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# Karuk Tribe



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November 21, 2011

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California Department of Fish & Game  
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BUREAU OF RECLAMATION OFFICE OF THE CLERK TO THE COMMISSIONER		
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**RE: Comments on Klamath Facilities Removal Draft Environmental Impact Statement/Environmental Impact Report**

Ayukii Ms. Vasquez and Mr. Leppig:

The Karuk Tribe appreciates the opportunity to comment on the Draft Environmental Impact Statement/Environmental Impact Report (DEIS/DEIR) for Klamath Facilities Removal, released September 21, 2011, as a joint environmental document for compliance with the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA).

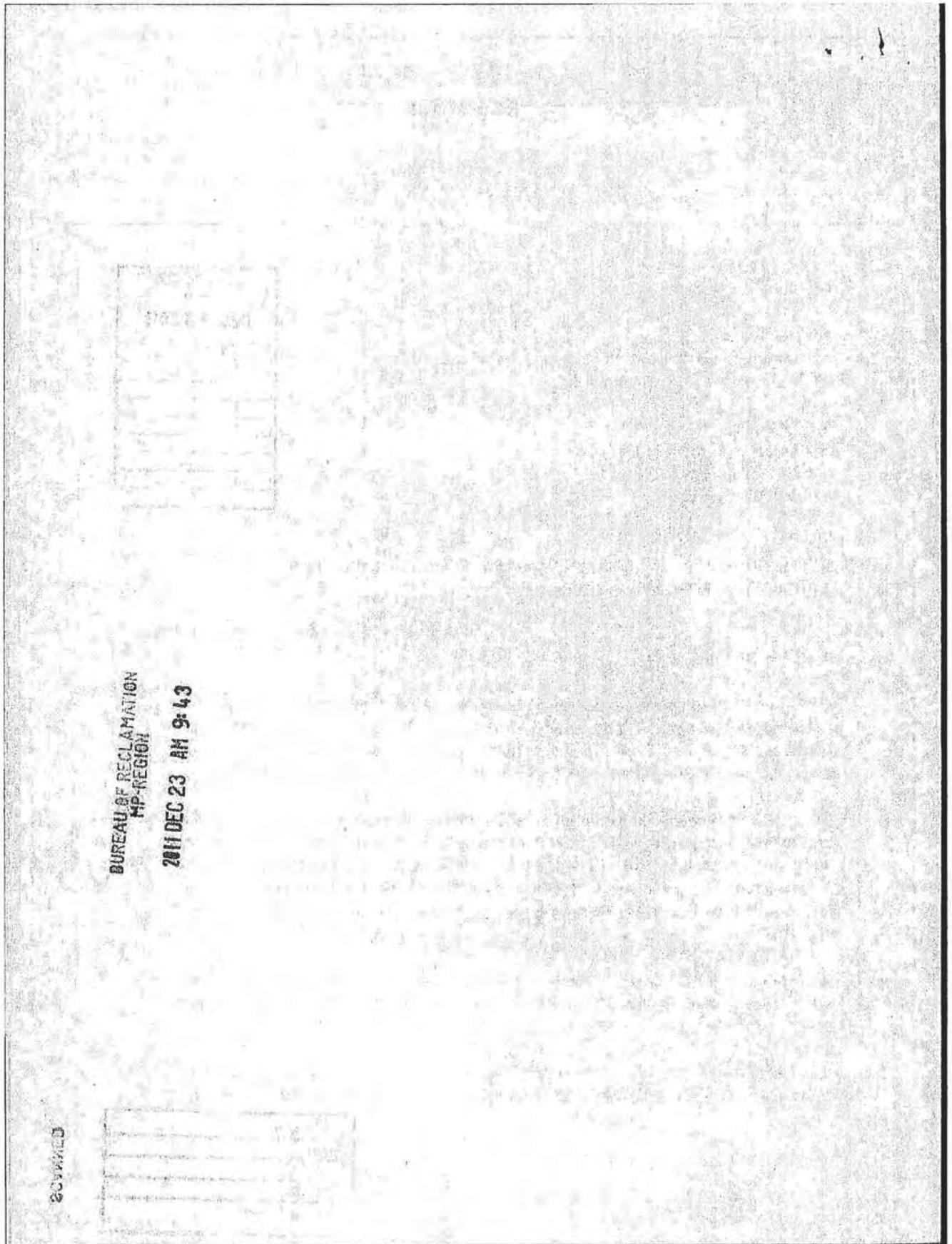
The DEIS/DEIR analyzes the potential impacts from the proposed removal of the four dams on the Klamath River, as proposed in the Klamath Hydroelectric Settlement Agreement (KHSA), along with implementation of the Klamath Basin Restoration Agreement (KBRA). The Karuk Tribe was one of 28 signatories to the KHSA and KBRA in February 2010, and in June 2010 we became a cooperating agency with the Bureau of Reclamation for development of the DEIS/DEIR.

