals. The Klamath Tribes negotiated this section to allow the tribe to start harvesting fish for ceremonial purposes immediately following approval of the Agreement and prior to dam removal and the start of restoration activities.</p> <p>EIS/EIR Section 3.12.3.1 describes the positive effects dam removal and establishment of an interim fishing site between Iron Gate dam and the I-5 Bridge and implementation of the KBRA will have on the Klamath Tribes and the fishery.</p> <p>The development of fish hatcheries on the Shasta and Scott Rivers is not a component of the KBRA and is not analyzed in this EIS/EIR.</p>	

IT_EM_1109_078

From: sami difuntorum [mailto:samijodif@yahoo.com]
Sent: Saturday, October 29, 2011 7:47 PM
To: Perry, Laureen (Laurie) M; Howison Russ
Cc: Joaquin Esquivel; Josh Reinder; Hemstreet Tim; Derek Harley; director@dfg.ca.gov; Echohawk, Larry; Nickels, Adam M; Bill Edwards; Brian Daniels; Dan Wessel; John Harte; Symons, Katrina L; Noah Walker; william Speer
Subject: Re: Klamath Dam Removal Study

Comment 1 - Cultural Resources

Laureen,

While noting that the partial dam removal alternative provides limited mitigation for the Shasta villages sites that are submerged, I do not believe and of the alternatives except installing Fish Ladders and the No Action Option can adequately protect the burial or ceremonial sites.

My comments are written from the perspective of protecting Shasta burial, archaeological and village sites. Unfortunately, several provisions of the KBRA have the ability to adversely impact ceremonial sites in addition to the negative impact that would occur solely by removing the dams. They are related actions - implementation of the KBRA and dam removal.

Thanks,
Sami Jo Difuntorum

From: "Perry, Laureen (Laurie) M" <LPerry@usbr.gov>
To: "samijodif@yahoo.com" <samijodif@yahoo.com>
Sent: Friday, October 28, 2011 1:43 PM
Subject: Klamath Dam Removal Study

Sami,

We haven't spoken since March 2011, so I want to touch base with you and check if you have the entire draft Environmental Impact Statement to review the project, alternatives, and cultural resources discussions. Please provide your comments as identified with the EIS or you may provide comments to me. Let me know if you need additional information.

Laureen

Laureen Perry, MA, RPA
Regional Archaeologist (MP-153)
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, CA 95825
916-978-5028
916-335-3816 (cell)
916-978-5055 (fax)

Comment Author Difuntorum, Sami Jo
Agency/Assoc. Shasta Indian Nation
Submittal Date October 09, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_EM_1109_078-1	EIS/EIR Section 3.13, Cultural and Historic Resources, addresses potential impacts and mitigation for all activities associated with dam removal to submerged village sites. The KBRA is analyzed as a connected action in this EIS/EIR.	No



RESIGHINI RANCHERIA

P.O. Box 529 • Klamath, CA 95548
Tel (707) 482-2431 • Fax (707) 482-3425

December 27, 2011

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

Re: Final Comments on the Klamath Hydroelectric Project Facilities Removal Draft
Environmental Impact Statement (DEIS) and Draft Environmental Impact Report (DEIR)

Dear Ms. Vasquez:

We would like to thank you and Secretary of Interior Salazar for the opportunity for the Resighini Rancheria to comment on the *Klamath Hydroelectric Project Facilities Removal Draft Environmental Impact Statement (DEIS) and Draft Environmental Impact Report (DEIR)* and our comments are attached. We appreciated the chance to previously comment on the same document during the cooperators' draft review and note that this version better characterizes who we are and what our interests in the Klamath River are. Unfortunately, the government has not made changes in response to many other comments we filed that satisfactorily meet our concerns and we find the DEIS/DEIR remains fatally flawed.

Comment 1 - NEPA/CEQA

Comment 2 - NEPA/CEQA

Because an affirmative Secretarial Decision will implement not just the Hydropower Settlement Agreement (KHSa) that removes dams, but also the Klamath Basin Restoration Agreement (KBRA) that allocates water and changes tribal trust obligations, the DEIS/DEIR needs to analyze cumulative effects from this "connected action." It ignores many well defined actions of the KBRA and is, therefore, deficient with regard to compliance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The DEIS/DEIR also fails to comply with use of "best available science" as required by CEQA because it ignores recommendations regarding Klamath River restoration offered by the National Research Council Klamath River endangered fishes report and the Chinook and Coho salmon-Steelhead Expert Panels convened to assess the KBRA. Failure to develop Alternatives for restoration to the KBRA or to provide recommendations for mitigation as repeatedly requested by the Resighini Rancheria are also a major NEPA and CEQA deficiencies, respectively.

The Resighini Rancheria was excluded from Klamath Settlement talks that lead to the KBRA and yet our tribal rights would be trampled by an affirmative Secretarial Decision in conjunction

Comment 4 - Envr. Justice

Comment 3 - Alternatives



Comment 4 cont.

with authorizing legislation. We are saddened by the continued abuse of environmental justice and social justice policies, laws and regulations as exemplified by the process surrounding the Secretarial Decision on Klamath dam removal and implementation of the KHSA and the KBRA. We are particularly disappointed in the Federal Government's willingness to change the trust obligation to Indian Tribes (KBRA 15.3.9) and its seeming eagerness to destroy tribal sovereignty for the sake of special hydroelectric and agricultural interests

Comment 5 - KBRA

The foundation of the KBRA, which would be implemented by the Secretary's Decision, is built around the Klamath Project water users demand that they be able to farm in the Tule Lake and Lower Klamath National Wildlife Refuge Lease Lands for the duration of the agreement, which is until the year 2062. This would lead to an ecologically unsound and economically infeasible outcome where huge taxpayer subsidies would allow farming of marginal land in the high desert in the face of climate change for the next 50 years.

Comment 6 - ITAs

Claims within the DEIS/DEIR that the Resighini Rancheria will benefit economically from KBRA and KHSA implementation are baseless. Party Tribes will receive program funds, but not the Resighini Rancheria or other non-Party Tribes. Section 3.12 of the DEIS/DEIR asserts that we will be eligible for KBRA funding "upon becoming a party" but fails to mention that the Resighini Rancheria would be required to enact claim waivers and take other acts inconsistent with its trust resources in order to obtain those "benefits."

Comment 7 - Alternatives

The community of the lower Klamath River, including the Resighini Rancheria, will suffer from continuing water pollution, fish diseases that decimate our life blood - the salmon, and toxic algae from KHP reservoirs until at least 2020 under the KBRA/KHSA. Likelihood of river and salmon restoration after 2020 with KBRA implementation are extremely low. Therefore, the preferred Alternative 2 will not lead to our economic recovery, and in fact we fear it may lead to our demise along with the salmon.

The Resighini Rancheria favors speedy dam removal but strongly opposes implementation of the KBRA that takes away our tribal rights and is ecologically insufficient. Had the government retained Alternative 8, full facilities removal without the KBRA, we would have favored it. Instead we support the No Action Alternative, because we believe the KBRA will do more harm than good. We see a return to the Federal Energy Regulatory Commission relicensing process as a preferable approach to getting Klamath Hydroelectric Project (KHP) dams removed.

Sincerely,



Rick Dowd
Resighini Rancheria Tribal Council Chairman

**Resighini Rancheria Comments on the Klamath Hydroelectric Project
Facilities Removal Draft Environmental Impact Statement (DEIS) and Draft
Environmental Impact Report (DEIR)**



Resighini Rancheria
P.O. Box 529
Klamath, CA 95548

December 2011

Table of Contents

Summary of Resighini Rancheria Input in DEIS/DEIR Process	1
Purpose and Needs Statement Flawed	1-2
Alternative Development Misleading and Inadequate	2-5
Tribal Rights, the DEIS/DEIR and KBRA Implementation	6-7
Analysis of Cumulative Watershed Effects in DEIS/DEIR Deficient	8-10
KBRA Conflicts with Endangered Species Act	11-20
Impediments to Clean Water Act Posed by KBRA	21-22
DEIS/DEIR Misrepresents Economic Benefits	22-23
Conclusion	23-24
References	25-30

Summary of Resighini Rancheria Input in DEIS/DEIR Process

The Klamath Hydroelectric Project Facilities Removal Draft Environmental Impact Statement (DEIS) and Draft Environmental Impact Report (DEIR) would be much different in content and approach, if the government would have taken recommendations from the Resighini Rancheria comments submitted on various processes related to the DEIS/DEIR and KHSA/KBRA since December 2010. Because the DEIS/DEIR does not reflect this input and it appears that it was ignored, we hereby incorporate by reference all documents filed:

- *Comments on the KBRA Coho Salmon and Steelhead Expert Panel Draft Report for the Resighini Rancheria* (Higgins 2011)
- *Comments on the Klamath Basin Restoration Agreement Draft Drought Plan* (Resighini Rancheria 2011a)
- *Comments on the KBRA Chinook Expert Panel Draft Report* (Resighini Rancheria 2011b)
- *Request for Reinitiation of 401 Certification Process Related to the Application for the Relicensing of the Klamath Hydroelectric Project (P-2082)* (Resighini Rancheria 2011c)
- *Comments on the Biological Aspects of the Draft KHSA/KBRA Cultural Resources Report* (Resighini Rancheria 2011d).

These documents are not attached or appended because they are all posted to the Resighini Rancheria website (www.KlamathER.org) and links from the reference section at the end of these comments are provided for convenience of those revising the DEIS/DEIR.

Purpose and Needs Statement Flawed

Comment 8 - NEPA/CEQA

The purpose and need statement is a critical part of the environmental review process because it helps to set the overall direction of an EIS/EIR, identify the range of reasonable alternatives, and focus the scope of analysis. The way the DEIS/DEIR frames the purpose and need is unreasonably narrow and limits consideration of restoration alternatives.

The stated "purpose" in the DEIS/DEIR for the National Environmental Policy Act (NEPA) is "to achieve a free flowing river condition and full volitional fish passage as well as other goals expressed in the KHSA and KBRA" while the "need" in the DEIS/DEIR is "to advance restoration of the salmonid fisheries in the Klamath Basin consistent with the KHSA and the connected KBRA." Tying re-establishment of free flowing river conditions and volitional fish passage (KHSA implementation) with KBRA implementation unnecessarily and unlawfully restricts options.

The KBRA is described as a "connected action" in the DEIS/DEIR because of severability clauses in the KHSA, but most of the actions involved in its implementation actually have nothing to do with dam removal. An EIS is supposed to "briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action" (CEQ 1502.13). In this case, the KBRA is the only restoration option offered and cumulative effects of known component actions are ignored in the DEIS/DEIR.

← Comment 8 cont.

The California Environmental Quality Act (CEQA) project objectives in the DEIS/DEIR (ES-17) related to “purpose and need” include “To be consistent with the goals and objectives of KHSA and KBRA.” Once again options for restoration are restricted by these objectives to only the KBRA, which fails CEQA sufficiency. Other CEQA objectives (ES-17) include the following:

- “Establish reliable water and power supplies, which sustain agricultural uses and communities and National Wildlife Refuges (NWR).
- Improve long-term water quality conditions consistent with designated beneficial uses.

The establishment of “reliable water and power supplies” in accordance with KBRA provisions has potential profound and substantial environmental impacts that conflict with the objective of improving water quality conditions. CEQA (21100 c3) itself has specific requirements for: “Mitigation measures proposed to minimize significant effects on the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy” with which the DEIS/DEIR fails to comply. To meet CEQA requirements, the KBRA strategy of subsidizing agricultural pumping power costs should be contrasted with an ecological restoration alternative that relies on gravity for water delivery and filtration and remedies the ecological breakdown that the KBRA will exacerbate.

Alternative Development Misleading and Inadequate ← Comment 9 - Alternatives

The “heart of the environmental impact statement” is the alternatives analysis (40 C.F.R. § 1502.14), but the KBRA is the sole restoration alternative offered by the DEIS/DEIR. NEPA (Sec. 102 [42 USC § 4332 E]) says the government needs to “study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.” There is certainly a major conflict over flow levels and nutrient pollution in the Klamath River Basin and how large the footprint of agriculture can be and still be compatible with ecological restoration. In response to Resighini Rancheria requests in the cooperator’s draft of the DEIS/DEIR for development of alternatives, the government wrote “This EIS/EIR considers the KBRA as a connected action and does not analyze alternatives to the KBRA.”

Request for Needed Ecological Restoration Alternative Rejected: The Resighini Rancheria has been requesting that the government develop an ecological restoration (SER 2004) alternative since signing an MOU with the Department of Interior (DOI) to participate in providing input and review of environmental documents related to the Secretary’s Decision. The answer we received from Dennis Lynch, the Project Manager, in government to government meetings was that the KBRA was the only alternative that could be considered because it was agreed to in the Klamath Settlement and inseverable from dam removal and the KHSA. This is in conflict with the requirement that “reasonable alternatives not within the jurisdiction” to implement also be analyzed (40 C.F.R. § 1502.14 c). The rational alternative of shrinking water demand and abating nutrient pollution at its source must be explored as NEPA and CEQA requirements and added to the final EIS/EIR.

← Comment 9 cont.

By avoiding evaluation of an ecological alternative, the DEIS/DEIR departs from the use of “best available science” as required by CEQA. The proper course for the DEIS/DEIR would have been to adopt an alternative similar to the Everglades restoration program (SERES 2011):

“Science should be directed at recommending actions that will restore the quantity, timing and distribution of clean freshwater to restore the ecosystem, recover threatened and endangered species, and protect natural resources.”

The DEIS/DEIR doesn’t acknowledge scientific expert recommendations from the National Research Council (2004) that Lower Klamath Lake be restored and expanded. The Coho Salmon-Steelhead Expert Panel (Dunne et al. 2011), convened to review the KBRA, also stressed refilling the lake to restore the natural flow regime of the Klamath River.

The Resighini Rancheria prepared a list of questions for a December 20, 2010 government to government meeting related to ecological restoration, which are attached to these comments as Appendix A. The government refused to answer the majority of questions because the actions we asked to be analyzed would not conform to the KBRA. Many of the questions were related to the nutrient and water budget of the Upper Klamath Basin and how various large scale restoration actions might affect them. For example:

- Why wasn’t refilling Lower Klamath Lake considered for water storage as recommended by NRC (2004)?
- What would a re-filled Lower Klamath Lake water storage capacity be, including wetland storage? In the footprint of federally owned lands? If Lower Klamath Lake were re-expanded to its original footprint?
- Marshes in the Lower Klamath National Wildlife Refuge have very substantial nutrient stripping capacity (Lytle 2000, Mayer 2005); what quantity of nutrients would be absorbed by a restoring Lower Klamath Lake? In the footprint of federally owned lands? If Lower Klamath Lake were re-expanded to its original footprint?

The DEIS/DEIR avoidance of preparation of an ecological alternative that would take different steps to restore the Klamath River represents the government’s retreat from its duty to stimulate informed discussion and to provide suitable information on alternatives to decision makers.

No Action Alternative Improperly Described: The DEIS/DEIR mischaracterizes the No Action Alternative as keeping the dams operating in perpetuity, when a return to the Federal Energy Regulatory Commission (FERC) relicensing process is likely to lead to dam removal. The final FERC (2007) EIS on dam removal acknowledged severe problems with Klamath River health and KHP operation that set the stage for decommissioning. The Resighini Rancheria (2011c) and the Hoopa Valley Tribe (2011) both feel that fish passage requirements imposed by NMFS (2006) would likely render the Project uneconomic and force its abandonment and decommissioning. Administrative Law Judge Parlen McKenna (2006) upheld NMFS authority and PacifiCorp (2008) estimates that fish passage at all KHP dams would cost \$267 million, which is far more than project revenue justifies. This will likely throw the project into the “uneconomic” category. PacifiCorp’s Vice President Dean Brockbank (2010) explained PacifiCorp’s options: “The applicant may accept the uneconomic license, decommission and remove the facility, or pursue litigation and challenge the mandatory conditions.”

← Comment 10 - Alternatives

← Comment 10 cont.

An equally important factor in the FERC process is that it also requires issuance of Clean Water Act 401 Certification from the State of Oregon and the California State Water Resources Control Board (SWRCB). The SWRCB is unlikely to issue a 401 Certification because water quality problems related to Klamath Hydroelectric Project (KHP) operation cannot be remedied without dam removal (Resighini Rancheria 2004, 2011b, 2011c).

Brockbank (2010) acknowledged that the reason the company sought to enter Settlement negotiations was because:

“Throughout these negotiations, the federal government and the states of Oregon and California have expressed a strong policy preference that PacifiCorp’s dams on the Klamath River be removed.”

In sum, there is virtually no chance that PacifiCorp will receive a FERC license for continued KHP operation, if the KHSA and KBRA are terminated because of lack of authorizing legislation and funding. The final EIS/EIR should properly characterize the No Action alternative as required by CEQA (15126.6 e 2), including not only baseline conditions but “what would be reasonably expected to occur in the foreseeable future if the project were not approved.”

← Comment 11 - Alternatives

Preferred Alternative 2: The government’s preferred alternative is for the lower four KHP dams to be removed and for Keno Reservoir to remain, but with ownership and operation transferred to the U.S. Bureau of Reclamation (BOR). Unfortunately dam removal under the KHSA also triggers KBRA implementation. The Resighini Rancheria finds the KBRA’s defined restoration actions to be ecologically insufficient and also object to changes it would bring about regarding government trust responsibilities, if it is enacted (see Tribal Rights). Therefore, the Resighini Rancheria rejects preferred Alternative 2.

← Comment 12 - Alternatives

Alternative 8: The Resighini Rancheria would have endorsed Alternative 8, had it been retained because it would remove dams and implement the KHSA but without the KBRA. The reason for it being dropped from consideration is captured below:

“Alternative 8 will not be carried forward for more detailed analysis in the EIS/EIR because it does not meet the purpose and need under NEPA or the project objectives under CEQA and would not avoid or lessen significant environmental effects of the Proposed Action. The impacts from dam removal would be the same as the Proposed Action, but the restoration elements of the KBRA would not provide benefits to help offset these environmental effects.”

This statement does not provide justification for dismissing Alternative 8, but rather just falls back on the overly restricted purpose and needs statement. In the main, dam removal will be a positive action with temporary sediment impacts that are well described and analyzed in the DEIS/DEIR. The restoration measures specified within the KBRA are for the most part not related to mitigating dam removal impacts. The Resighini Rancheria argues that KBRA actions in aggregate will likely do more harm than good, given its water allocation, power cost subsidy for Klamath Project irrigators and continued farming in Tule Lake and Lower Klamath National Wildlife Refuges.

← Comment 13 - Alternatives

Alternative 13 Federal Take Over Alternative: The Resighini Rancheria request that the DEIS/DEIR be revised to reinstate Alternative 13, where the government would assume ownership of the KHP with powers granted under Section 14 of the Federal Power Act (16 U.S.C. § 807) and/or supplemental Congressional authorization. This would achieve volitional fish passage, improved water quality, and a free-flowing river without the harmful consequences and expense of the KBRA. The DEIS/DEIR in Table 2.2 states the following reasons for rejection of consideration of this alternative:

“Alternative 13 will not move forward for more detailed analysis in the EIS/EIR because the environmental impacts would be generally the same (and have generally the same timeframe) as those under Alternative 2.”

Implementation of dam removal without the flow and land use allocations of the KBRA has a much different set of impacts and arguments for rejection of Federal Takeover are weak. The time frame of dam removal through a Federal takeover could be much more expeditious than the KHSA’s 2020 schedule. Given the level of toxic algae and nutrient pollution problems associated with the KHP operation, and unacceptably high disease rates in the lower Klamath River, speedier dam removal is warranted (Resighini Rancheria 2011c). The model for a Federal Takeover is the Elwha River dam removal that is proceeding in Washington State, where there is no change in any water rights or shifts in government tribal trust responsibilities associated with decommissioning.

← Comment 14 - Alternatives

Alternative Requirements for Record of Decision Also Unmet: The Code of Federal Regulations (CFR §46.450) states requirements for development of an environmentally preferable alternative to support a Record of Decision:

“The environmentally preferable alternative is the alternative required by 40 CFR 1505.2(b) to be identified in a record of decision (ROD), that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources. The environmentally preferable alternative is identified upon consideration and weighing by the Responsible Official of long-term environmental impacts against short-term impacts in evaluating what is the best protection of these resources. In some situations, such as when different alternatives impact different resources to different degrees, there may be more than one environmentally preferable alternative.

The DEIS/DEIR position that the KBRA is the only alternative for restoration that can be considered also puts it clearly in conflict with this statute, which means that the ROD issued for an affirmative Secretarial Decision could also be subject to legal challenge.

Comment 15 - ITAs

Tribal Rights, the DEIS/DEIR and KBRA Implementation

The DEIS/DEIR improved its language describing the Resighini Rancheria, its people and its customs. It is still deficient, however, with regard to full disclosure of how tribal trust and treaty responsibilities of the government would change with an affirmative Secretarial Decision on dam removal, appropriate authorizing legislation and the implementation of the KBRA. Benefits claimed for the Resighini Rancheria because of KBRA implementation lack basis, but this issue will be more fully discussed in the Economics section below.

Comment 16 - ITAs

Resighini Rancheria Water and Fishing Rights: The Resighini Rancheria appreciates the improvement in text in the public release DEIS/DEIR from previous drafts that mischaracterized the Tribe and its way of life. However, the DEIS/DEIR continues to state that “Any fishing and concomitant water rights associated with the Resighini Rancheria have not yet been determined.” The Resighini Rancheria Reservation borders Klamath River and its waters sometimes submerge large areas of the Reservation; therefore, the Tribe automatically possesses riparian water rights under California water law for domestic consumption or agricultural use on adjoining lands (SWRCB 2011). The Resighini Rancheria currently draws its domestic water from groundwater wells and has no active agricultural irrigation at present, but that does not diminish their right:

“A riparian water right is a right to use the natural flow of water on riparian land. Riparian land is land that touches a lake, river, stream, or creek.”

“Riparian rights are not lost by non-use. A person who has a riparian right, but is not currently using water, has a ‘dormant’ riparian right. He or she can begin using water under that dormant right at any time. If the new riparian use results in a junior water right holder not having enough water, the junior water right holder must decrease his or her diversion and use of water until the senior water right holder has enough water to meet his or her reasonable needs. Riparian right holders on a stream course all have the same priority. If there is not enough water available for competing riparian users, they must share the available supply according to their needs. Generally in this situation, water used for interior domestic purposes, such as drinking, cooking and bathing, has the highest priority” - SWRCB (2011).

As the Resighini Rancheria has repeatedly expressed in government to government meetings, members have fishing rights both on-Reservation and off that have never been relinquished and that cannot be extinguished.

Comment 17 - ITAs

Klamath Basin Tribal Rights: There Klamath Basin Tribes individually and collectively benefit from treaty rights and trust responsibilities that the government is bound to uphold and the Resighini Rancheria is concerned about changes triggered by the KBRA. The current legal precedent for prioritization of water allocation by the U.S. Bureau of Reclamation (BOR) to the Klamath Irrigation Project or the Klamath River is based on the Southwest Regional Solicitor of Department of Interior (DOI 1995):

“Reclamation is obligated to ensure that Project operations not interfere with the Tribes’ senior water rights. This is dictated by the doctrine of prior appropriation as well as Reclamation’s trust responsibility to protect tribal trust resources.

Comment 17 cont.

With respect to the Tribes' fishing rights, Reclamation must, pursuant to its trust responsibility and consistent with its other legal obligations, prevent activities under its control that would adversely affect those rights, even though those activities take place off-reservation."

Resighini Rancheria Tribal Council members are extremely concerned about language that could change this precedent in the KBRA (15.3.9) that is not fully disclosed or discussed in the DEIS/DEIR:

"The United States, acting in its capacity as trustee for the Federally-recognized tribes of the Klamath Basin, hereby provides interim Assurances as stated in Section 15.3.8.B, and conditional *permanent* Assurances that it will not assert: (i) tribal water or fishing right theories or tribal trust theories in a manner, or (ii) tribal water or trust rights, whatever they may be, in a manner that will interfere with the diversion, use or reuse of water for the Klamath Reclamation Project that is not precluded by the limitation on diversions of water as provided in Appendix E-1 in any administrative context or proceeding, or judicial proceeding, or otherwise."

An affirmative Secretarial Decision in combination with authorizing legislation would trigger KBRA implementation and would; therefore, change water delivery priority from Tribes to Klamath Project irrigators. The Solicitor's opinion withstood legal challenge in the *Klamath Water Users Protective Association v. Patterson* decision. The U.S. Ninth Circuit Court of Appeals (9th Cir. 1999, 204 F.3d 1206) rejected the Klamath Basin Water Users appeal of practices that allocated water to endangered fishes to the benefit of Tribes as a priority over deliveries to the Klamath Irrigation Project: "Similar to its duties under the Endangered Species Act (ESA), the United States, as a trustee for the Tribes, has a responsibility to protect their rights and resources."

The DEIS/DEIR (ES-2) states "Under the KHSA and KBRA (Agreements) the United States will be a party to the KBRA at the time of a Secretarial Determination under the KHSA, and obligated to implement the KBRA according to its terms." The Resighini Rancheria interprets this language as switching DOI and U.S. Government priorities from protecting fisheries and Indian trust resources to water delivery to Klamath Project irrigators (Schlosser 2010) and we strongly object to this change. DEIS/DEIR Table ES-5 entitled "Summary of Adverse Environmental Effects Relative to NEPA" does not identify any issues related to KBRA implementation and tribal rights. Instead the table has a footnote stating that: "Effects relative to tribal trust resources are not displayed in this table given that no new adverse effects were identified relative to the alternatives analyzed in this EIS/EIR." This is clearly obfuscation.

The DEIS/DEIR also ignores the fact the Resighini Rancheria would be excluded as non-Parties from participating on fisheries restoration, water quality or other Klamath Basin Coordinating Council (KBCC) committees for the 50 year life of the KBRA (Appendix D1). The Resighini Rancheria has actively participated in government processes regarding Klamath River dam removal and Clean Water Act enforcement since 2004 and has knowledge and staff capacity that should qualify it for participation in the KBCC. This discrimination eliminating participation by legitimate stakeholders in trust resource management oversight is likely illegal under the Federal Advisory Committee Act.

Comment 18 - KBRA

Analysis of Cumulative Watershed Effects in DEIS/DEIR Deficient

Chapter 4 of the DEIS/DEIR entitled Cumulative Effects frames the issue appropriately:

“Cumulative effects are an important part of the environmental analysis because they allow decision makers to look not only at the impacts of an individual proposed project, but the overall impacts on a specific resource, ecosystem, or human community over time from several different projects.”

In response to Resighini Rancheria cumulative effects related comments in the cooperators draft the government responded:

“The KBRA is currently programmatic in nature and is being analyzed programmatic as a connected action to the issue of whether or not to remove the Four Facilities.”

The DEIS/DEIR calls the KBRA a “connected action” but also states that that its concrete actions and impacts are yet to be determined, which is untrue. The known KBRA actions that should have been analyzed with regard to cumulative effects are:

- Klamath Project water allocation that will “range for the March to October period from 330,000 to 385,000 acre feet, which would at some time increase to 340,000 to 385,000 acre-feet” (KBRA 15.1.1Bi),
- River flows that are lower than any historic precedent in the October through February period and with projected drought flows of less than 60% of levels (Appendix E-5) that triggered the September 2002 adult salmon fish kill, and
- Continued farming in the Tule Lake and Lower Klamath National Wildlife Refuge (NWR) Lease Lands that blocks needed lake and marsh restoration that would increase water storage and nutrient absorption.

The statute governing NEPA that define “connected actions” invoked by the DEIS/DEIR also state that such “cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement.” Deferring analysis of KBRA implementation is piecemealing under NEPA, which is illegal. Furthermore, legislative authorization of the KBRA will make actions within it sanctioned by law and; therefore, likely not subject to future environmental review.

The DEIS/DEIR Table ES-4 entitled *Summary of Significant and Unavoidable Impacts* lists the KBRA in three places, but only analyzes things like impacts to artifacts by project construction and potential negative water supply impacts to the agricultural economy of the Upper Klamath Basin. The effects of KBRA flows and water allocation are examined only as a constraint to agricultural interests and not with regard to how they effect water pollution or restoration potential. The DEIS/DEIR in Table ES-5 (Summary of Adverse Environmental Effects Relative to NEPA) lists other KBRA related issues, such as increased pumping costs and potential for job losses related to implementation, but again shows bias towards impacts to the farm economy. The KBRA (Appendix C-2) has over \$150 million for power subsidies including an On-Project Plan and connection to the Bonneville Power Administration grid, but a DEIS/DEIR Table E-5

Comment 18 cont.

footnote states that: "Many factors affect setting customer electricity rates, including regulatory approval; therefore, it is difficult to assess how rates may change, if at all." Since a major thrust of the KBRA is to keep power rates artificially low and there are substantial lines items in the project budget (Appendix C-2), this latter statement seems purposefully misleading.

Comment 19 -
NEPA/CEQA

The DEIS/DEIR Table 4-2 entitled "Cumulative Effects Area of Analysis by Resource" defines the cumulative effects area of analysis by resource (emphasis added):

- Water Quality: Rivers, streams and reservoirs within the upper and lower Klamath Basins including Wood, Williamson and Sprague Rivers; Upper Klamath Lake; the Klamath River to the Klamath River Estuary; and the Klamath River watershed.
- Aquatic Resources: Surface waters within the Klamath Basin affected by dam removal activities *excluding the Lost River watershed, Tule Lake basin, and Trinity River*. The Klamath River to the Pacific Ocean.
- Algae: Surface waters within the Klamath Basin affected by dam removal activities *excluding the Lost River watershed, Tule Lake basin, and Trinity River*. The Klamath River to the Pacific Ocean.
- Flood Hydrology: The Klamath River watershed starting at J.C. Boyle reservoir and continuing downstream from the deconstruction area of the four dams to the Pacific Ocean.
- Groundwater: Supply wells adjacent to J.C. Boyle, Copcol, Copco 2, and Iron Gate reservoirs.

The entire California area of the Klamath Project (Figure 1) is left out of analysis, including lower Lost River, Tule Lake and Lower Klamath Lake. Klamath Irrigation Project development has caused acute nutrient pollution in Lost River and Tule Lake Basin and the polluted tail waters are now exported to Keno Reservoir through the Lost River Canal and the notoriously polluted Straits Drain. The extremely high nutrients coming into the Keno Reservoir from Upper Klamath Lake and Klamath Project tail water qualify as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA). Without abatement of nutrients at their source within the Klamath Irrigation Project, Keno reservoir problems will not be solved and downstream nutrient pollution impacts will continue or worsen (Dunne et al. 2011, Goodman et al. 2011). Since the KBRA specifies farming in the Lease Lands for the next 50 years and impedes UKL recovery (see below), these are not just part of environmental baseline conditions but also Project impacts that need analysis.

The transfer of Keno Reservoir called for in the KHSA (7.5) also needs cumulative effects analysis under this DEIS/DEIR. The KHSA (7.5.4) states that the BOR will continue manage Keno Reservoir and surrounding lands similar to operation since 1968. The dredging practices and disconnection of flood plains and marshes in Keno Reservoir have contributed to its ecological dysfunction that includes weeks to months of anoxia. Changes in operation and land use adjacent to the reservoir are needed for ecological recovery, to abate lower Klamath River water pollution and to restore salmon. The Chinook Expert Panel (Goodman et al. 2011) concluded that unless Keno Reservoir water quality problems are remedied that successful reintroduction of salmon to the Upper Klamath Basin was unlikely, even if dams were removed. Deferring discussion in the DEIS/DEIR of this "connected action" is once again illegal piecemealing under NEPA.

Comment 20 - Keno
Transfer

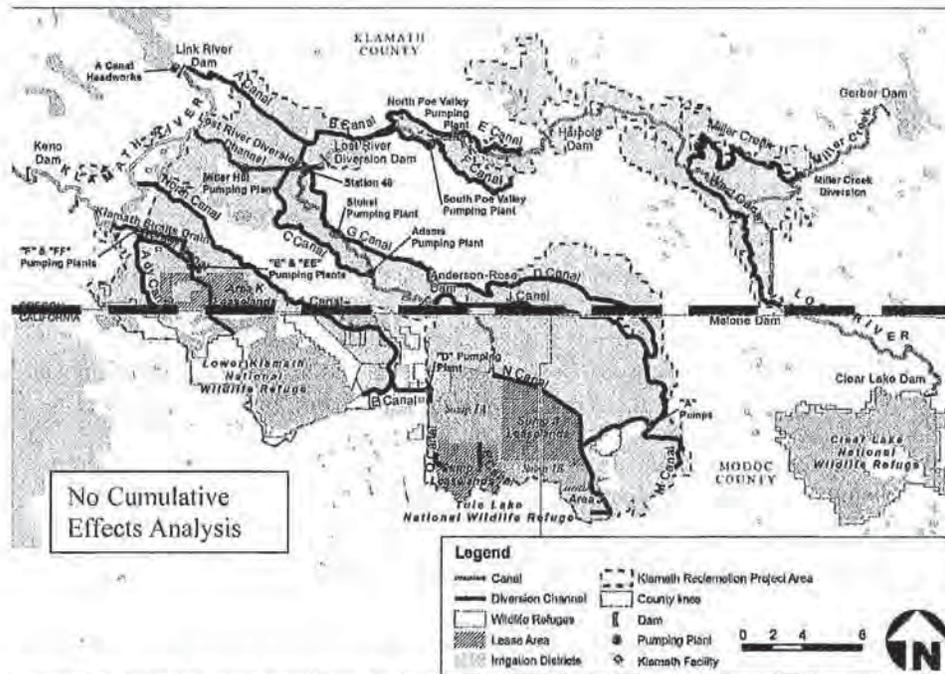


Figure 1. Klamath Project map from DEIS/DEIR Figure 1.4 has the State Line highlighted (red line) and annotation showing that there will be no cumulative effects analysis in California. Lease Lands (grey) that will continue to be farmed under the KBRA are in both California and Oregon.

Comment 21 - Groundwater

The Resighini Rancheria (2011b) has expressed concerns regarding groundwater depletion in comments on the *KBRA Drought Plan* (Sheets 2011) and in the cooperators draft of the DEIS/DEIR. In response to cooperators' draft comments the government replied:

"As noted in the revised KBRA sections, the KBRA includes programs to benefit groundwater resources by protecting them from over exploitation (through provisions prohibiting adverse impacts to groundwater, where none currently exist)."

The KBRA (15.2.4.A.i) specifically mentions protecting springs that are directly connected to the Klamath River, but not those in the Lost River. The On-Project Water Plan is likely to continue to draw on groundwater sources in the lower Lost River in California and yet DEIS/DEIR cumulative effects analysis does not cover this area.

Groundwater levels have already dropped significantly (USGS 2005) and the lowered water table has likely reduced surface flows in the Lower Lost River (Gannett et al. 2007). Therefore, cumulative effects of water use under the KBRA and connected action of On-Project Plan need NEPA and CEQA analysis with regard to impacts on ESA and CESA listed sucker species in the lower Lost River but also on potential for increased concentrations of nutrients in agricultural return water through the Straits Drain. The *KBRA Drought Plan* (1.1) (Sheets 2011) also clearly states that the KBRA does not control water management in the Lost River basin.