The purpose of this DEIS/DEIR is to inform the Secretary of the Interior as he determines whether or not dam removal advances restoration of salmon fisheries and is in the public interest. This determination is due by March 2012.

The Tribe recognizes that for purposes of CEQA, the analysis of the KBRA was programmatic and based on the best available information, and that future KBRA projects may require

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additional, project-specific environmental analysis which will be tiered to this DEIS/DEIR as appropriate.

This decision is of utmost importance to the Karuk Tribe. The Karuk are salmon people – our health, our wealth, and our spiritual well-being is dependent on a healthy river and fisheries.

**Karuk Tribe Preferred Alternative**

Comment 1a - Approves of Dam Removal

The Karuk Tribe strongly supports Alternative 2 as identified in the DEIS/DEIR, which consists of full removal of the lower four dams and all their features, along with implementation of the KBRA. We believe that Alternative 2, Full Facilities Removal, best meets the purposes, needs and objectives as defined by the DEIS/DEIR. We note however, that Alternative 3 also meets the purposes, needs and objectives as defined by the DEIS/DEIR and saves nearly \$50 million in dam removal costs. Although we believe some consideration must be made regarding the risks and liabilities that may stem from leaving some structures in place, we would not oppose implementation of Alternative 3.

**Comments**

In general, the Karuk Tribe is impressed with the scope, breadth, and depth of the analysis. We applaud the Department's effort to digest such a large amount of technical information spanning across many scientific and social disciplines.

Comment 2 - Alternatives

**Comment #1: DEIS should include analysis of Alternative 8, Full Facilities Removal of Four Dams without KBRA**

The DEIS states that Alternative 8 was developed as an initial alternative but not evaluated because it "does not meet most of the purpose and need/project objectives and would not reduce environmental impacts of the Proposed Action."

To the contrary, we assert that dam removal alone would indeed meet most of the purpose and need/project objectives such as: advance restoration of the salmonid fisheries, achieve free flowing river conditions, restore and sustain natural production of fish species, etc. In fact, we assert that dam removal alone is likely to go further to meet these objectives than alternatives 1, 4, or 5.

Clearly, even among fishery advocates, there has been much public debate over the pros and cons of the KBRA. One way to help affected communities and the Secretary understand the significance of the KBRA is to compare dam removal with and without it. We believe that since dam removal without the KBRA is arguably a possible, or even likely, outcome if the effort to implement the KBRA/KHSA fails, this alternative is an important one to consider.

**Comment #2: Regarding the Klamath Riverscape**

← Comment 3 - Cultural Resources

The Karuk Tribe strongly concurs with the identification of the entire length of the Klamath River as a "riverscape" Gates (2003) and King (2004), which is potentially eligible as an ethnographic landscape for inclusion in the National Register of Historic Places. However, we do not concur with the conclusion that *"removal of dams could have an adverse effect on the Klamath River TCP or riverscape as identified by Gates (2003) and King (2004) and other sites associated with traditional cultural practices of the Klamath Tribes, Shasta, Karuk, Hoopa, and Yurok that could be eligible for inclusion on the NRHP."* The removal of the dams is specifically designed to restore health to the riverscape and its contributing elements. Therefore, the cultural resources report should recognize the perspective that the Project could enhance and preserve the TCP eligible for the National Register.