Comment 23 - Fish

KBRA Conflicts with Endangered Species Act

Comment 22 - Fish

The KBRA (22.5) states that “By entering into this Agreement, NMFS and U.S. Fish and Wildlife Service (USFWS) are not prejudging the outcome of any process under the ESA and NMFS and USFWS implementing regulations, and NMFS and USFWS expressly reserve the right to make determinations and take actions as necessary to meet the requirements of the ESA and implementing regulations in a number of places.” However, there is also language that binds the agencies to uphold the KBRA and many statutes and provisions that restrict conservation options for NMFS and USFWS and diminish the prospects for endangered fish recovery.

Lost River and Shortnose Suckers: According to the National Research Council (NRC 2004) the USFWS has failed to take appropriate actions to recover the Lost River sucker (Figure 2) and the shortnose sucker (Figure 3) that are listed as endangered under ESA (USFWS 1988). These species occupy just a fraction of their former range (Figure 4) and the only populations that seem somewhat healthy are in Clear Lake Reservoir in the upper Lost River Basin. USFWS has never published final Critical Habitat for these species due to political pressure that would include Tule Lake and Lower Klamath Lake within National Wildlife Refuges. The KBRA allows farming in the NWR Lease Lands and; therefore, prevents re-establishment of suckers in Lower Klamath Lake, lower Lost River and Tule Lake. Keno Reservoir was once a connected wetland with Lower Klamath Lake and restoration of suckers there will be constrained under the KHSA (see Alternatives section). In order to function as a hedge against extinction, NRC (2004) recommended: “Reestablishment of spawning and recruitment capability for endangered suckers in Tule Lake and Lower Klamath Lake, even if the attempts require alterations in water management.” Population status for Figure 4 is based on Delineas et al. (1996), Shively et al. (2000), Perkins et al. (2000), NRC (2004), and USFWS (2008).



Figure 1. Lost River sucker adult.



Figure 2. Shortnose sucker adult.

The KBRA relies heavily on Upper Klamath Lake (UKL) populations for sucker recovery, which is problematic given population status and water quality problems there. Perkins et al. (2000) expressed concerns about UKL sucker populations:

“In 1984 and 1985, the spawning populations of both species were dominated by large, old individuals, with little indication of recent adult recruitment. In the next 13 years, only one strong year class (1991) recruited into the spawning populations of both species. This year class temporarily boosted population numbers, but annual fish kills from 1995 to 1997 eliminated most adults of both species. Associated with poor water quality

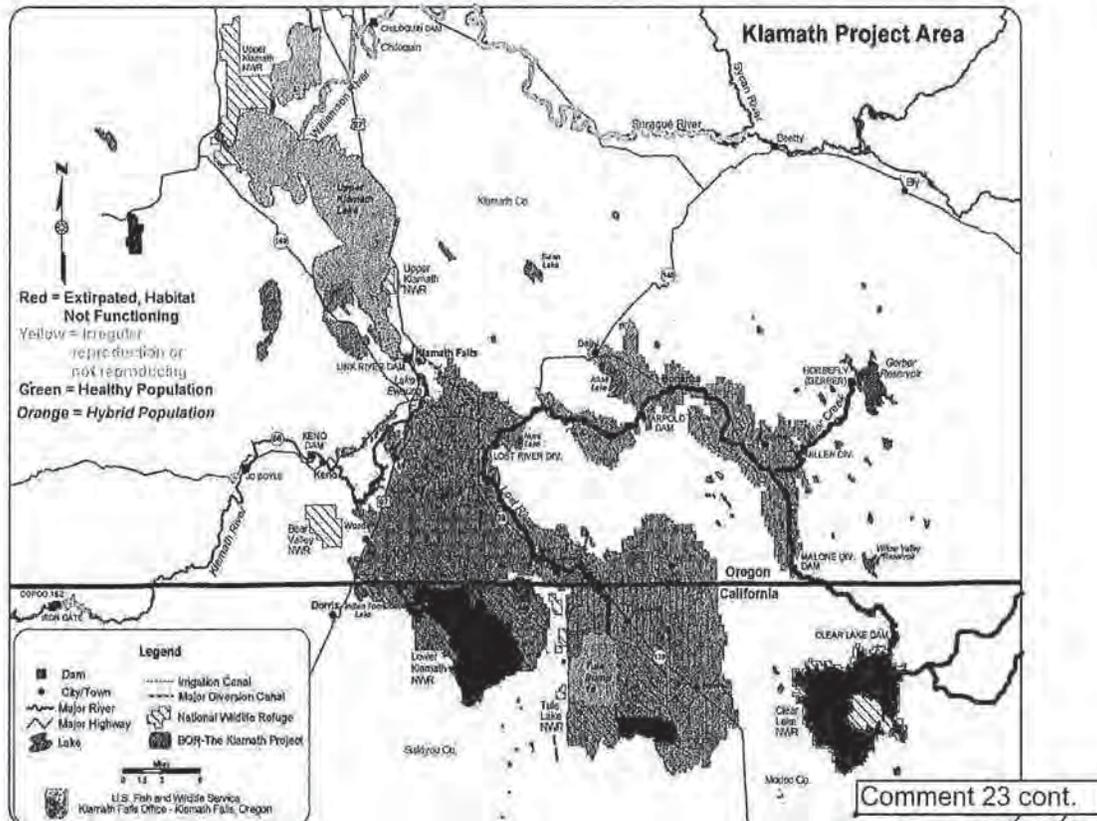


Figure 4. This map shows the status of Lost River and shortnose sucker populations in the Upper Klamath Basin. The only healthy population is in Clear Lake and the population in Tule Lake may be lost to sedimentation.

caused by the proliferation and decay of blue-green algae *Aphanizomenon flos-aquae*, these fish kills raise concern that alterations to the lake ecosystem over the past several decades have increased the magnitude and frequency of poor water quality. As a result, mortality rates of all life stages may have increased, thereby disrupting the species' life history pattern and potentially decreasing long-term population viability."

The Expert Panel on Native Fish (Buchanan et al. 2011) convened for KBRA review and assessment stated that: "Unless a recruitment event occurs soon, these populations could become extinct in the near future given their current annual mortality rates." Population recruitment for both the Lost River and shortnose sucker populations in UKL has continues to be problematic (Janney et al. 2008). The algae blooms that choke the surface of the lake (Figure 5) can cause dissolved oxygen to fluctuate from super-saturated during blooms to zero (Figure 6) when the algae dies, which in turn causes massive fish kills.

Janney et al. (2008) found that average survival for Lost River suckers was 15-17 old in recent years, when the typical age in 1986 was 19-30 years old and the maximum known age of the species is 57 years old (Buchanan et al. 2010). The shortnose sucker within UKL had an even

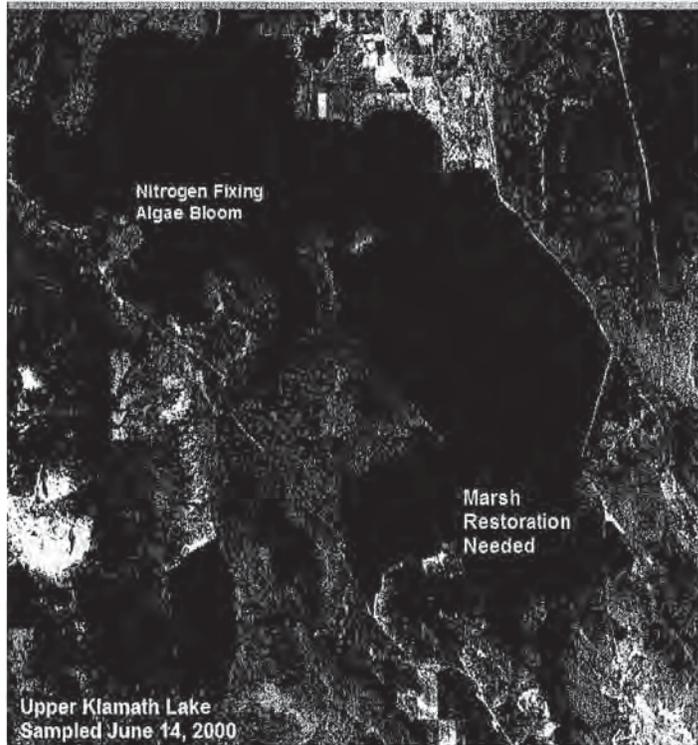


Figure 4. UKL has profuse algae blooms dominated by the nitrogen fixing species *Aphanizomenon flos-aquae*. Examples of marsh areas that should be restored for ecological function and algicidal properties are highlighted (red arrows). Adapted from figure in ODEQ (2010).

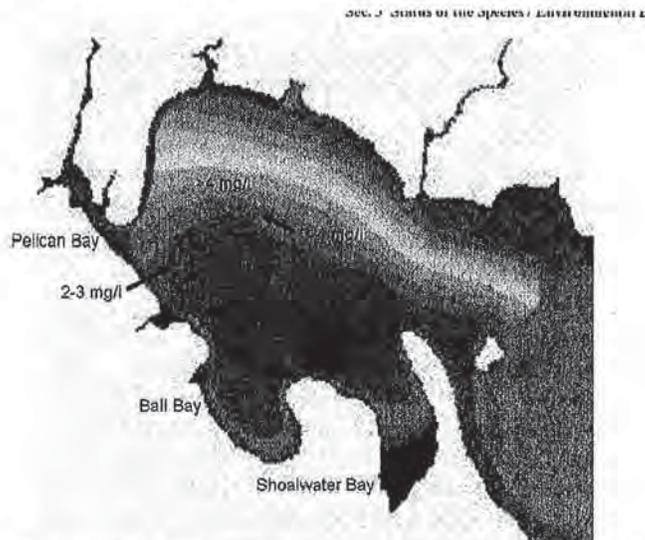


Figure 5. Map of dissolved oxygen in northern UKL from Figure 3-21 of the USFWS (2008) B.O. for Klamath Project operations. Insufficient actions under the KBRA to restore marshes surrounding UKL mean that dissolved oxygen problems (red/orange) will continue with damaging results to sucker recovery.

← Comment 23 cont.

shorter life expectancy of 8.6-10.6 years old (Janney et al. 2008) when their maximum age under optimal conditions is over 30 years (Buchanan et al. 2010). Janney et al. (2008) also noted that shortnose sucker recruitment was failing in some years even when there were no adult fish kills. Thus, the UKL Lost River and shortnose sucker populations are not secure, which argues strongly for expanding the number of viable populations as a buffer for extinction (NRC 2004).

In addition, the KBRA actually impedes water quality and sucker recovery in UKL because of its emphasis on additional water storage to help meet guaranteed allocations of water for the Klamath Project. The Wetland Research Consortium (WRC 2009) found that UKL marshes create conditions that can stifle blue-green algae (BGA). Getting a marsh perimeter around UKL is needed because there is no other way to control nitrogen fixation that causes the outflow of UKL to be 3.5 times higher in N than incoming waters (PacifiCorp 2004).

Although marsh restoration has been occurring, it has been subverted from its original purpose of restoring marsh function. Former marsh land acquired for restoration had subsided and would have needed to be filled and graded for ecosystem function and algicidal benefits. Instead dikes were pulled and the flooded area used for additional water storage. Blue-green algae thrive in this deep water instead of being suppressed. The failure to suppress blue-green algae in UKL has major implications for prospects of clean up in Keno Reservoir because the suspended load is a major driver of anoxia (ODEQ 2010, Sullivan et al. 2009, 2010) (see CWA section).

Comment 24 - NEPA/CEQA

The DEIS/DEIR (Table 4-2) cumulative effects analysis does not cover Lost River and shortnose sucker habitat in California and they are both listed under the California Endangered Species Act (CESA). The KBRA (24.2.2) states that:

“Within sixty days of concurrence by the Governor of California with an affirmative Determination by the Secretary under Section 3.3 of the Hydroelectric Settlement, CDFG will provide the draft legislation to the Parties regarding a limited authorization to take incidentally Lost River suckers, shortnose sucker, golden eagles, southern bald eagles, greater sandhill cranes, or American peregrine falcon contingent upon the fulfillment of certain conditions, if such authorization is necessary for implementation of the Agreement.”

This shows intense pressure on the California Department of Fish and Game (CDFG) to grant “take” permits for listed sucker species when there are no actions to recover them in the KBRA in their Upper Klamath Basin habitats within California, only impediments. Since federal ESA has failed to protect the suckers (NRC 2004).

Comment 25 - Fish

The DEIS/DEIR (2-51) notes that the KBRA allocation for National Wildlife Refuges includes “refilling of the Tule Lake NWR sumps after intentional draining.” Although suckers are not present in Tule Sump B, there is a remnant population of about 1,000 adults both species of endangered suckers in Tule Sump A (USFWS 2008). Therefore, the effects of such water allocation should be analyzed in the DEIS/DEIR. The government refused such a request by the Resighini Rancheria in the cooperator’s draft review: “The KBRA only identifies the types of uses that the Refuge Allocation of water may be used for. A decision to drain the sump would likely require a Section 7 consultation on water management.”

Comment 26 - Fish

Endangered Pacific Salmon Species Recovery Unlikely Under KBRA: Two aspects of the KBRA would likely to confound Pacific salmon species recovery; 1) flows that are too low in drought years and 2) failure to abate nutrient pollution. The clear conflict between the KBRA and the NMFS (2010) B.O. flows will likely result in compromising flows for fish, similar the history of consultation in 2002 as documented by former NMFS employee Mike Kelly (2004), whose retirement letter is attached as Appendix B.

Comment 27 - Hydrology

The Resighini Rancheria (2011c) commented extensively on the draft *KBRA Drought Plan* (Sheets 2011), expressing concerns for the lack of defined minimum flows for salmon. The finalized *KBRA Drought Plan* (2011), published in July 2011, needs to be analyzed in the DEIS/DEIR in concert with the KBRA. The former offers no guaranteed low flows for fish and the latter recommends flows (Appendix E-5) that are in conflict with those recommended by NMFS (2008) in their Biological Opinion (B.O.) for coho salmon and Klamath Project operations. This is a cumulative effect of the "connected action" of the KBRA and requires NEPA and CEQA assessment. Avoidance of this issue is piecemealing. In response to a similar Resighini Rancheria request in the cooperator's draft round the government responded:

"The Drought Plan is not completed and cannot be analyzed at this time. Such analysis would be beyond the scope of this EIS/EIR. When a decision needs to be made on the Drought Plan, decision makers will need to comply with applicable laws and regulations including NEPA, CEQA, ESA and CESA. This EIS/EIR does include KBRA modeled flows in the analysis."

Table 1. WRMS flow simulations at Iron Gate Dam for years similar to 1992 and 1994 under KBRA flow allocations. R32 = primary run. R33 = with additional storage. R34 = with additional storage and climate change. Yellow indicates lower than September 2002 fish kill flows (758 cfs).

Period	R32_1992	R32_1994	R33_1992	R33_1995	R34_1992	R34_1994
Jan	854	959	819	1106	846	1106
Feb	809	928	800	1025	809	1025
Mar_1_15	1022	1239	800	996	800	996
Mar16_31	1021	1151	800	860	826	924
Apr_1_15	1063	1184	800	824	786	847
Apr_16_31	1022	1125	800	821	767	813
May_1_15	807	924	800	813	701	798
May_16_31	843	1069	800	812	668	823
Jun_1_15	698	913	800	811	581	773
Jun16_30	646	873	800	809	610	753
Jul_1_15	509	629	700	706	515	607
July15_30	524	574	700	705	537	561
August	442	485	800	804	533	548
Sept	512	577	800	808	519	552
Oct	549	582	800	811	800	811
Nov	647	690	829	800	829	800
Dec	774	762	914	800	914	800

← Comment 27 cont.

The *KBRA Drought Plan* (Sheets 2011) promises to “provide sufficient quantities of water to meet the biologically essential river flows and lake elevations in periods of Drought or Extreme Drought” but a close examination of the Plan finds no specific reference to amounts of releases for salmon during critical periods at locations like Iron Gate Dam. Thus, one can only surmise that KBRA flow levels from Appendix E-5 model outputs from WRMS and KLAMSIM based on inflow into Upper Klamath Lake similar to historic water years (1961-2000) show the range of projected minimum flows. Flow levels in the driest years would be much lower than the 758 cfs flow at the time of the of the September 2002 fish kill (<758 cfs in yellow)(CDFG 2004, Guillen 2003). Different model runs are R32, which is the baseline KBRA model before dam removal (interim), R33 is post-dam removal and R34 is post dam removal but factoring in climate change. R32 and R34 have projected flows as low as 442 cfs and 515 cfs, respectively, for a year similar to 1992. Figure 6 shows the same flow model results as a chart.

The DEIS/DEIR does show very low water supply projected by KBRA model flows in its Figure 3.8-5 that is adapted here as Figure 7. The projected annual volume of water in acre feet (AF) delivered to the Klamath Project and that allocated to the lower Klamath River is projected for the 50 year life of the KBRA. Areas highlighted with dashed orange lines in Figure 7 show where there are critical shortfalls in KBRA flows during droughts. It is in periods of prolonged drought that span several years, when water will be allocated to agriculture and not fisheries that are likely to cause a major ecological breakdown in the lower Klamath River, including widespread fish disease epidemics and fish kills (see below). Flows under the KBRA will be less than those called for under the Klamath Project operations NMFS (2010) Biological Opinion (B.O.) for coho salmon and Hardy et al. (2006). Figure 8 shows Klamath River flows at Iron Gate Dam for the 90% exceedance (very dry) water year with the KBRA WRMS R32 model run, the NMFS (2010) Biological Opinion (B.O.) flows and minimums recommended in the Hardy et al. (2006) Phase II study (Hoopa Tribe Fisheries Department 2011).

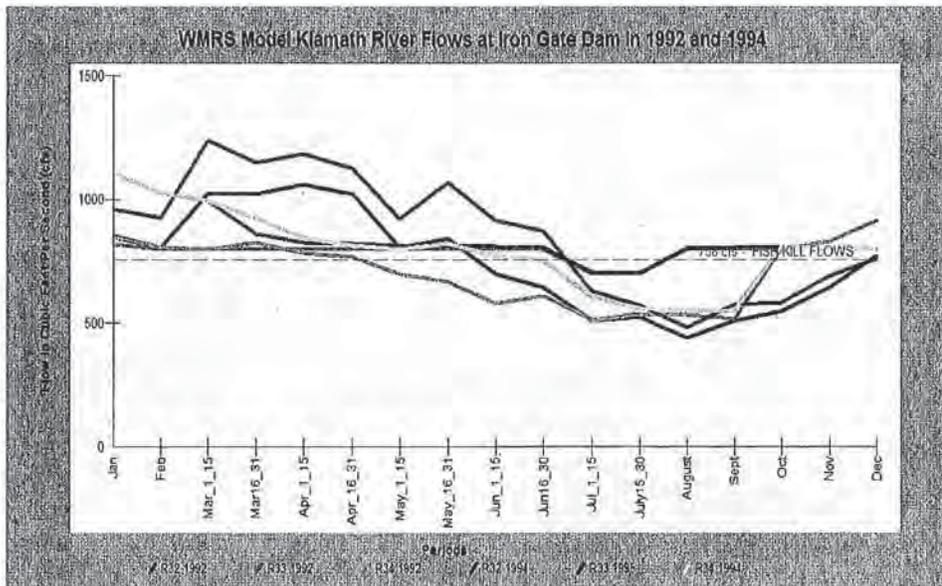


Figure 6. WRMS model run for Iron Gate Dam in years of Extreme Drought, with similar Upper Klamath Lake in-flow to 1992 and 1994. Data from KBRA (E-5, Tables 2, 4, 6).

Annual flows under the No Action/No Project Alternative and Proposed Action

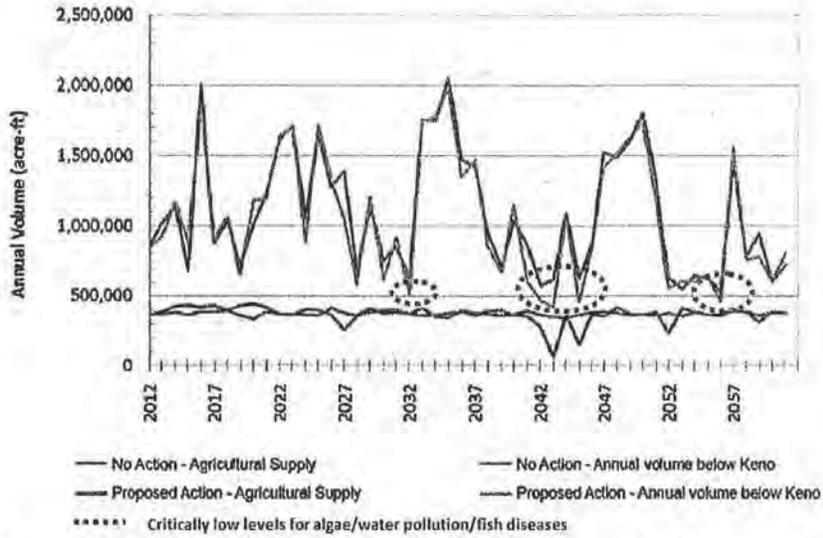


Figure 7. KBRA WRMS model outputs showing projected annual volume in acre feet (AF) of water delivered to the Klamath Project and to the lower Klamath River. DEIS/DEIR Figure 3.8-5.

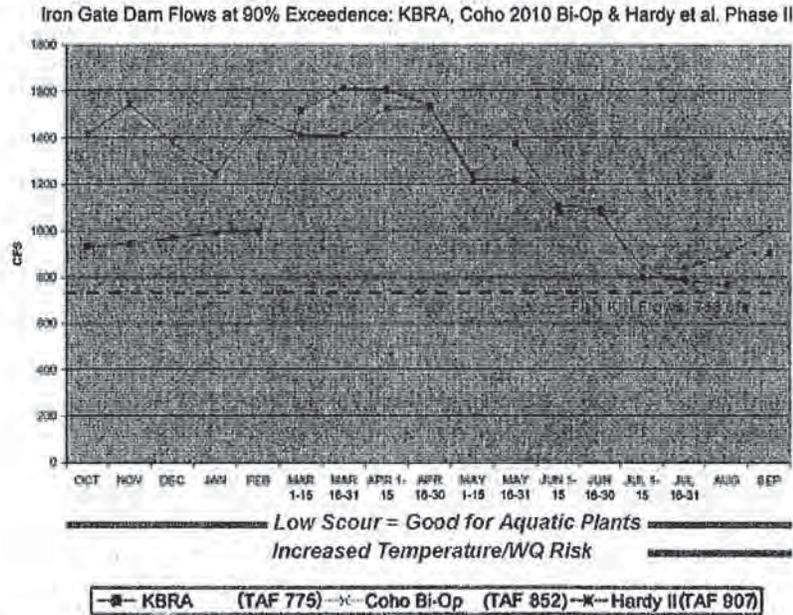


Figure 8. Flows at Iron Gate Dam in a 90% exceedence flow year comparing the KBRA WMRS R32 model flows, NMFS (2010) BO flow levels and Hardy et al. (2006) Phase II. Data from the Hoopa Fisheries Department. Reference is USGS Iron Gate September 2002 fish kill flow release.

← Comment 28 - Water Quality

Annotations in Figure 8 show periods when very low flow conditions will foster increased algae growth and trigger more adverse water quality. Algae build up has the potential to be most injurious during prolonged droughts when there is insufficient water for flushing flow releases in spring. Lower Klamath River algae blooms not only cause directly stressful conditions due to elevated pH and dissolved ammonia and depressed dissolved oxygen (D.O.) (Hoopa TEPA 2008), they also provide habitat for the intermediate host of deadly fish diseases (Stocking and Bartholomew 2004, Stocking and Bartholomew 2007).

Goodman et al. (2011) call attention to persistent problems of prolonged anoxia in Keno Reservoir (Figure 9) that they believe will not be alleviated under the KBRA. Figure 10 shows schematically where water quality limitations would block salmon migration, even the lower four KHP dams were removed. Diking off of wetlands and farming up to the margin of the reservoir has disrupted river processes that could otherwise assist with nutrient processing and reduction, similar to the findings of Bernot and Dodds (2005). Dredging of the reservoir to increase water storage capacity circa 1968 likely contributed to a decreased ability for ecological function and an increased propensity for anoxia. Continuing this land use and pattern of operation of Keno Reservoir under the KHSR (7.5.4, 7.5.5) will prevent improved ecosystem function by riparian marshes that could otherwise assist with clean up of nutrient pollution, similar to the findings of Lytle (2000) and Mayer (2005). As noted above, the failure to analyze the transfer of Keno Reservoir to the BOR and its operation for the 50 year life of the KHSR/KBRA is a critical shortcoming of the DEIS/DEIR.

In addition to the suspended load from Upper Klamath Lake, ODEQ (2010) also found the waste load from the Straits Drain to be a major driver of anoxia in Keno Reservoir. Waste water from the Klamath Straits Drain in August 2002 constituted 52% of out flows from the reservoir (Figure 11), which is similar to NRC (2004) findings. Agricultural discharges from the Lost River through the Lost River Diversion (LRD) canal are known to occur in winter (Deas and Vaughn 2006); however, ODEQ (2010) also found substantial nutrient contributions from that source in summer and fall of 2000 and 2008. ODEQ (2010) model runs of D.O. depletion in Keno Reservoir show that the contributions from the LRD in September and October 2008 that appears to prolong the period of lethal conditions for salmonids there by several weeks. This is further conclusive proof of the connection between the Lost River, Tule Lake and Lower Klamath Lake and water quality in Keno Reservoir that needs analysis in the cumulative effects section of the DEIS/DEIR.

Highly polluted water from Keno Reservoir released to the lower Klamath River may be somewhat improved by river denitrification processes in the free flowing river section after dam removal and will also be improved dilution from springs in the reach currently inundated by KHP reservoirs (Asarian et al. 2010). However, dam removal also will speed the travel of nutrients from Keno Reservoir and the levels of nitrogen after dam removal at the present location of Iron Gate Dam will increase by 45-58% in July-September (Asarian et al. 2010).

The DEIS/DEIR (3.2.4.1.3) cites Asarian et al. (2010) and acknowledges the increase in nitrogen after dam removal, but fails to analyze the potential cumulative effects of continuing high pollution rates from the Klamath Project under the KBRA on water quality and fish health.

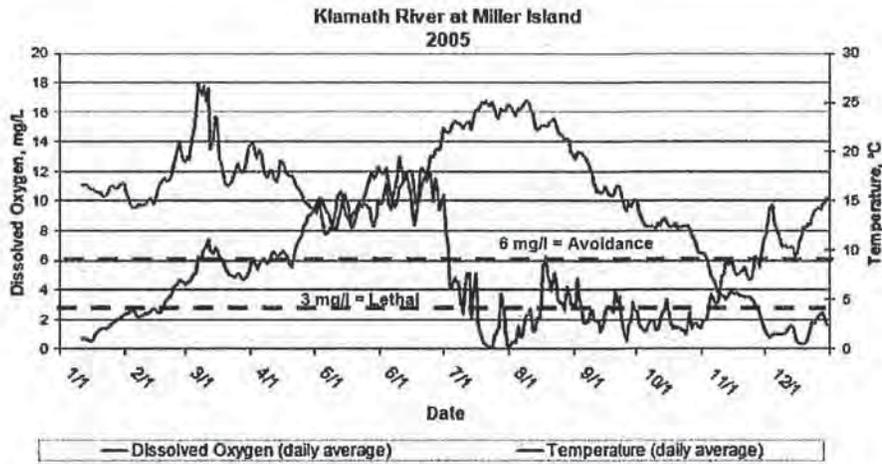


Figure 9. This chart shows fluctuations of water temperature and dissolved oxygen in Keno Reservoir in 2005 with lethal levels extending from July through October. Taken from Goodman et al. 2011 where it appears as Figure 4. Threshold reference annotations added based on WDOE (2002).

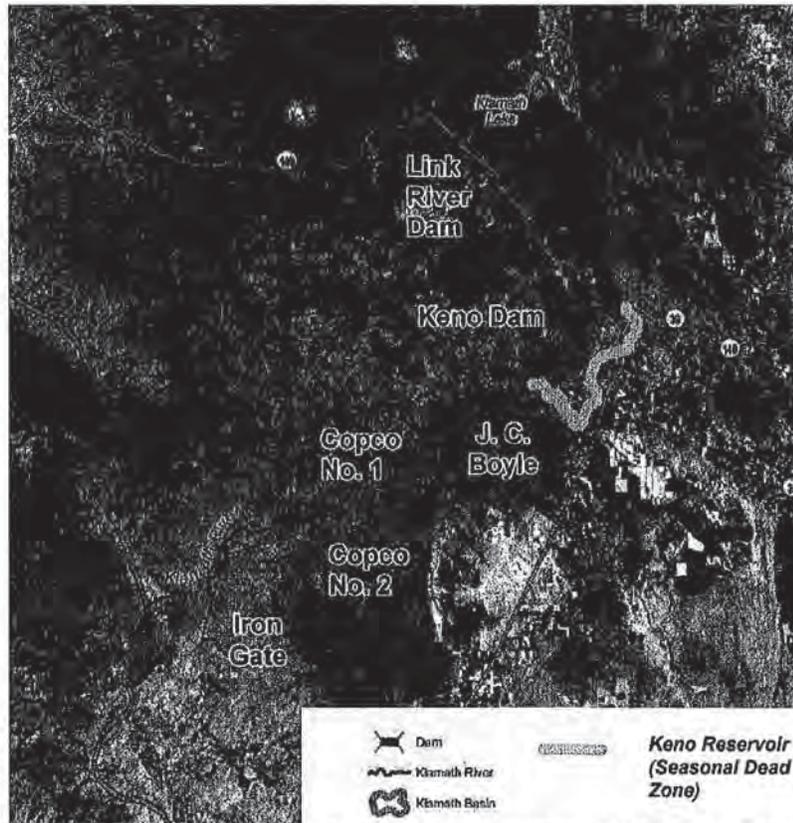


Figure 8. Keno Reservoir is highlighted in yellow because water quality there is likely to remain too poor to allow Chinook salmon passage, even if KHP dams are removed. Map adapted from Goodman et al. (2011).

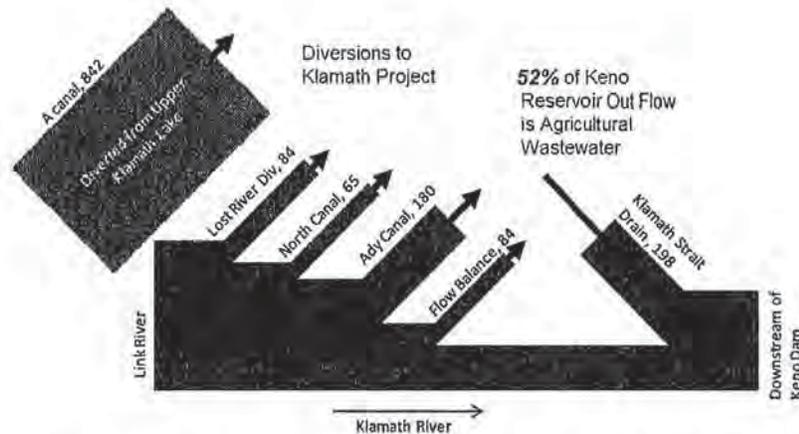


Figure 9. Average daily flow in August 2002 into the Klamath Project and Keno Reservoir. From ODEQ (2010) where it appears as Figure 2-21.

Comment 28 cont.

Two myxozoan disease organisms, *Ceratomyxa shasta* and *Parvicapsula minibicornis*, are endemic to the Klamath River and the Pacific salmon species have co-evolved with them and have developed substantial resistance. However, nutrient enrichment from the Upper Klamath Basin and from within Iron Gate Reservoir sets up conditions that cause extraordinarily high production of disease organisms that can overwhelm otherwise healthy fish (Nichols and Foott 2005).

The green algae species *Cladophora* is recognized as an indicator of nutrient pollution and there are areas below Iron Gate Dam where this species is dominant (Stocking et al. 2006). A polychaete worm, *Manayunkia speciosa*, which thrives in *Cladophora* beds also serves as an intermediate host for the deadly diseases. Fall Chinook spawning is concentrated below Iron Gate Dam and adults carry myxospores that cause a vicious cycle as *M. speciosa* captures them and then releases actinospores when Chinook juveniles are migrating downstream (Stocking et al. 2006, Bartholomew 2008).

Without abatement of nutrients at their source in the Upper Klamath Basin, both Goodman et al. (2010) and FERC (2007) predict that fish disease nodes will persist after dam removal, but will relocate to low gradient stream reaches restored by dam removal. *Cladophora* would tend to become established and these same areas would have concentrated Chinook salmon spawning.

“Continued high nutrient levels in the Klamath River that create ideal colonization conditions for *Cladophora*, at sites with favored flow and substrate conditions, would enable the host polychaete to become reestablished, and *C. shasta* and *P. minibicornis* would likely continue to pose a serious threat to downstream salmon for the foreseeable future” (FERC 2007).

Impediments to Clean Water Act Posed by the KBRA

Comment 29 - Water Quality

The KBRA (2.1) states directly that it will not infringe upon the Clean Water Act (CWA):

“In the implementation of this Agreement, Public Agency Parties shall comply with all applicable legal authorities, including Authorizing Legislation, National Environmental Policy Act, Endangered Species Act, Clean Water Act, and other Applicable Law.”

However, there is conflict of meeting CWA standards and Total Maximum Daily Load (TMDL) implementation due to provisions of the KBRA that block effective enforcement or enactment of either. The DEIS/DEIR ignores these problems and invokes the TMDL process, which is part of the CWA, as a major force for clean up and abatement of water pollution. When pressed by the Resighini Rancheria in cooperator’s draft review to more fully explore KBRA and TMDL implementation conflicts, the government responded in a contradictory fashion:

- “The TMDLs and KBRA are both included as programs that strive to decrease nutrient loading in the Upper Klamath Basin”, and
- “The effectiveness of the TMDLs is outside the scope of this project; it is under the state and EPA jurisdiction.”

This shows that there is no scientific basis for DEIS/DEIR assertions that TMDLs will work in helping abate water pollution. The conflicts of the KBRA and implementation of TMDLs by geographic area are described below.

Upper Klamath Lake: The section above on endangered sucker recovery in UKL details how KBRA water supply objectives are in conflict with abatement of nuisance blue-green algae blooms. Ecosystem function of marshes surrounding UKL is needed in order to attain the ecosystem service they provide, which is suppression of blue-green algae. As long as UKL remains hypereutrophic, it will continue to overload the Keno Reservoir with dire consequences for water quality there and in the lower Klamath River.