← Comment 4 - Economics

**Comment #3: DEIS fails to consider impact of toxic blue green algae blooms on eco-tourism downstream of dams.**

Although section 3.20 has some discussion on how water quality improvements could increase water based recreation, some discussion on the matter is needed in section 3-15. Table 3.15-16 lists whitewater boating user days on the upper and lower Klamath. However, the DEIS fails to note the significant drop in whitewater boating days since 2005 when the Karuk Tribe first reported results of blue-green algae sampling in the reservoirs and river. Based on the data presented in Tale 3.15-16, it should be noted that the total number of whitewater boater user days on the lower river averaged 15,144 between 1994 and 2005. After toxic blue green algae was detected and publicized, that number dropped to an average of 12,134 between 2006 and 2009. This represents a 20% decline. Note that four of the five lowest total whitewater boater user days occurred in the four years since toxic blue green algae was discovered in the Klamath Reservoirs. It is likely that similar decreases in visitation to the area for camping, hiking, and swimming decreased as well. If these data are available, any similar trends should be described.

← Comment 5 - Real Estate

**Comment #4: DEIS fails to consider impacts to real estate values downstream of the dams**

The DEIS does include some discussion on the potential effects of the various alternatives on real estate values around the reservoirs, however, the document fails to consider impacts to real estate values downstream of the dams.

Currently, in many summers we see the river turn a bright green color each August and September from Iron Gate dam down to the mouth. This discoloration is not only aesthetically unappealing, it is a result of massive blooms of the toxic blue green algae *Microcystis aeruginosa* in the Klamath Reservoirs. Real estate values of water front properties are affected

← Comment 5 cont.

by water quality. Real estate values of any property are affected by the presence of nearby toxic waste that threatens human health. Some discussion on how the project alternatives may affect property values downstream and how these property values in turn affect tax revenues in Siskiyou, Humboldt, and Del Norte Counties should be discussed.

In addition, it should be noted that many of these properties are privately owned by Indians affiliated with area Tribes. The impacts to properties held by Indians should be discussed in the Social Justice section.

← Comment 6 - Real Estate

**Comment # 5: DEIS fails to consider impacts to real estate values in and around the BOR Klamath Irrigation Project**

The DEIS does include some discussion on the potential effects of the various alternatives on real estate values around the reservoirs, however, the document fails to consider impacts to real estate values for properties associated with the BOR Klamath Irrigation Project. The value of properties associated with agricultural activities is influenced in part by reliability of irrigation water. Since the KBRA is an associated action and the KBRA indeed increases the reliability of irrigation diversions, project alternatives that include KBRA implementation would affect property values. Clearly the magnitude of these impacts are difficult to evaluate quantitatively, however some discussion on this point is warranted.

Comment 7 - Real Estate

**Comment # 6: DEIS fails to consider how massive blooms of toxic blue-green algae impacts real estate values around reservoirs in non-dam removal alternatives**

Clearly, the annual occurrence of toxic algae blooms affects the value of lakefront/lake view properties. Since the discovery of high levels *Microcystis aeruginosa* in 2005 by the Karuk Tribe, property values around the reservoirs have decreased significantly. Although the Clean Water Act mandated TMDL's theoretically would address this condition even in the absence of dam removal, it is unclear how this could be achieved or how long it would take. Thus, we believe some discussion on how the presence of the dam negatively impacts property values is warranted.

Comment 8 - Water Quality

**Comment # 7: Need to clarify statement on thermal impact of dams (Page 1-7)**

"The four dams create water temperature in the river that are too warm in the fall for fish migration..." It may be more accurate to state that the dams create a thermal lag such that in

## ← Comment 8 cont.

the spring the reservoirs warm slowly making the river unnaturally colder in spring months which affect the growth rates of juveniles whereas in the fall the reservoirs cool down slowly creating unnaturally warmer river temperatures than delays migration of fall run Chinook. This delay in migration in the fall effectively reduces the number of fishing the days in the river affecting both in river sport and tribal fisheries and could factor into a fish kill as fish stack up in the estuary waiting for river temperatures to drop. This could contribute to over-crowding and adult fish kills like that observed in 2002.