Keno Reservoir: As noted above in relations to salmon recovery, Keno Reservoir will continue to be overloaded with nutrients both from UKL and from the Klamath Project through the LRD canal and the Klamath Straits Drain. The Lost River and Tule Lake were originally a sink and did not discharge into the Klamath River; therefore, the high level of nutrients contributed by them today help push the river past the tipping point where ecosystem processes are insufficient for the river to clean itself. Goodman et al. (2010) point out that Upper Klamath Chinook salmon recovery will not likely be successful because of insufficient actions in the KBRA to clean up Keno reservoir pollution. This is a clear example of the COLD water fish beneficial use under the CWA not being attained. The KHSR is also in conflict with restoring ecological function in the Keno Reservoir reach, which is counter to achieving TMDL and CWA objectives.

Lower Lost River: As noted above, the KBRA provisions that continue Lease Land farming on Tule Lake NWR and Lower Klamath NWR and support continued full use of the 200,000 acre Klamath Project through power subsidy essentially block TMDL implementation. This land use does not allow reduction of nutrient contributions and water demand and blocks strategic restoration of marshes and lakes needed for water storage and filtration. Therefore, the nutrient

← Comment 29 cont.

load exported to the Keno Reservoir is likely to remain extremely high and confound recovery there and downstream. As also noted above, Lost River and shortnose suckers will not be restored in areas covered by the *Lower Lost River TMDL* (EPA 2008), which includes Lower Klamath Lake and Tule Lake. The last populations in Tule Sump A are also potentially threatened by draining and refilling planned as part of the KBRA. Since Lost River and shortnose suckers are beneficial uses under the CWA and they will not be restored, it follows that the KBRA blocks the Lower Lost River TMDL and CWA implementation.

Lower Klamath River: The NCRWQCB (2010) action plan for clean up of the lower Klamath and Lost River is clearly in conflict with the KBRA. Dam removal will help ecosystem function of the Klamath River in the restored KHP reach, including elimination of toxic algae. However, the huge excess of nutrients from Keno Reservoir will continue to overwhelm the river's capacity for assimilation causing major algae blooms downstream. As noted above, this has consequences for fish diseases as well as exceedance of water quality standards.

In the DEIS/DEIR (p 3.2-103) acknowledges that water quality will continue to be impaired and will fail to meet water quality standards set by the Hoopa Valley Tribe (Hoopa TEPA 2008):

“TMDL model results indicate that while resulting TP levels would meet the existing Hoopa Valley Tribe numeric water quality objective (0.035 mg/L TP) at the Hoopa reach (≈RM 45–46) of the Klamath River, TN levels would continue to be in excess of the existing objective (0.2 mg/L TN) (NCRWQCB 2010a).”

The DEIS/DEIR only touches on the issue of increased nutrients after dam removal and adopts the hypotheses of Asarian et al. (2010) that additional N may only change the point in the lower Klamath River where N dependent and N fixing periphyton dominate the river. However, since current nutrient levels at Iron Gate Dam are causing problems with nuisance algae blooms and water quality that is highly stressful or lethal to salmonids, there is no reason to believe that similar problems will not continue when the nutrient that would otherwise be limiting to plant growth is increased by 50% after dam removal.

The greatest problems with water quality will likely manifest in years of low flow and low snow pack similar to 1997, when the mainstem Klamath River below Orleans had lethal levels of D.O. (Halstead 1997). Lower Klamath River recovery also requires that flows and ecosystem function of the Shasta and Scott rivers be restored, but conditions there have not improved since adoption of those TMDLs (QVIR 2008a, 2008b).

DEIS/DEIR Misrepresents Economic Benefits

Comment 30 - Economics

The DEIS/DEIR makes the following claims regarding economic benefits:

“Implementation of the Proposed Action, including the KHSA and KBRA, would, in the long-term benefit the water, aquatic, and terrestrial resources issues related to trust resources and rights identified by the Resighini Rancheria (Table 3.12-5).” (3.12-46)

Comment 30 cont.

“County and tribal programs include economic development programs for local governments and tribes, regulatory assurances that adverse impacts on communities would be minimized, and tribal fisheries and natural-resource conservation management programs.” (ES-24)

The Resighini Rancheria (2011d) feel that the KBRA will not recover the Klamath River’s health, but instead will degrade it. This translates into a very poor economic outcome for all Indian people of the lower Klamath River that will have profound negative effects into the future. In fact all tribal benefits will be derived by the Yurok and Karuk Tribes and the Klamath Tribes of Oregon that are signatories of the KBRA and KHSA and; therefore, “Parties” in the deal. The Resighini Rancheria believes that the receipt of monetary resources by these Tribes has clouded their vision with regard to the deficiencies of the KBRA and its ability to restore ecosystem function of the Klamath River.

Conclusion

Comment 31 - NEPA/CEQA

The DEIS/DEIR fatal flaws are rooted in a purpose and needs statement that restricts restoration option to KBRA implementation. This prevents consideration or adoption of more cost-effective alternatives that would better solve the Klamath River’s serious water quality, water supply and fisheries issues and that are required by NEPA and CEQA. The DEIS/DEIR’s failure to analyze the cumulative effects of the KBRA and honestly assess conflicts with ESA and CWA is another example of egregious departure from NEPA and CEQA requirements.

Comment 32 - Water Quality

An ecosystem based approach to resolving Klamath River water quality impairment is in keeping with current best-science principles:

“Management of the freshwater habitat of Pacific salmon should focus on natural processes and variability rather than attempt to maintain or engineer a desired set of conditions through time” (Bisson et al. 2009).

The U.S. Environmental Protection Agency (2000) also recommends this approach:

“Restoration strives for the greatest progress toward ecological integrity achievable within the current limits of the watershed, by using designs that favor the natural processes and communities that have sustained native ecosystems through time.”

Specific steps that need to be taken are:

- Re-establishment of a marsh perimeter around Upper Klamath Lake.
- Restore the riparian marsh in the Keno Reservoir and in the lower Lost River.
- Expand Tule Lake and make the lower Lost River suitable for suckers.
- Refill Lower Klamath Lake to increase water storage and restore the natural hydrograph and to add nutrient buffering capacity.
- Restore flows in Shasta and Scott River.

Comment 33 - ITAs

The DEIS/DEIR misrepresents the shift in tribal trust responsibilities of the government, particularly the BOR, that will shift the priority of water delivery to Klamath Irrigation Project

← Comment 33 cont.

water users. The document also masks the injustice associated with the exclusion of the Resighini Rancheria from Klamath Settlement talks and in future participation on the KBCC or any of its sub-committees.

The Resighini Rancheria feel that the massive DEIS/DEIR does an adequate job of characterizing the risks and benefits of KHP dam removal and; therefore, could be of value for PacifiCorp or the federal government for environmental justification when decommissioning occurs after return to the FERC relicensing process.

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APPENDIX A

Resighini Rancheria Questions for the U.S. Bureau of Reclamation Re: Klamath Basin Restoration Agreement (KBRA) and Klamath Basin Hydropower Agreement (KHSAs) Environmental Impacts

December 15, 2010

** BOR agrees to address on Monday 12/20

* Scientific or technical questions that could be addressed

1. ** How much effort are the U.S. BOR and other agencies putting in to evaluating changes caused by all alternatives as far down as the estuary, where the Resighini Rancheria is located? (Resighini Rancheria 2005)
2. ** How will flow alteration under the KBRA/KHSA change flood frequency, duration and damage on the Resighini Rancheria (i.e. accelerated of bank erosion, lowland flooding, standing water)?
3. ** The Resighini Rancheria pumps water from the aquifer in the gravel bar of the lower Klamath River for its domestic water supply; will the change in flow regime under the KBRA/KHSA in any way change groundwater recharge on the Reservation?
4. ** How much sediment will be released from upstream of the four dams that are to be removed and what will the effects of sediment be on the Klamath River?
 - For salmon spawning near the current site of the Klamath Hydroelectric Project (KHP)?
 - For sturgeon spawning in the Middle Klamath River?
 - For candlefish in the lower Klamath River and at the Resighini Rancheria?
 - How long can these effects be expected to last?
 - If sediment impacts are greater than expected, who will be responsible for clean up?
5. ** How many toxic substances are there in the KHP reservoirs and in what quantity?
 - What will the concentration of these substances be in the lower Klamath River and could they affect beneficial uses such as Resighini drinking water?
6. What are the options being evaluated for additional 100K AF of water storage within and around Upper Klamath Lake (UKL) and the 30K AF inflow augmentation?
 - Won't storing additional water change flows in a way that further departs from historic norms and cause other problems for locally adapted fish species?
 - Who will get to use the water stored in these new impoundments?
7. ** Is there a Drought Plan in place that you could explain or just the possibility that one will be adopted?

8. ** What will low flow conditions be like on the Resighini Rancheria during extreme drought under the KBRA/KHSA with regard to water quality? Will they be sufficient to provide for domestic use and healthy salmonid habitat?
9. ** Isn't it the case that minimum flows for agriculture during droughts under the KBRA are quantitatively defined but that minimum flows for fish are not? If fisheries restoration is one of the objectives of the Agreements, how can that be attained without minimum flow requirements necessary for fish survival?
10. ** Dr. Thomas Hardy's definitive study (Hardy and Addley 2001) of Klamath River flows recommended that they never drop below 1000 cfs at Iron Gate Dam, but flows were only 700 cfs when the September 2002 adult salmon fish kill occurred; what assurances are there in the KBRA that low flows that caused the prior fish kill will not be allowed again? If there are no such assurances, why not?
11. ** Resighini Rancheria members are extremely concerned about the recurrence of the fish kill that was caused by low flows and crowding of fish in warm water in the lower Klamath River (CDFG 2003, Guillen 2003); could flows under the KBRA/KHSA fall below 1000 cfs?
 - If so, how can such low flows be allowed when they were clearly linked to the worst biological disaster the Klamath River has ever experienced?
12. Initiatives by the State of Oregon and federal agencies in the Upper Klamath Basin above Upper Klamath Lake (Sprague/Sycan) to encourage water conservation have been met with hostility and failed (UKBWG 2006, 2007); how will the KBRA win cooperation for water storage and to increase water supply to Upper Klamath Lake?
13. Why wasn't refilling Lower Klamath Lake considered for water storage as recommended by NRC (2004)?
 - * What is LKL's water storage capacity, including wetland storage?
 - In the footprint of federally owned lands?
 - If LKL were re-expanded to its original footprint?
 - * How would it affect the region's water budget if Lease Lands and other agricultural lands in the LKL basin were retired?
14. * Lower Klamath Lake filled during the winter and reduced Klamath River flood peaks historically (Abney 1964 as cited in NRC 2004); why isn't restoring this natural flood control mechanism being considered?
 - What flood control benefits would refilling LKL have for downstream riparian land owners, such as the Resighini Rancheria?
 - What flood control benefits would refilling LKL have in Siskiyou County nearer to the current location of Iron Gate Dam?

15. * The Keno Reservoir currently becomes anoxic for weeks at a time during late summer as a result of major nutrient pollution problems (Deas and Vaughn 2007); what is the quantity of nutrients pumped from the Lost River to the Klamath River during winter periods and how does it affect water quality in the impoundment?
16. * Marshes in the Lower Klamath Lake National Wildlife Refuge have very substantial nutrient stripping capacity (Mayer 2005); what quantity of nutrients would be absorbed by a restoring Lower Klamath Lake (LKL)?
 - In the footprint of federally owned lands?
 - If LKL were re-expanded to its original footprint?
17. * The Keno reach of the Klamath River before alteration was bordered by a marsh system that spanned the entire valley width (U.S. BOR 2005 as cited in Higgins 2010); what would the water storage and water purification benefits be of restoring these wetlands in the Keno Reservoir reach?
18. The Lost River Basin and Tule Lake are in a sink so pollutants tend to persist and recirculate in the environment; will the KBRA allow the Klamath River to continue to be the dumping ground for Lost River pollution?
 - a. What specific steps are called for under the KBRA to clean up the Lost River and LKL basins?
19. * Nutrient pollution to the Klamath River from the Klamath Straits Drain is long recognized problem and often agricultural drain-water from Tule Sump is routed there directly in summer with no filtration by marshes (Yurok 2007); how would longer residence time for Tule Sump water in an expanded Lower Klamath Lake change summer nutrient loading in the Keno Reservoir?
20. Wouldn't it make better sense to stop Lost River winter pumping into Keno Reservoir and instead shunt the water into a re-expanded Lower Klamath Lake bed, thus solving both the water pollution problem and increasing water storage? Will the BOR give consideration and study to this alternative?
21. * How would the nutrient budget of the Upper Klamath and the Keno Reservoir reach change if LKL were refilled and nutrient pollution from agricultural activities in that basin were discontinued?
 - If the riparian wetlands of the Keno Reservoir reach were restored?
 - If the Lost River riparian zone was restored and Tule Lake expanded?
 - In the footprint of current federal ownership?
 - To the original size of Tule Lake?
22. * What about nutrient spiraling downstream of Keno Reservoir even after dam removal, won't that cause similar water quality problems (low D.O., high pH, elevated dissolved ammonia) for Pacific salmon except at different locations? (Asarian, E. and J. Kann. 2006, Resighini 2006, Higgins 2010).

23. * Won't continuing water pollution and nutrient spiraling downstream of Keno reservoir provide ideal habitat for fish disease organisms and their hosts and cause negative effects on Pacific salmon species, similar to the findings of Bartholomew (2008) and Foott et al. (2007), except at different locations?
24. * The nitrogen fixing blue-green algae Aphanizomenon flos-aquae became pervasive in Upper Klamath Lake following filling and diking off of marsh lands after WW II that increased nutrient loading and changed water chemistry; how can A. flos aquae be prevented from perpetually causing nutrient pollution in the Lost River Basin and Klamath Hydroelectric Project Reservoirs without marsh restoration? (ASR/WRC 2005, Milligan et al. 2009) Resighini Rancheria believes this issue must be addressed if fishery restoration is really one of the KBRA/KHSA objectives.
25. The KBRA states that the Total Maximum Daily Load (TMDL) process called for under the Clean Water Act will not be impeded, but it protects agriculture operations on Lease Lands on the Tule Lake and Lower Klamath Lake Wildlife Refuges that need to be restored to abate water pollution (Yurok 2007); what assurances are there within the KBRA/KHSA that Upper Klamath water pollution problems will be abated?
- * Where is the focused water quality monitoring plan within the KBRA/KHSA plan that will guide adaptive management?
 - * What is the timeline (rates and dates) for the clean up of Keno Reservoir?
 - How do the KBRA/KHSA assure compliance with Klamath River TMDL's established by the State of California Water Resources Control Board.
26. Given that climate change will likely decrease precipitation in the Upper Klamath Basin, with the severe drought of 2001 being a harbinger, why wasn't reducing agricultural water demand through buy-out of farms or ranches on marginal lands within and outside the Klamath Project given more consideration as a solution? Resighini Rancheria and other down-river stakeholders, property owners, businesses, commercial fishermen, Indian tribes, environmentally concerned groups and individuals and local governments have given up a life style and livelihoods without any compensation whatsoever. Pacific salmon species can not survive under existing conditions brought about by the abuses of hydro-power, water extraction and agricultural interests. The communities and businesses that depend on the Klamath fishery and a healthy Klamath River have a greater investment in the Klamath Basin than do these other interests. Why do these Agreements continue to allow that abuse? How can the BOR and other federal agencies allow this inequity?
27. * The Pacific decadal oscillation (PDO) cycle causes variability of ocean productivity in the California Current and wet and dry climate regimes in northwestern California and southern Oregon; since the change to poor ocean conditions and less rainfall will likely occur sometime between 2015 and 2025, wouldn't speedier dam removal

- increase the prospects for recovery of Chinook and coho salmon? (Mantua and Hare 2002, Collison et al. 2003). What are the estimates for the Klamath Chinook and Coho populations by 2020, the supposed date for commencement of dam removal?
28. The Resighini Rancheria residents have ancestral ties to fishing that go back thousands of years and want these opportunities preserved for future generations; what are the chances of Pacific salmon recovery and protection of Indian Treaty Rights in the Klamath Basin, if action to remove dams and abate water pollution is taken after the PDO switch versus before? (Collison et al. 2003)
 29. * Clear Lake supports the only viable population of the Lost River suckers in the Lost River basin but this population might perish from anoxia, if the lake froze for an extended period (Perkins and Scopettone 1996, Resighini 2005); where are secure populations of this species in the Upper Klamath Basin that will be protected and restored under the KBRA/KHSA?
 30. Lost River and short-nose suckers have been listed under federal ESA since 1988 yet habitat for them in the lower Lost River itself and Tule Lake is unviable or marginal; how will the KBRA/KHSA improve conditions in the lower Lost River for these species? (USFWS 1993, Dileanis et al. 1996, Scopettone et al. 1995)
 - * What provisions are there to guarantee sucker recovery and how will adaptive management be used to improve flows or lake levels, if populations are still declining under the KBRA/KHSA?
 - * Are there specific targets for sucker species recovery in the KBRA and KHSA and rates and dates for recovery of various sub-populations (Clear Lake/Upper Lost, Lower Lost, Upper Klamath Lake)?
 31. The KBRA states that it will not interfere with the enforcement of the federal Endangered Species Act (ESA) but then specifies no minimum flow for coho salmon or other listed salmonids; since NMFS will become a cooperator under the KBRA won't their authority and ability to protect coho be compromised? Will NMFS cooperation be in violation of the ESA?
 32. The KBRA calls for subsidy of \$144 million dollars for power users on and off the Klamath Project for the first ten years of implementation, wouldn't it be more fiscally responsible and sustainable to reduce agricultural water demand? If not, why not?
 33. Pumping wetlands in the Tule Lake and LKL Lease Lands is only feasible with subsidized power costs and ironically the Tule Lake Wildlife Refuge will pay for wetland draining under the KBRA when these areas are needed to improve water quality and water supply; why isn't the retiring of these lands and cessation of pumping considered given the current national budget crisis and climate change? What are the long range impacts of continuing this pumping?
 34. Mayer (2005) shows that nutrient stripping of marshes in National Wildlife Refuges is significant and water quality problems are likely to be more severe in drought years

- and yet refuges get less water in dry years; isn't this strategy counter-productive to abatement of water pollution problems? What legitimate environmental or economic reasons support this practice?
35. If the Secretary of Interior determines that the removal of four KHP dams is not in the public interest, or that it will not advance restoration of salmonid fisheries of the Klamath Basin, what provisions of the KHSA and KBRA will still be binding? Does FERC relicensing commence anew?
36. What if there is a positive decision from the Secretary but there is no Authorizing Legislation?
- Are water allocations for Upper Basin farmers still guaranteed?
 - Will Tule Lake and LKL NWR Lease Land farming be allowed for 50 more years?
 - Will parties signing onto the KBRA agreement still have a duty to uphold it and thereby be unable to join legal challenges under ESA or the Clean water Act?
37. How will the KBRA/KHSA be implemented if there is both a positive Secretarial Decision and Authorizing Legislation, but no budget allocation?

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Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_LT_1230_100-1	<p>Master Response N/CP-13 KBRA is Analyzed as a Connected Action.</p> <p>Master Response N/CP-22 How KBRA was Analyzed.</p>	No
IT_LT_1230_100-2	<p>Master Response GEN-3 Best Available Information.</p> <p>Master Response AQU-21 NRC Dam Removal Help Coho.</p> <p>Master Response AQU-19 Chinook Expert Panel Proposed Action Better Than No Action.</p> <p>Master Response AQU-17 Expert Panel Second Line of Analysis, Not the Only Line of Evidence.</p>	No
IT_LT_1230_100-3	<p>The comment author suggests that the EIS/EIR should include restoration alternatives other than the KBRA. The Lead Agencies recognize that restoring the Klamath Basin is a complicated process and that there are several approaches that can be taken towards restoration. But as explained more fully in:</p> <p>Master Response ALT-4 Elimination of Alternative 8 - Dam Removal Without KBRA from Detailed Study.</p> <p>Dam removal contemplated under the KHSA cannot be implemented without implementing the KBRA. Therefore, an alternative that would implement a restoration project other than the KBRA is not feasible. Also as explained in Master Response ALT-4, KBRA as it is contemplated in the actual agreement is a whole program and one cannot implement some KBRA components but not others and still expect it to yield the same benefits as full implementation of the KBRA.</p> <p>The comment also mentions "repeated requests" for recommendations for mitigation. The comment does not specify what mitigation has been requested, and appears to reference other communications with DOI. The Lead Agencies do not have a record of these requests, either in public scoping comments, comments made as a Cooperating Agency on the Administrative EIS/EIR, records of government-to-government meetings, or comments on the public Draft EIS/EIR.</p>	No
IT_LT_1230_100-4	<p>Inclusion in the Klamath Settlement Group required consent of all the parties then participating in that group. DOI is aware that a party exercised its right in the spring of 2007 and blocked the inclusion of the Resighini Rancheria in the Klamath Settlement negotiations. This action did not and does not preclude the Resighini Rancheria from meaningfully participating in the natural resources issues implicated by the KHSA and KBRA. As</p>	No

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_LT_1230_100-5	<p>described in Master Response KHSA-1 Negotiation of KHSA and KBRA, parties outside the Klamath Settlement Group had opportunities to give input regarding development of the KBRA during 2007-2010. At present, any party willing to support the KHSA and KBRA as currently crafted may become a signatory to the agreement. If the KBRA is implemented, DOI would still have to consult on a government-to-government basis with all tribes that have an interest in fish and water in the Klamath Basin. So, there still would be tribal – Federal discussion regarding how water management and fish issues should be handled outside of the KBRA. For additional information on Tribal Involvement in Future Discussions of Water Management see Master Response TTA-7.</p> <p>Master Response TTA-1 Federal Trust Responsibility and the KBRA describes in detail how the KBRA is consistent with upholding Federal trust responsibility.</p> <p>Also, to the extent that the Resighini Rancheria’s “exclusion” complaint concerns the Klamath Facilities Removal EIS/EIR process, such a complaint would be unfounded. The Resighini Rancheria has been afforded all of the opportunities for public input and comment available under NEPA, CEQA, and the relevant implementing regulations, including the opportunity to submit comments on the Draft EIS/EIR to which the Lead Agencies are now responding. DOI has held many public meetings in the basin as described in Master Response GEN-16 Public Involvement and has consulted multiple times with all the basin tribes, including the Resighini Rancheria. The Resighini Rancheria is a cooperating agency for the EIS. However, the Resighini Rancheria does not have an absolute right to participate in the development of the proposed action and alternatives that are the subject of analysis in this EIS/EIR since the proposed action concerns potential decisions that would be made by the lead Federal and State agencies.</p> <p>The KBRA does not require the Lower Klamath Lake and Tule Lake National Wildlife Refuges to allow or continue lease land farming. The KBRA provides for an allocation of water to the refuges. Water required for lease land farming does not count against the Refuge Allocation (KBRA Section 15.1.2.D.i). See Klamathrestoration.gov for a copy of the KBRA.</p> <p>Future refuge management decisions with respect to lease land farming would be speculative and are beyond the scope of the analysis of this EIS/EIR.</p>	No

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Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_LT_1230_100-6	The description of the Resighini Rancheria in Section 3.12 does not include a subsection on KBRA. The discussion on KBRA benefits "upon becoming a party" is found in regard to the Hoopa Valley Tribe.	No
IT_LT_1230_100-7	The comment author is in favor of removing the dams but seems to oppose implementation of the KBRA because it allegedly delays removal of the dams, takes away the comment author's tribal rights, and is ecologically insufficient. These issues are addressed below.	No
	<p>Delays Removal of Dams</p> <p>Accelerating dam removal was analyzed in Alternative 13.</p> <p>Master Response ALT-3 Elimination of Alternative 13 - Federal Takeover of the Klamath Hydroelectric Project for Detailed Study.</p> <p>ALT-3 describes why Alternative 13 was not carried forward for further analysis in the EIS/EIR. The timeframe for dam removal under Alternative 13 would be generally the same as the timeframe under Alternatives 2 or 3. Implementation of the KBRA would not further delay the dams; rather, it is inextricably linked to the dam removal as described in:</p> <p>Master Response ALT-4 Elimination of Alternative 8 - Dam Removal Without KBRA from Detailed Study.</p> <p>Tribal Rights</p> <p>The comment author indicates that the KBRA would "take away our tribal rights," but does not specify in this comment which tribal rights are part of the discussion. Based on other comments, these concerns likely seem related to water rights and trust responsibilities related to fish harvest.</p> <p>Master Responses TTA-1 Federal Trust Responsibility and the KHSA.</p> <p>Master Response TTA-3 Federal Trust Responsibilities and Fisheries.</p> <p>Ecologically Insufficient</p> <p>The comment author believes the KBRA to be ecologically insufficient. The EIS/EIR, however, includes technical analysis related to the target resources of the restoration effort, primarily fish. The analysis indicates that the actions included in</p>	

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Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_LT_1230_100-8	<p>Alternatives 2 and 3 would provide long-term benefits to aquatic resources (see Section 3.3 of the EIS/EIR).</p> <p>Master Response N/CP-16 Purpose and Need/Project Objectives.</p> <p>While it is possible that the two objectives identified by the comment author could conflict, the alternatives presented in this EIS/EIR were formulated to strike a balance between the two.</p> <p>This EIS/EIR considers the KBRA as a connected action and does not analyze alternatives to the KBRA (see Section 2.4.3.9). For purpose of CEQA, relevant parts of the KBRA analysis are programmatic. Many KBRA elements have not been specified to a degree where impacts could be analyzed. Future project-specific analysis may be required for various components of the KBRA.</p> <p>Master Response N/CP-22 How KBRA Was Analyzed.</p> <p>The Power for Water Management Program of the KBRA is not a “power subsidy”. The program includes three elements including an interim power program, a Federal power program, and a renewable power program. The interim power program is intended to provide power to eligible users at a power cost target that is at or below the average cost for similar drainage projects in the surrounding area. The Federal power program is intended to obtain an allocation of cost-effective power from the Bonneville Power Administration. The largest portion of the Power for Water Management Program is directed at increasing power efficiency and developing new renewable sources of power.</p> <p>The Lead Agencies considered potential mitigation measures for significant impacts associated with all action alternatives. Many of the mitigation measures are applicable to multiple alternatives and are first mentioned under Alternative 2; however, the subsequent alternatives also cite these mitigation measures to reduce potential effects.</p>	No
IT_LT_1230_100-9	<p>The comment author suggests that the EIS/EIR should include restoration alternatives other than the KBRA. The Lead Agencies recognize that restoring the Klamath Basin is a complicated process and that there are several approaches that can be taken towards restoration. But as explained more fully in:</p> <p>Master Response ALT-4 Elimination of Alternative 8 - Dam Removal Without KBRA from Detailed Study.</p> <p>Dam removal contemplated under the KHSA cannot be implemented without implementing the KBRA. Therefore, an alternative that would implement a restoration project other than</p>	No

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
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the KBRA is not feasible. Also as explained in Master Response ALT-4, KBRA as it is contemplated in the actual agreement is a whole program and one cannot implement some KBRA components but not others and still expect it to yield the same benefits as full implementation of the KBRA.

If the Lead Agencies were considering alternatives to the KBRA, the restoration actions at Lower Klamath Lake would have some weaknesses. The purpose and need/project objectives are broader than purely restoration of fisheries. The objectives also include providing benefits to the entire Klamath community and having sustainable agriculture. Restoring water storage and wetlands at Lower Klamath Lake would remove a substantial amount of historic agricultural uses, which would conflict with these elements of the purpose and need/project objectives.

IT_LT_1230_100-10

NEPA's Forty Most Asked Questions from CEQ include a discussion of the No Action Alternative. It describes what should be included for different types of projects, including projects involving Federal decisions on proposals for projects, which is relevant for this EIS/EIR. "No action' in such cases would mean the proposed activity would not take place, and the resulting environmental effects from taking no action would be compared with the effects of permitting the proposed activity or an alternative activity to go forward."

No

Under the Alternative 1 as described in the EIS/EIR Section 2.4.2, PacifiCorp would need to obtain a long-term operating license from the FERC to replace the existing annual license. PacifiCorp would resume relicensing proceedings with FERC to obtain the required long-term operating license. Until that unknown time, PacifiCorp would continue to operate under an annual license. The No Action/No Project Alternative, as described, is the most reasonable assumption of future conditions. Among the action alternatives, Alternative 4: Passage at Four Dams, as described in Final EIS 2.4.5, describes a scenario where KHSa terminates and the requirements for fish passage as set forward by the prior FERC relicensing proceedings are implemented.

The comment author also refers to CEQA's requirements for the No Project Alternative; however, the basis for comparison in CEQA is the environmental setting.

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_LT_1230_100-11	<p>The comment author describes two specific concerns about the KBRA:</p> <p>1. Ecologically insufficient: the comment author believes the KBRA to be ecologically insufficient. The EIS/EIR, however, includes technical analysis related to the target resources of the restoration effort, primarily fish. The analysis indicates that the actions included in Alternatives 2 and 3 would provide long-term benefits to aquatic resources (see Section 3.3 of the EIS/EIR).</p> <p>2. Government trust responsibilities: the comment author objects to the changes to government trust responsibilities, but does not specify in this comment which trust responsibilities are part of the discussion. Based on other comments, these concerns likely seem related to water rights and trust responsibilities related to fish harvest.</p> <p>Master Responses TTA-1 Federal Trust Responsibility and the KBRA.</p> <p>Master Response TTA-3 Federal Trust Responsibilities and Fisheries.</p>	Yes
IT_LT_1230_100-12	Master Response ALT-4 Elimination of Alternative 8 - Dam Removal Without KBRA from Detailed Study.	No
IT_LT_1230_100-13	<p>Master Response ALT-3 Elimination of Alternative 13 - Federal Takeover of the Klamath Hydroelectric Project from Detailed Study.</p> <p>Master Response ALT-3 describes why Alternative 13 was not carried forward for further analysis in the EIS/EIR. The timeframe for dam removal under Alternative 13 would be generally the same as the timeframe under Alternatives 2 or 3. However, the interim measures included in the KHSAs would provide a benefit before dam removal that would not be realized with Alternative 13. Additionally, ESA-related requirements to protect fish would continue to be in effect until dam removal, and effects to ESA-listed species would trigger another consultation with the resource agencies.</p> <p>The cited text in the EIS/EIR has been edited to read "Alternative 13 will not move forward for more detailed analysis in the EIS/EIR because the environmental impacts of dam removal would be generally the same (and have generally the same timeframe) as the dam removal impacts under Alternative 2."</p> <p>Additionally, Alternative 13 would fail to resolve some of the long standing problems related to water supply in the Klamath Basin</p>	Yes

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_LT_1230_100-14	<p>(see Chapter 1). Also, Alternative 13 would fail to achieve many of the long-term environmental benefits related to implementing the KBRA, which include benefits to water quality, algae, flood hydrology, groundwater, recreation, and aquatic resources. (See EIS/EIR, Sections 3.2, 3.3, 3.4, 3.6, 3.7, 3.20.)</p> <p>Section 5.8 describes the environmentally preferable and environmentally superior alternatives under NEPA and CEQA, respectively. This section has been revised to more clearly describe the relationship between NEPA and CEQA regarding the environmentally preferable and environmentally superior alternatives.</p> <p>The comment author suggests that the EIS/EIR should include restoration alternatives other than the KBRA. The Lead Agencies recognize that restoring the Klamath Basin is a complicated process and that there are several approaches that can be taken towards restoration. But as explained more fully in:</p> <p>Master Response ALT-4 Elimination of Alternative 8 - Dam Removal Without KBRA from Detailed Study.</p> <p>Dam removal contemplated under the KHSA cannot be implemented without implementing the KBRA. Therefore, an alternative that would implement a restoration project other than the KBRA is not feasible. Also as explained in Master Response ALT-4, KBRA as it is contemplated in the actual agreement is a whole program and one cannot implement some KBRA components but not others and still expect it to yield the same benefits as full implementation of the KBRA.</p>	Yes
IT_LT_1230_100-15	<p>The Resighini Rancheria does not have any Treaty Rights, therefore no Treaty Rights would be affected by an Affirmative Secretarial Determination on dam removal, authorizing legislation and implementation of the KBRA.</p> <p>The Federal government's Trust responsibility to the tribe would not be changed by an Affirmative Secretarial Determination on dam removal, authorizing legislation and implementation of the KBRA Section 3.12.</p>	No
IT_LT_1230_100-16	<p>Master Response TTA-4 1988 Hoopa-Yurok Settlement Act.</p> <p>The Reserved Rights Doctrine:</p> <p>The reserved rights doctrine provides that when lands are set aside as Indian or other Federal reservations, sufficient water to fulfill the purposes of the reservation is reserved as well. Federal reserved water rights arise expressly or by implication from</p>	No

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
T_LT_1230_100-17	<p>Federal treaties, statutes, and executive orders, and vest no later than the date the reservation was established. Unlike State appropriative rights, Federal reserved water rights are for present and future uses and may be exercised at any time and are not lost through non-use. While Federal reserved water rights may be quantified and administered by States in the context of comprehensive State water adjudication, they are otherwise governed by Federal, not State, law. No determination of the Secretary's views on the Rancheria's fishing and water rights has been made since the release of the EIS/EIR, and thus the Secretary's conclusion is still the same. See EIS/EIR Section 3.8.2.1 Federal Water Law for additional information.</p> <p>Master Response TTA-Federal Trust Responsibility and the KBRA.</p> <p>Master Response TTA-7 Tribal Involvement in Future Discussions of Water Management.</p>	No
IT_LT_1230_100-18	<p>Master Response N/CP-13 KBRA is Analyzed as a Connected Action.</p> <p>The KBRA does not require the Lower Klamath Lake and Tule Lake National Wildlife Refuges to allow or continue lease land farming. The KBRA provides for an allocation of water to the refuges. Water required for lease land farming does not count against the Refuge Allocation (KBRA Section 15.1.2.D.i). See Klamathrestoration.gov for a copy of the KBRA. Future refuge management decisions with respect to lease land farming would be speculative and are beyond the scope of the analysis of this EIS/EIR.</p> <p>The effects of available flows with implementation of the KBRA are included in the analyses throughout the EIS/EIR. For example, the potential effects of flows in the Klamath River and lake levels in Upper Klamath Lake on fish and wildlife are described in Section 3.3 and 3.5. Tables ES-4 and ES-5 is focused on adverse impacts, thus resource areas where impacts are not significant or where there may be beneficial effects would not be included in this table.</p> <p>With respect to the Power for Water Management Program within the KBRA, the baseline condition for analysis in this EIS/EIR includes the existing inexpensive power supplies from the Four Facilities. Even with No Action, power supplies are trending to market rates, so there would be little difference between alternatives. This EIS/EIR is analyzing whether or not to remove</p>	No