## ← Comment 9 - Fish

**Comment #8: Regarding section 3.3-67**

We do not agree with the statement in this section saying that steelhead habitat in the Klamath is generally suitable with the exception being during summer months in the river reaches located above Happy Camp up to Iron Gate Dam. Other than cold water patches and cold water tributaries, during the summer months habitat for steelhead is unsuitable for the entire river below Iron Gate Dam to the Pacific Ocean.

## ← Comment 10 - Fish

**Comment #9: Regarding section 3.3-71**

The section should acknowledge that "Red Band Trout" are simply *O. mykiss* or commonly known as "resident rainbow trout" or "resident steelhead". The section is misleading and suggests that "Red Band Trout" is another species of trout exclusive to the Klamath River. In fact, the species *O. mykiss* are the most common trout species found on the entire planet.

## ← Comment 11 - Other Aquatic Life

**Comment #10: Regarding Freshwater Mussels and section 3.3-74**

It is appropriate that *Westoven 2010* was cited in this section. This section acknowledges that *G. angulata* are widely distributed below Iron Gate Dam, but fails to mention that species *G. angulata* is not widely distributed in other river systems and the Klamath might be one of the only widely distributed populations known that still exists today. Also, DEIS should note that the species *Margaritifera falcata* would likely benefit from increased salmonid population viability with dam removal because of it's reliance on salmonids as a host species and a mechanism for further distribution up stream.

## ← Comment 12 - Fish

**Comment #11: DEIS should better describe consequences of "no action" in section 3.3-101 and 3.3-107**

← Comment 12 cont.

In regards to removing the 4 dams the document acknowledges there will be an increased access to cold water tributaries such as Jenny Creek, Fall Creek, Shovel Creek, Spencer Creek and other cold water springs. This is mentioned in all the sections regarding effects on salmonids. We believe the document should go further and also acknowledge under the "no action alternative" cold water sources are severely limited. There are no cold water sources for a long distance below Iron Gate Dam. Beaver Creek is the first significant cold water tributary below the dam and is located approximately 25 miles downstream of Iron Gate dam and represents the first cold water tributary that out-migrating juvenile salmon encounter with dams in place.

Comment 13 - Fish

**Comment #12: DEIS fails to describe the full potential range of reintroduced coho under the dam removal alternatives (3.3-106)**

In regards to historic range of coho salmon, there is no rationale for why the coho salmon range is limited to the river reached below Spencer Creek. There are no physical barriers to prevent coho salmon from ranging above Klamath Lake. We don't agree with the assumption that coho historic range stopped at Spencer Creek.

Comment 14 - Fish

**Comment #13: DEIS overestimates fish mortality resulting from dam removal (3.3-113)**

We do not agree with statements in this section on Suspended Sediment Effects (SSE). Results of the analysis presented in Appendix E (E-6) suggest high mortality on steelhead might result from high levels of SSE. We believe this is an over estimate of fish mortality caused by high levels of SSE. The appendix acknowledges uncertainty in the model and this cannot be overstated. The model is based on laboratory experiments where fish are not mobile and cannot migrate to avoid lethal SSE. We suggest the analysis and results be removed due to overwhelming uncertainty as the current results will likely be misinterpreted by the public.

#### **WATER QUALITY COMMENTS (BY SECTION AND PAGE NUMBER)**

##### **Executive Summary**

##### **Page ES-44:**

The word "in" is missing before 2020 in this sentence Table ES-6 (beneficial effects): *"Largely eliminates 2020 dissolved oxygen and pH problems produced in reservoirs in the Hydroelectric Reach and transported downstream."*

**Page ES-45:**

The following footnote at the end Table ES-6 should probably be deleted, because increased periphyton is not mentioned in the table: *“Increased periphyton biomass would not affect levels of algal toxins in the Klamath River. The noxious blooms of phytoplankton (suspended algae) occurring in the calm, lake-like waters of Copco 1 and Iron Gate Reservoirs are responsible for the production of algal toxins, such as microcystin, in the Klamath River downstream of Iron Gate Dam (see Section 3.4). Noxious phytoplankton would not thrive in the free-flowing river following dam removal.”*

However, this is a very important point, so if it is deleted here, it should be included prominently somewhere else.