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
	<p>the Four Facilities and alternative future scenarios for power rate structures would be speculative and beyond the scope of this analysis.</p>	
	<p>The Power for Water Management Program of the KBRA is not a “power subsidy”. The program includes three elements including an interim power program, a Federal power program, and a renewable power program. The interim power program is intended to provide power to eligible users at a power cost target that is at or below the average cost for similar drainage projects in the surrounding area. The EIS/EIR notes that there are many factors that affect electricity rates and thus it is difficult to assess how rates may change, if at all. Appendix C-2 indicates an estimated amount of \$7.6M for the interim power program. The Federal power program is intended to obtain an allocation of cost-effective power from the Bonneville Power Administration. Again, as the EIS/EIR notes, it is difficult to predict what future electricity rates would be and although a source may be cost-efficient that does not predict whether the rates would be higher or lower than existing rates. There is an estimated \$1M allocated for the Federal power program in Appendix C-2. The largest portion of the Power for Water Management Program is directed at increasing power efficiency and developing new renewable sources of power. While these actions may result in lower power rates, it is difficult to predict how rates may change, if at all. There is an estimated \$41M allocated in Appendix C-2 for the efficiency and renewable energy programs. The total allocated for the Power for Water Management program is closer to \$51M rather than the \$150M claimed in the comment.</p>	
IT_LT_1230_100-19	<p>Master Response WQ-4A, C and D Hydroelectric Project Impacts to Water Quality & Anticipated KHSA/KBRA Improvements.</p> <p>Master Response WQ-22 TMDLs and the No Action/No Project Alternative (and Alternative 4).</p> <p>Master Response WQ-43 Handling of Uncertainty in the Water Quality Analysis, Including TMDLs.</p> <p>The KBRA does not require the Lower Klamath Lake and Tule Lake National Wildlife Refuges to allow or continue lease land farming. The KBRA provides for an allocation of water to the refuges. Water required for lease land farming does not count against the Refuge Allocation (KBRA Section 15.1.2.D.i). See klamathrestoration.gov for a copy of the KBRA. Future refuge management decisions with respect to lease land farming would be speculative and are beyond the scope of the analysis of this EIS/EIR.</p>	No

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_LT_1230_100-20	<p>The proposed transfer of the Keno Facility is a connected action to Alternative 2 and Alternative 3 as described in EIS/EIR Chapter 2. Transfer of title to the Keno facility. Transfer of the Keno facility is addressed in an Agreement in Principle on the Transfer of Keno Dam (Reclamation and PacifiCorp 2012.) between the Department of the Interior and PacifiCorp. This Agreement in Principle lays the foundation for a binding agreement for transfer of the facility should the Secretary of the Interior Make an Affirmative Determination regarding removal of the Four Facilities. Provided the Secretary makes an Affirmative Determination, the actual transfer would take place when the Dam Removal Entity provides notice to the Parties (to the KHSA) and to the FERC that J.C. Boyle Facility Removal is ready to commence (KHSA, Section 7.5.2). The EIS/EIR contains an analysis which meets the requirements of NEPA and CEQA for a connected action as described by 40 CFR Part 1508.25 (a)1.</p> <p>According to KHSA the Keno Facility would be operated as it was historically which does not cause a change to the existing environment. Only lands occupied by and required for access to the Keno Facility itself would be included in the transfer. Lands adjacent to the reservoir would remain in private ownership and Reclamation has no authority over the management practices on privately owned lands.</p> <p>The States of California and Oregon have developed TMDL for the Klamath river in accordance with the Clean Water Act, and California Water Code Division 7, Chapter 4 Article 3 and Oregon Administrative Rules (OAR) Chapter 340, Division 42, respectively. Section 3.2 of the EIS/EIR, Water Quality, describes the TMDLs in detail. The TMDLs would remain in effect following the transfer of the Keno Facility. Although the transfer of ownership is not intended to improve water quality, the Fisheries Restoration Plan (FRP) of the KBRA specifies that it would include, but may not be limited to, water quality improvements, permanent protection of riparian vegetation, measures to prevent and control excessive sediment inputs, and remediation of fish passage problems, among others. The Phase I Plan of the FRP would address management and reduction of organic and nutrient loads in and above Keno Impoundment/Lake Ewauna and in the Klamath River downstream (KBRA Section 10.1.2).</p>	Yes
IT_LT_1230_100-21	<p>As described in Section 3.7.4.3 of the EIS/EIR, under Alternative 2, implementation of the Klamath Basin Restoration Agreement (KBRA) is expected to benefit groundwater in the long term by providing measures to monitor and protect groundwater where none currently exist. For example, if KBRA's Water Diversion Limitations program were in place during 2010, instead of receiving approximately 185,000 AF of water, irrigators would</p>	Yes

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
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have received 330,000 AF, an increase of approximately 145,000 AF. As a result, groundwater pumping would likely have been much less than what occurred in 2010. Also, contrary to the comment author's assumption, implementation of the On-Project Plan could include management, efficiency, or conservation measures; land acquisitions, additional storage, or agreements for Reclamation's Klamath Project irrigators to forebear the use of water from Upper Klamath Lake or the Klamath River. New production irrigation wells would not be allowed if an irrigator has a surface water forbearance or similar agreement under the On-Project Plan. Also, Oregon law concerning limits on groundwater pumping are to be applied in both the California and Oregon side of the Reclamation Klamath Project as part of the On-Project Plan. The KBRA also includes implementation of a work plan that involves evaluating and monitoring groundwater levels within the Upper Klamath Basin where none currently occurs, and analysis and reporting of such data to better inform the public agencies. Moreover, KBRA would also provide a new source of funding to remedy any adverse impacts that could arise from groundwater use. Given the aforementioned actions to reduce groundwater pumping, increase monitoring, and increase funding related to groundwater, the Lead Agencies expect the KBRA to slow, halt, or reverse the declining trend in groundwater levels over the past decade (i.e. since 2001) and serve to protect existing or future permitted land uses as well as surface water conditions and related resources.

Regarding the comment author's specific comments, it appears that they are alleging that implementation of the KBRA would result in further declines to groundwater levels, causing further reductions in Lower Lost River surface flows, and such flow reductions would have adverse effects on listed sucker species and water quality. First, the comment author fails to provide any evidence supporting any of its claims. With this response's text as background, it is understandable that the comment author has no evidence. As explained above, the amount of groundwater that would be pumped under the On-Project Plan has yet to be determined. Also, pumping effects on Lost River stream flows is unknown. (Gannet, 2007) Accordingly, one cannot begin to assess the potential effects on listed sucker species and water quality in the Lost River caused by groundwater pumping under the On-Project Plan. Moreover, as explained more fully above, preliminary modeling indicates that pumping 56,000 AF causes less than a 0.2% declines in groundwater discharge to the Lost River. Therefore, the Lead Agencies cannot analyze the cumulative effects of such water use as the comment author alleges.

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_LT_1230_100-22	<p>In order to clarify one potential misconception, under KBRA Section 1.1.2, Federal agencies, including the NOAA Fisheries Service and the U.S. Fish and Wildlife Service (USFWS), are not parties to the KBRA until enactment of legislation that authorizes and directs certain Federal agencies to become parties. This legislation has not been enacted; thus, NOAA Fisheries Service and USFWS are not yet parties to the KBRA.</p> <p>When such legislation is enacted and certain Federal agencies become parties to the KBRA, there are a number of sections of the KBRA that clarify that Federal agencies must comply with all applicable laws, regulations, and other legal requirements, including the ESA, when implementing the KBRA (see, for example, KBRA Sections 2.1, 2.2, and 7.4.3). Section 22.5 of the KBRA specifically clarifies that the KBRA does not supersede NOAA Fisheries Service and USFWS' obligations under the ESA and related regulations. In order to clarify a mistake in the comment author's quotation of this section, Section 22.5 of the KBRA provides, "By entering into this Agreement, National Marine Fisheries Service (NOAA Fisheries Service) and USFWS are not prejudging the outcome of any process under the ESA and NOAA Fisheries Service and USFWS implementing regulations, and NOAA Fisheries Service and USFWS expressly reserve the right to make determinations and take actions as necessary to meet the requirements of the ESA and implementing regulations." In addition, the KBRA specifically describes processes that are available and would be used by parties to comply with requirements under the ESA (see, for example, KBRA Sections 22.1 and 22.2).</p> <p>The comment author did not provide any examples of "statutes and provisions that restrict conservation options for NOAA Fisheries Service and USFWS and diminish the prospects for endangered species recovery." As described below, the Proposed Action, to include implementation of the KBRA, would provide numerous benefits to the fish populations in the Klamath Basin.</p> <p>Master Response AQU-21 NRC Dam Removal Help Coho.</p> <p>The National Research Council (NRC) also recommended a systematic evaluation of all dams and diversions in the Klamath Basin for their effects on anadromous fishes; those with strong adverse effects should be investigated further for modification or removal (NRC, 2004, p. 302). The EIS considers the impacts of, and alternatives for removal of hydroelectric dams on the Klamath as recommended by the NRC.</p> <p>In order to further understand the likely effects of dam removal, extensive surveys and reviews have been conducted as</p>	No

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
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recommended by the NRC on salmon and steelhead in the Klamath Basin. Two Expert Panels were convened specifically to address these issues.

The Chinook Salmon Expert Panel (Goodman et al. 2011) assessment was that the Proposed Action [dam removal] appears to be a major step forward in conserving target fish populations compared with decades of vigorous disagreements, obvious fish passage barriers, and continued ecological degradation.

Master Response AQU-6A Expert Panel Coho, Steelhead and Chinook.

As described in Section 3.3.4.3 of the EIS, the Proposed Action, which includes implementation of the KBRA, would result in flows more favorable to all life stages of salmonids, and would provide suitable habitat for resident riverine species, anadromous fish and lamprey in hydroelectric reach from the upstream end of J. C. Boyle Reservoir to Iron Gate Dam. In the Lower Klamath River below Iron Gate Dam, over the long term, the Proposed Action would alter the hydrograph so that the duration, timing, and magnitude of flows would be more similar to the unregulated conditions under which the native fish community evolved (Hetrick et al. 2009). The Proposed Action would have a beneficial effect on EFH for Chinook and coho salmon in the long term. The fact that coho and Chinook salmon historically occupied the hydroelectric reach and the Lower Klamath is also evidence that restoring flows to mimic historic patterns would be sufficient for maintenance and recovery of fish populations.

As discussed in Section 3.3.4.3 of the Draft EIS/EIR under Alternatives 2 (p. 3.3-126) and 3, the KBRA is expected to provide benefits to sucker populations through: nutrient reduction, reconnecting former wetlands to Agency Lake, reconstructing quality rearing habitat for early life stages, and restoring spring shoreline spawning habitat among others. The KBRA speaks to the settlement of long-running disputes concerning the use of Klamath Basin water for irrigation, fish and wildlife. It also speaks to water quality improvements in the basin. Addressing the water-related issues within the basin is expected to benefit all species of resident fish, including suckers. The EIS/EIR concludes that based on improved habitat quality, the effect of the Proposed Action would be beneficial for Lost River and shortnose sucker populations in the Long Term (Draft EIS/EIR 3.3-127). The Resident Fish Expert Panel concluded that a "dams out plus KBRA" management scenario provides promise for preventing extinction of sucker species and for increasing overall population abundance and productivity (Buchanan et al. 2011).

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_LT_1230_100-23	<p>It is not the explicit objective of the KBRA to recover suckers, although suckers would benefit in many ways. There are other tools to address the challenges described in the comment. For example, the USFWS has released (October 2011) a draft revised Recovery Plan for the two endangered sucker species that identifies objectives and criteria for recovery which would inform and focus future recovery actions. Additionally, the USFWS has initiated designation of Critical Habitat for the Lost River sucker and shortnose sucker (76 FR 76337, December 07, 2011), which will be finalized by November 30, 2012.</p>	No
IT_LT_1230_100-24	<p>Lost River and shortnose suckers are listed as fully protected species under CDFG code; thus, any take of these species is prohibited. However, a component of the Proposed Action includes legislation to permit the take of some individuals during implementation. The KBRA Section 24.2.2, as cited, doesn't show "intense pressure" on CDFG to issue permits, it states that legislation will be drafted and presented to the parties, if necessary.</p> <p>The Cumulative Effects Section 4.4.2.1 does analyze the effects of reservoir removal associated with dam removal under the Proposed Action and finds that the action could alter habitat availability and affect lost river and shortnose suckers. Based on reduction in abundance within reservoirs, the effect of the Proposed Action would be significant for Lost River and shortnose sucker populations in the short term. Implementation of Mitigation Measure AR-6 could be implemented to reduce the impact to individuals within reservoirs by rescuing fish prior to reservoir drawdown. Based on small numbers of individuals affected after mitigation, the effect of the Proposed Action would be less-than-significant for Lost River and shortnose sucker populations in the short term after mitigation.</p> <p>As discussed in Section 3.3.4.3 of the EIS/EIR under Alternatives 2 (p. 3.3-126) and 3, The KBRA is expected to provide benefits to sucker populations through: nutrient reduction, reconnecting former wetlands to Agency Lake, reconstructing quality rearing habitat for early life stages, and restoring spring shoreline spawning habitat among others. The KBRA speaks to the settlement of long-running disputes concerning the use of Klamath Basin water for irrigation, fish and wildlife. It also speaks to water quality improvements in the basin. Addressing the water-related issues within the basin is expected to benefit all species of resident fish, including suckers. The EIS/EIR concludes that based on improved habitat quality, the effect of the Proposed Action would be beneficial for Lost River and shortnose sucker populations in the long term (EIS/EIR 3.3-127). The Resident Fish Expert Panel concluded that a dams out plus KBRA management</p>	No

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_LT_1230_100-25	<p>scenario provides promise for preventing extinction of sucker species and for increasing overall population abundance and productivity (Buchanan et al. 2011).</p> <p>The comment presents no evidence of a potentially significant adverse environmental effect caused by refilling of the Tule Lake National Wildlife Refuge (NWR) sumps after intentional draining. Moreover, the Lead Agencies are not required to conduct every test or perform all research, study, and experimentation recommended by comment author s or address issues that are not significant to the action in question. (CEQA Guidelines, § 15204(b); NEPA Regulation 40 CFR 1500.1(b)).</p> <p>Should the Tule Lake NWR sumps be proposed for intentional draining the action agency would be required to consult with the USFWS under Section 7 of the ESA concerning the effects to listed sucker species.</p>	No
IT_LT_1230_100-26	<p>As described in Section 3.3.4.3 of the EIS, the Proposed Action, which includes implementation of the KBRA, would result in flows more favorable to all life stages of salmonids, and would provide suitable habitat for resident riverine species, anadromous fish and lamprey in hydroelectric reach from the upstream end of J. C. Boyle Reservoir to Iron Gate Dam. In the Lower Klamath River below Iron Gate Dam, over the long term, the Proposed Action would alter the hydrograph so that the duration, timing, and magnitude of flows would be more similar to the unregulated conditions under which the native fish community evolved (Hetrick et al. 2009).</p> <p>The Proposed Action would have a beneficial effect on EFH for Chinook and coho salmon in the long term. The fact that coho and Chinook salmon historically occupied the hydroelectric reach and the Lower Klamath is also evidence that restoring flows to mimic historic patterns would be sufficient for maintenance and recovery of fish populations.</p> <p>Minimum flows for fish are also expected to be a result of future Biological Opinions by NOAA Fisheries Service and USFWS, pursuant to Section 7, of the Federal Endangered Species Act. NOAA Fisheries Service issued a biological opinion to Reclamation requiring releases from Reclamation's Klamath Project to produce specified rates of flow for the Klamath River downstream from Iron Gate Dam, based on the habitat needs of coho salmon (NOAA Fisheries Service 2010, EIS/EIR Section 2.4.2, p. 2-17). Implementation of the NOAA Fisheries Service 2010 Biological Opinion mandatory flows are a reasonably foreseeable future action associated with Reclamation's Klamath Project (Draft EIS/EIR Section 3.2.4.1, p. 3.2-35). Target flow rates</p>	No

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_LT_1230_100-27	<p>in the Klamath River downstream from Iron Gate Dam vary by month, and are dependent in part on the amount of water entering Upper Klamath Lake. Reclamation and PacifiCorp's are required to meet these flow requirements. PacifiCorp currently coordinates with Reclamation to meet ramp rates in the NOAA Fisheries Service biological opinion on Reclamation's Klamath Project (Draft EIS/EIR Section 2.4.2, p. 2-17).</p> <p>Master Response HYDG-2 Drought Plan.</p>	No
IT_LT_1230_100-28	<p>The Modeled KBRA Hydrology that is described in Reclamation (2012d) is the hydrology that is used in the analysis for the Proposed Action Alternative in the EIS/EIR and they are not identical to the KBRA hydrology found in Appendix E-5 of the KBRA. The text on p. 2-20 of the EIS/EIR had been corrected to read "Operation of Reclamation's Klamath Project and the related river flows, measured at the United States Geological Survey (USGS) gauge downstream from Iron Gate Dam, would be according to the hydrologic model outputs in Bureau of Reclamation (Reclamation) (2012d)."</p> <p>Master Response AQU-11 NOAA Fisheries Service BO, ESA and KBRA Water Management.</p> <p>Concern #1: Annotations in Figure 8 show periods when very low flow conditions would foster increased algae growth and trigger more adverse water quality. Algae build up has the potential to be most injurious during prolonged droughts when there is insufficient water for flushing flow releases in spring.</p> <p>Response #1: We assume that the comment refers to periphyton growth downstream from Iron Gate Dam under low flow conditions. The EIS/EIR Section 3.4.4.3.2 analysis of the effects of increased nutrients on periphyton growth in the Klamath River downstream from Iron Gate Dam under the Proposed Action indicates the following: "Because of these many competing factors, some that may favor enhanced periphyton growth downstream from Iron Gate Dam (i.e., increased nutrients transport), and some that counteract this response (increased uptake of nutrients by periphyton in the Hydroelectric Reach, increased frequency and intensity of scouring events, decreasing nutrient concentrations due to TMDL implementation and KBRA nutrient reduction programs [see KBRA discussion below]), it is likely that increases in periphyton growth below Iron Gate Dam would be less than significant."</p> <p>Concern #2: Lower Klamath River algae blooms not only cause directly stressful conditions due to elevated pH and dissolved ammonia and depressed dissolved oxygen (D.O.) (Hoopa TEPA</p>	No