**Chapter 1, Introduction****Page 1-6:**

“Upper Klamath Lake has become more enriched with nutrients, leading to nuisance blooms of blue-green algae that produce toxins (primarily microcystin) and creating pH and dissolved oxygen problems that are stressful to aquatic biota.” Major issues are pH/DO not toxins. Revise sentence to reverse order.

**Page 1-6:**

The DEIS/DEIR appears to use the term “Keno Reach” to describe Keno Reservoir, which is different than is typical in most other Klamath Basin literature (for example, see PacifiCorp’s [2004] Final License Application and FERC’s [2007] EIS). For example: “The 20-mile Keno Reach of the Klamath River receives large loads of decaying organic matter (blue-green algae) from Upper Klamath Lake, producing extremely low dissolved-oxygen levels that persist in the summer and fall.” In most other Klamath River documents, “Keno Reach” typically refers to un-impounded reach of the Klamath River between Keno Dam and J.C. Boyle Reservoir, while “Keno Reservoir” is typically used to refer to the impoundment that spans from Link River to Keno Dam. For example, see pages 3-9 and 3-11 in FERC (2007):

- “Keno Reservoir (RMs 253.1–233.0)”
- “Keno Reach (RMs 233–228.3)”

If possible, this should be corrected throughout the document, though it is not essential because “Keno Reach” is used by some people/documents to describe Keno Reservoir (as is done in the DEIS/DEIR). Note: we did not look through the entire DEIS to see if “Keno Reach” is also sometimes used to refer to the un-impounded reach of the Klamath River between Keno Dam and J.C. Boyle Reservoir.

**3.2 Water Quality**

**Page 3.2-17:**

*"Annual TP and TN loading reduction (TP=22,367 lbs and TN=120,577 lbs) to offset the reduced nutrient assimilative capacity in the reservoirs (as compared to a free-flowing river condition)"*

It is important to define what is meant here by assimilative capacity, because people use the word assimilative capacity in different ways and you need to be clear which one you are using here. The reservoirs absorb more nutrients (per mile) than the free-flowing river does; therefore if someone is thinking of the other definition of "assimilative capacity" they will very confused when the document says that the reservoirs have LESS assimilative capacity. The suggested revision is to add a footnote about the definition of assimilative capacity:

"The phrase 'assimilative capacity' here refers to the maximum amount of nutrients that can enter the reservoirs and still allow for water quality conditions in the reservoirs to meet water quality standards (i.e. for dissolved oxygen and algae). Because of their warm quiescent waters, the reservoirs are inherently more prone to nuisance blue-green algal blooms than free flowing reaches are. In other contexts (not in this document), 'assimilative capacity' is used to refer to the amount of nutrients that are removed (through physical, biological, and chemical processes) as water flows downstream."

[note actually the other meaning of assimilation is used later in the document on page 3.3-87  
"In the absence of the reservoirs, hydraulic residence time in this reach would decrease from several weeks to less than a day, and water quality would also be improved by nutrient assimilation in this reach (Hamilton et al. 2011).]

**Page 3.2-21:**

This sentence *"Water temperatures in the bypass reach can decrease by 5–15°C (9–27°F) when peaking operations are underway (Kirk et al. 2010)."* Should be revised to "...when bypass operations are underway..." because the peaking operations do not affect water temperatures in the bypass reach. The bypass operates almost constantly (except during the highest flows when both turbines at the Boyle Powerhouse are at capacity and water is allowed to spill of Boyle Dam into the bypass reach), whereas the peaking typically occurs for some hours each day. Water temperatures in the bypass reach are not affected by peaking operations, because during non-peaking hours water is stored in Boyle Dam, it is not released in the bypass reach.

**Page 3.2-23:**

Grammatical correction: the sentence *"Under low-flow summertime conditions, when the mouth can closed..."* should be revised to *"...mouth can close..."*

**Page 3.2-29:**

The wording of this sentence suggests that *M. aeruginosa* can produce anatoxin and saxitoxin, which is incorrect: *"Some cyanobacteria species, such as M. aeruginosa, produce cyanotoxins (e.g., cyclic peptide toxins that act on the liver such as microcystin, alkaloid toxins such as anatoxin-a and saxitoxin that act on the nervous system) that can cause irritation, sickness, or in extreme cases, death to exposed organisms, including humans (World Health Organization [WHO] 1999)."*

We suggest that this sentence be revised as follows: *"Some cyanobacteria species produce cyanotoxins (e.g., cyclic peptide toxins that act on the liver such as microcystin, alkaloid toxins such as anatoxin-a and saxitoxin that act on the nervous system) that can cause irritation, sickness, or in extreme cases, death to exposed organisms, including humans (World Health Organization [WHO] 1999). Species capable of producing microcystin include *Microcystis aeruginosa*, while species in the genus *Anabaena* can produce anatoxin-a and saxitoxin."*

**Page 3.2-29:**

*"Additional microcystin data collection in Upper Klamath Lake is ongoing, including measurement of toxin levels in native suckers (Vanderkooi et al. 2010, see Section 3.3, Aquatic Resources for more detail)."* It is our understanding that while Vanderkooi et al. 2010 found histological evidence (i.e. physical changes observed in dissections) consistent with damage from microcystin toxin, there have not yet been any studies to actually measure toxin levels in suckers.

**Page 3.2-26:**

*"These scenarios also represent Keno Dam as the historical natural Keno Reef, such that the Keno Reach is not a free-flowing reach (Tetra Tech 2009)."* This sentence is unclear and thus potentially misleading and should be revised. The height of the rock reef in T1BSR is lower than Keno Dam. Excerpt from Kirk et al. 2010: *"The natural conditions baseline scenario simulated the Klamath River from Upper Klamath Lake to the Pacific Ocean in the absence of all dams, except for Link Dam, but represented the presence of the historic Keno Reef (a natural basalt outcrop that was removed prior to construction of the Keno dam). Keno Reef was represented using data provided by the Bureau of Reclamation with an elevation of 1244.5 meters (4083 feet), whereas normal full pool elevation is 1245 meters (4085 feet) (PacifiCorp 2004a)."* Therefore, the suggested revision for the sentence is *"In the T1BSR, TOD2RN, and TCD2RN scenarios (but not T4BSRN), Keno Dam is replaced by the historical natural Keno Reef, such that the Keno Reach is still partially impounded even though the reef's elevation is two feet lower than the current full pool elevation of Keno Reservoir (Tetra Tech 2009, Kirk et al. 2010)."*

**Page 3.2-59:**

This sentence over-states the degree to which the reservoirs release TN:

*"Continued impoundment of water at the Four Facilities could result in long-term interception and retention of TP and TN in the KHP reservoirs on an annual basis and release (export) of TP and TN to the Klamath River downstream of Iron Gate Dam on a seasonal basis."*

The suggested revision is revise the sentence to end with "...release (export) of TP to the Klamath River downstream of Iron Gate Dam on a seasonal basis."  
For justification, see comments regarding Page 3.2-60 below.

**Page 3.2-60:**

These sentences over-state the degree to which the reservoirs release TN:

*"Further, in late-summer and fall (i.e., August-November), TP and TN concentrations can increase downstream of the KHP reservoirs due to release of TP (as ortho-phosphorus) and, to a lesser degree, TN (as ammonium), which are formed during periods of seasonal hypolimnetic anoxia in Copco 1 and Iron Gate reservoirs. This seasonal release occurs during periods that may stimulate periphyton growth in the Klamath River downstream of Iron Gate Dam (see Appendix C, Sections C.3.1.4.C.3.2.1)."*