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
	<p>2008), they also provide habitat for the intermediate host of deadly fish diseases (Stocking and Bartholomew 2004, Stocking and Bartholomew 2007).</p> <p>Response #2: Master Response WQ-4. Hydroelectric Project Impacts to Water Quality & Anticipated KHSA/KBRA Improvements.</p> <p>Master Response AQU-27 Disease.</p> <p>Concern #3: Goodman et al. (2011) call attention to persistent problems of prolonged anoxia in Keno Impoundment/Lake Ewauna (Figure 9) that they believe would not be alleviated under the KBRA. Figure 10 shows schematically where water quality limitations would block salmon migration, even the lower four KHP dams were removed. Diking off of wetlands and farming up to the margin of the reservoir has disrupted river processes that could otherwise assist with nutrient processing and reduction, similar to the findings of Bernot and Dodds (2005). Dredging of the reservoir to increase water storage capacity circa 1968 likely contributed to a decreased ability for ecological function and an increased propensity for anoxia. Continuing this land use and pattern of operation of Keno Impoundment/Lake Ewauna under the KHSA (7.5.4, 7.5.5) would prevent improved ecosystem function by riparian marshes that could otherwise assist with cleanup of nutrient pollution, similar to the findings of Lytle (2000) and Mayer (2005).</p> <p>Response #3: Existing data and numeric models described in Draft EIS/EIR Section 3.2.4.3.2 (p. 3.2-76 to 3.2-125) indicate that dam removal would improve water quality in the Hydroelectric Reach and the Klamath River downstream from Iron Gate Dam by decreasing late summer/early fall water temperatures, increasing seasonal dissolved oxygen concentrations, decreasing seasonal pH levels*, and decreasing or eliminating high seasonal chlorophyll-a and algal toxin concentrations (see also Table 3.2-14, p. 3.2-149 to 3.2-161).</p> <p>Master Response AQU-17 Expert Panel Second Line of Analysis, Not the only line of Evidence.</p> <p>Concern #4: As noted above, the failure to analyze the transfer of Keno Impoundment/Lake Ewauna to the BOR and its operation for the 50 year life of the KHSA/KBRA is a critical shortcoming of the EIS/EIR.</p> <p>Response #4: The States of CA and OR have developed TMDLs for the Klamath river in accordance with the Clean Water Act, and California Water Code Division 7, Chapter 4 Article 3 and OAR</p>	

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
	<p>chapter 340, Division 42, respectively. Section 3.2 of the EIS/EIR, Water Quality, describes the TMDLs in detail. The TMDLs would remain in effect following the transfer of ownership of Keno Dam. Although the transfer of ownership of Keno Dam is not intended to improve water quality, the FRP of the KBRA specifies that it would include, but may not be limited to, water quality improvements, permanent protection of riparian vegetation, measures to prevent and control excessive sediment inputs, and remediation of fish passage problems, among others. The Phase I Plan of the FRP will address management and reduction of organic and nutrient loads in and above Keno Impoundment/Lake Ewauna and in the Klamath River downstream (KBRA Section 10.1.2). Prior to the measures taking effect, and until they result in water quality in Keno Impoundment being adequate for fish, anadromous fish would be trapped below Keno dam and transported above Keno dam to avoid the area of impaired water quality. Trap and haul around Keno Impoundment 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 2007; NOAA Fisheries Service 2007). These conditions occur during the period July-October. In some years it may not be necessary. In the long run, implementation of KBRA and TMDLs may eliminate the need for trap and haul around the Keno Impoundment, or sooner if engineering solutions to the low summer dissolved oxygen in the Keno Impoundment can be identified and implemented.</p> <p>Concern #5: In addition to the suspended load from Upper Klamath Lake, Oregon Department of Environmental Quality (ODEQ) (2010) also found the waste load from the Straits Drain to be a major driver of anoxia in Keno Impoundment/Lake Ewauna. Waste water from the Klamath Straits Drain in August 2002 constituted 52% of out flows from the reservoir (Figure 11), which is similar to NRC (2004) findings. Agricultural discharges from the Lost River through the Lost River Diversion (LRD) canal are known to occur in winter (Deas and Vaughn 2006); however, ODEQ (2010) also found substantial nutrient contributions from that source in summer and fall of 2000 and 2008. ODEQ (2010) model runs of D.O. depletion in Keno Impoundment/Lake Ewauna show that the contributions from the LRD in September and October 2008 that appears to prolong the period of lethal conditions for salmonids there by several weeks. This is further conclusive proof of the connection between the Lost River, Tule Lake and Lower Klamath Lake and water quality in Keno Impoundment/Lake Ewauna that needs analysis in the cumulative effects section of the EIS/EIR. Highly polluted water from Keno Impoundment/Lake Ewauna released to the lower Klamath River may be somewhat improved by river denitrification processes in the free flowing river section after dam removal and would also be</p>	

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
	<p>improved dilution from springs in the reach currently inundated by Klamath Hydroelectric Project (KHP) reservoirs (Asarian et al. 2010).</p> <p>Response #5: Master Response WQ-4 C, D. Hydroelectric Project Impacts to Water Quality & Anticipated KHSA/KBRA Improvements.</p> <p>Concern #6: However, dam removal also would speed the travel of nutrients from Keno Impoundment/Lake Ewauna and the levels of nitrogen after dam removal at the present location of Iron Gate Dam would increase by 45-58% in July-September (Asarian et al. 2010). The EIS/EIR (3.2.4.1.3) cites Asarian et al. (2010) and acknowledges the increase in nitrogen after dam removal, but fails to analyze the potential cumulative effects of continuing high pollution rates from Reclamation's Klamath Project under the KBRA on water quality and fish health. Two myxozoan disease organisms, <i>Ceratomyxa shasta</i> and <i>Parvicapsula minibicornis</i>, are endemic to the Klamath River and the Pacific salmon species have co-evolved with them and have developed substantial resistance. However, nutrient enrichment from the Upper Klamath Basin and from within Iron Gate Reservoir sets up conditions that cause extraordinarily high production of disease organisms that can overwhelm otherwise healthy fish (Nichols and Foott 2005).</p> <p>Response #6: Master Response WQ-27. Nutrient Retention With Dams, Nutrient Release Without Dams, and Periphyton.</p> <p>Concern #7: The green algae species <i>Cladophora</i> is recognized as an indicator of nutrient pollution and there are areas below Iron Gate Dam where this species is dominant (Stocking et al. 2006). A polychaete worm, <i>Manayunkia speciosa</i>, which thrives in <i>Cladophora</i> beds also serves as an intermediate host for the deadly diseases. Fall Chinook spawning is concentrated below Iron Gate Dam and adults carry myxospores that cause a vicious cycle as <i>M. speciosa</i> captures them and then releases actinospores when Chinook juveniles are migrating downstream (Stocking et al. 2006, Bartholomew 2008). Without abatement of nutrients at their source in the Upper Klamath Basin, both Goodman et al. (2010) and FERC (2007) predict that fish disease nodes would persist after dam removal, but would relocate to low gradient stream reaches restored by dam removal. <i>Cladophora</i> would tend to become established and these same areas would have concentrated Chinook salmon spawning. "Continued high nutrient levels in the Klamath River that create ideal colonization conditions for <i>Cladophora</i>, at sites with favored flow and substrate conditions, would enable the host polychaete to become</p>	

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
	<p>reestablished, and C. Shasta and P. minibicornis would likely continue to pose a serious threat to downstream salmon for the foreseeable future" (FERC 2007).</p> <p>Response #7:</p> <p>Master Response AQU-27 Disease.</p>	
IT_LT_1230_100-29	<p>Concern #1: The KBRA (2.1) states directly that it will not infringe upon the Clean Water Act (CWA): "In the implementation of this Agreement, Public Agency Parties shall comply with all applicable legal authorities, including Authorizing Legislation, National Environmental Policy Act, Endangered Species Act, Clean Water Act, and other Applicable Law."</p> <p>However, there is conflict of meeting CWA standards and TMDL implementation due to provisions of the KBRA that block effective enforcement or enactment of either. The EIS/EIR ignores these problems and invokes the TMDL process, which is part of the CWA, as a major force for cleanup and abatement of water pollution. When pressed by the Resighini Rancheria in cooperator's draft review to more fully explore KBRA and TMDL implementation conflicts, the government responded in a contradictory fashion:</p> <ul style="list-style-type: none"> • "The TMDLs and KBRA are both included as programs that strive to decrease nutrient loading in the Upper Klamath Basin", and • "The effectiveness of the TMDLs is outside the scope of Reclamation's Klamath Project; it is under the State and EPA jurisdiction." <p>This shows that there is no scientific basis for EIS/EIR assertions that TMDLs would work in helping abate water pollution. The conflicts of the KBRA and implementation of TMDLs by geographic area are described below:</p> <p>Upper Klamath Lake: The section above on endangered sucker recovery in UKL details how KBRA water supply objectives are in conflict with abatement of nuisance blue-green algae blooms. Ecosystem function of marshes surrounding UKL is needed in order to attain the ecosystem service they provide, which is suppression of blue-green algae. As long as UKL remains hypereutrophic, it would continue to overload the Keno Impoundment/Lake Ewauna with dire consequences for water quality there and in the lower Klamath River.</p> <p>Keno Impoundment/Lake Ewauna: As noted above in relations to salmon recovery, Keno Impoundment/Lake Ewauna would</p>	No

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
	<p>continue to be overloaded with nutrients both from UKL and from Reclamation's Klamath Project through the LRD canal and the Klamath Straits Drain. The Lost River and Tule Lake were originally a sink and did not discharge into the Klamath River; therefore, the high level of nutrients contributed by them today help push the river past the tipping point where ecosystem processes are insufficient for the river to clean itself. Goodman et al. (2010) point out that Upper Klamath Chinook salmon recovery would not likely be successful because of insufficient actions in the KBRA to clean up Keno Impoundment/Lake Ewauna pollution. This is a clear example of the COLD water fish beneficial use under the CWA not being attained. The KHSA is also in conflict with restoring ecological function in the Keno Impoundment/Lake Ewauna reach, which is counter to achieving TMDL and CWA objectives.</p> <p>Lower Lost River: As noted above, the KBRA provisions that continue Lease Land farming on Tule Lake NWR and Lower Klamath NWR and support continued full use of the 200,000-acre Reclamation's Klamath Project through power subsidy essentially block TMDL implementation. This land use does not allow reduction of nutrient contributions and water demand and blocks strategic restoration of marshes and lakes needed for water storage and filtration. Therefore, the nutrient load exported to the Keno Impoundment/Lake Ewauna is likely to remain extremely high and confound recovery there and downstream. As also noted above, Lost River and shortnose suckers would not be restored in areas covered by the Lower Lost River TMDL (EPA 2008), which includes Lower Klamath Lake and Tule Lake. The last populations in Tule Sump A are also potentially threatened by draining and refilling planned as part of the KBRA. Since Lost River and shortnose suckers are beneficial uses under the CWA and they would not be restored, it follows that the KBRA blocks the Lower Lost River TMDL and CWA implementation.</p> <p>Lower Klamath River: The NCRWQCB (2010) action plan for cleanup of the lower Klamath and Lost River is clearly in conflict with the KBRA. Dam removal would help ecosystem function of the Klamath River in the restored KHP reach, including elimination of toxic algae. However, the huge excess of nutrients from Keno Impoundment/Lake Ewauna would continue to overwhelm the river's capacity for assimilation causing major algae blooms downstream. As noted above, this has consequences for fish diseases as well as exceedance of water quality standards.</p> <p>Response #1: As described in Draft EIS/EIR Section 3.2.4.3.2.10 KBRA (p. 3.3-125 to 3.2-132), resource management actions implemented under KBRA as part of the Proposed Action would accelerate long-term improvements in water quality, including</p>	

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
	<p>those anticipated under the TMDLs. Trap and haul has been proposed to transport migrating adult fish upstream of the Keno Impoundment when certain adverse water conditions exist. Additional detail on the interaction of the TMDLs and the Alternatives is provided by the Water Quality SubTeam (2011) (also referred to as the Water Quality SubGroup), as cited in Draft EIS/EIR Section 3.3.5, p. 3.3-241. This document, entitled "Assessment of Long Term Water Quality Changes for the Klamath River Basin Resulting from KHSA, KBRA, and TMDL and NPS Reduction Programs" can be found at http://klamathrestoration.gov/keep-me-informed/secretarial-determination/role-of-science/secretarial-determination-studies.</p> <p>Concern #2: In the Draft EIS/EIR (p 3.2-103) acknowledges that water quality would continue to be impaired and would fail to meet water quality standards set by the Hoopa Valley Tribe (Hoopa TEPA 2008): "TMDL model results indicate that while resulting TP levels would meet the existing Hoopa Valley Tribe numeric water quality objective (0.035 mg/L TP) at the Hoopa reach (≈RM 45–46) of the Klamath River, TN levels would continue to be in excess of the existing objective (0.2 mg/L TN) (NCRWQCB 2010a)." The EIS/EIR only touches on the issue of increased nutrients after dam removal and adopts the hypotheses of Asarian et al. (2010) that additional nitrogen (N) may only change the point in the lower Klamath River where N dependent and N fixing periphyton dominate the river. However, since current nutrient levels at Iron Gate Dam are causing problems with nuisance algae blooms and water quality that is highly stressful or lethal to salmonids, there is no reason to believe that similar problems would not continue when the nutrient that would otherwise be limiting to plant growth is increased by 50% after dam removal. The greatest problems with water quality would likely manifest in years of low flow and low snow pack similar to 1997, when the mainstem Klamath River below Orleans had lethal levels of D.O. (Halstead 1997). Lower Klamath River recovery also requires that flows and ecosystem function of the Shasta and Scott rivers be restored, but conditions there have not improved since adoption of those TMDLs (QVIR 2008a, 2008b).</p> <p>Response #2:</p> <p>Master Response WQ-27 Nutrient Retention With Dams, Nutrient Release Without Dams, and Periphyton.</p>	
IT_LT_1230_100-30	<p>KBRA and KHSA promote basin fisheries through the following actions: dam removal, Reclamation's Klamath Project diversion limitations, increase in the size of Klamath Lake, habitat restoration activities throughout the basin, continued ESA protections, a drought plan affecting the Reclamation's Klamath</p>	No

Comment Author Dowd, Rick
Agency/Assoc. Resighini Rancheria
Submittal Date December 30, 2011

Comment Code	Comment Response	Change in EIS/EIR
	<p>Project and the Upper Klamath Basin, water acquisitions (both permanent and during an interim period before the agreements are fully implemented), fish and water quality monitoring studies, and other actions to protect and restore the basin fishery. The Department has also committed to identify other potential mitigation tools, including additional releases from Trinity Reservoir, as necessary to protect Trinity River-based fishery resources as well (KBRA Section 2.2.12) Overall, restoration would be consistent with any trust obligation due all basin tribes, including those who currently oppose the KBRA and its authorizing legislation. Conversely, litigation or adjudication of these and other issues entails significant risks and costs, takes years if not decades to resolve, and ultimately does not provide the opportunity, both in programs and appropriations, that the KBRA and related activities would if enacted. In fact, the Oregon adjudication began in the mid-1970s and has yet to complete the first of three phases. Thus, this agreement offers enormous opportunities as well as certainty to the basin's interests.</p> <p>Section 3.15 specifies economic effects of Tribal Programs in the KBRA apply to the Karuk, Klamath, and Yurok Tribes. The Resighini Rancheria Fishery Socioeconomic Technical Report further describes economic effects to the Resighini Rancheria and is available at klamathrestortation.gov.</p> <p>Master Response TTA-5 Presentation of Effects.</p>	
IT_LT_1230_100-31	<p>Master Response N/CP-16 Purpose and Need/Project Objectives.</p> <p>Master Response N/CP-22 How KBRA was Analyzed.</p> <p>Master Response N/CP-13 KBRA is Analyzed as a Connected Action.</p>	No
IT_LT_1230_100-32	<p>Master Response WQ-19 Water Temperature Models and General Predictions.</p>	No
IT_LT_1230_100-33	<p>Tribal trust responsibilities are unchanged by the KBRA/ KHSA.</p> <p>Master Response TTA-1 Federal Trust Responsibility and the KBRA.</p> <p>Master Response TTA-7 Tribal Involvement in Future Discussions of Water Management.</p>	No

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November 17, 2011

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My name is Venola Dowd. I am a tribal member to Resighini Rancheria and a residence to Del Norte County in California and a of United States citizen. I am 84 years old.

← Comment 1 - Envr. Justice

My concern is with the negative impacts these agreements have on our tribal water and fishing rights claims. I believe that our exclusion is a violation of the federal trust responsibility and this process violates environmental justice laws and policies. Each federally recognized tribe in the Klamath Basin should be recognized sovereign authority to choose to accept these deals called agreement without forced provisions like the one in Section 15.3.9 of the KBRA. If the federal government accepts these agreements as they stand, Klamath River Senior water rights will be compromised and our future generation ancestral fishing practices will be in jeopardy. As a tribe, we do not have the funds to fight anyone that violates our sovereignty.

I do not oppose dam removal, I support giving the authority back to the Federal Energy Regulatory Commission where it belongs; back to a process that the people in power adopted to allow equally participation from beginning to the end. Follow the law! It will make the dams come out sooner.

I support the **NO ACTION ALTERNATIVE!**

← Comment 2 - FERC

Venola Dowd

← Comment 3 - Disapproves of Dam Removal

*646 Fresno Street
Crescent City, Ca 95531*

SCANNED

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