While some ammonia is released into the Klamath River from Iron Gate Dam (i.e. ammonia concentrations are higher immediately below Iron Gate than immediately above Copco Reservoir) the reservoirs remove many times that amount of nitrate and therefore the reservoirs have an overall reducing effect on the amount of bioavailable inorganic (nitrate plus ammonia) nitrogen in the Klamath River below Iron Gate Dam. Therefore, the suggested replacement language for the two sentences quoted above is:

*"On a seasonal basis, reservoir sediments can release phosphorus to the water column during periods of seasonal hypolimnetic anoxia (see Appendix C, Sections C.3.1.4.C.3.2.1); however, most of the phosphorus released from the reservoir sediments during the anoxic period appears to remain within the hypolimnion until the reservoirs begin to turn over in the fall, and therefore is primarily not released into the river during the summer period of peak primary productivity downstream. An exception to this is that in many years TP concentrations are higher below Iron Gate Dam than above Copco Reservoir at times during the months of August through October during peak in-reservoir algal blooms, indicating that some release of TP does occur at times when it could stimulate periphyton growth downstream."*

**Page 3.2-61:**

*"In the Hydroelectric Reach, the seasonal variability in dissolved oxygen concentrations in J.C. Boyle Reservoir is highly influenced by the adverse dissolved oxygen conditions in the upstream Keno Impoundment." We are not aware (though have not fully investigated) of any evidence that dissolved oxygen levels in Keno Reservoir directly affect dissolved oxygen levels in J.C. Boyle Reservoir. Due to the steep and turbulent nature of the un-impounded river reach between Keno Dam and J.C. Boyle Reservoir, even if water leaves Keno with zero dissolved oxygen, it should be quickly brought back to near-saturation due to riffles and cascades in the*

turbulent river. It is true that the *factors that cause low D.O.* in Keno Reservoir (decomposition of algae and organic matter) also strongly affect D.O. in J.C. Boyle Reservoir; however, the *actual D.O. concentration* in water discharged from Keno Reservoir should not directly affect D.O. in J.C. Boyle Reservoir. Therefore, this sentence should be revised accordingly.

**Page 3.2-63:**

*"Continued impoundment of water at the Four Facilities could result in long-term seasonal and daily variability in dissolved oxygen concentrations in the Klamath River downstream of Iron Gate Dam, such that levels do not meet California North Coast Basin Plan and Hoopa Valley Tribe water quality objectives and adversely affect beneficial uses."*

The impoundment of water in the reservoirs does not contribute to *daily variability* in D.O. below Iron Gate Dam, but it does contribute to decreased overall (i.e. daily mean) D.O. (for example, see Figure 3.2-19 and 3.2-20 in the DEIS/DEIR). In addition, we are not aware of any evidence that the reservoir impoundments have a negative effect on dissolved oxygen on the Hoopa reservation (the only areas where the Tribe's water quality objectives apply); thus, the reference to "and Hoopa Valley Tribe" should be deleted probably be deleted if the intent is to discuss the effects of the dams (however, if it is just to describe generally the conditions in the river then it is fine to leave it in). Therefore, the suggested revision is to either delete "and daily variability" from the sentence, or replace the sentence with "Current dissolved oxygen concentrations in the Klamath River downstream of Iron Gate Dam are adverse, such that levels do not meet California North Coast Basin Plan and Hoopa Valley Tribe water quality objectives and adversely affect beneficial uses. Continued impoundment of water at the Four Facilities could result in continued release of water with low dissolved oxygen concentrations from Iron Gate Dam into the Klamath River, contributing to those adverse conditions, particularly in the vicinity of the dam."

**Page 3.2-67:**

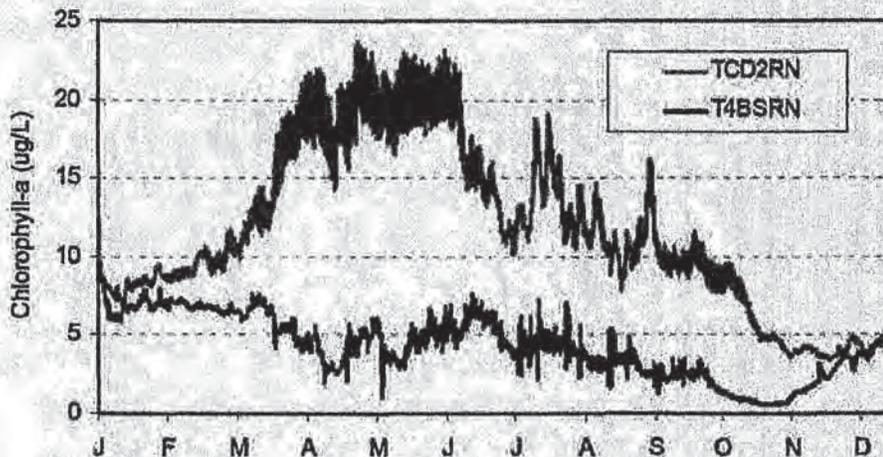
*"Continued impoundment of water at the Four Facilities could result in long-term seasonal and daily variability in pH in the Klamath River downstream of Iron Gate Dam."*

There is inconsistency regarding the pH issue in the DEIS/DEIR. In some sections, it is stated that the Proposed Action will increase pH below Iron Gate Dam, whereas in other places it is stated that it will decrease. We have researched the available information regarding this topic, and the evidence is confusing and unclear. On one hand, existing monitoring data from continuously recording pH probes indicate that pH during the summer is often higher, but not always, at Iron Gate than at sites downstream such as Seiad Valley (for example, see the 2000-2004, 2005, and 2007 data presented on pages C-47 to C-50 of the DEIS/DEIR appendix C). Additional pH data are available in the Karuk Tribe's 2008 water quality report (Karuk Tribe 2009) and the upcoming Klamath Hydroelectric Settlement Monitoring 2010 report (currently in draft). Additionally, as noted in comments regarding page 3.2-113 below, pH values in the surface of the reservoirs are extremely high (though they are less high at the ~5 m depth from

which most water is withdrawn). These existing-conditions data would suggest that algal blooms within the reservoirs are contributing to high pH in the Klamath River below Iron Gate Dam under current conditions.

However, the TMDL model predicts that for the dams-in TMDL-compliance scenarios (T4BSRN)(used in the DEIS/DEIR to approximate the No Action/No Project Alternative), mid-summer pH would be extremely low (i.e. near 8.0 with almost no daily fluctuation), whereas mid-summer pH under the dams-out scenario (TCD2RN)(used in the DEIS/DEIR to approximate the Proposed Action), would range from 8.5-9.0(see Figure 3.2-24).

We are skeptical of these extremely low pH values for the dams-in scenario. Examination of the model results presented in Appendix 7 of NCRWQCB (2010a), indicate the low pH values appears to be caused by a combination of two factors: 1) lower periphyton biomass at Iron Gate Dam, and 2) extremely low water column chlorophyll levels in Iron Gate Reservoir. With the large decreases (relative to current conditions) assumed for TMDL implementation, it definitely seems possible that periphyton biomass would be lower with a dams-in scenario (due to nutrient-trapping in the reservoirs). However, the very low chlorophyll levels in Iron Gate Reservoir seem unlikely. The following figure (from page C-56 of NCRWQCB 2010a Appendix 7) shows that the model predicts that there would be mid-summer chlorophyll levels at Iron Gate Dam would be 3-7 ug/L for the dams-in scenario but 8-19 ug/L for the dams-out scenarios:



*It seems extremely unlikely that impoundment of water would decrease water-column chlorophyll levels at Iron Gate Dam (which, in a dams-in scenario, reflect the output of Iron Gate Reservoir).*

Due to the contradictory evidence described above, it is difficult to recommend how the DEIS/DEIR should approach this issue. In summary, the field data suggests that the reservoirs

are increasing pH downstream of Iron Gate Dam; however, the TMDL model results suggest *with very aggressive upstream nutrient reductions*, it is potentially possible (though as we note above, it seems unlikely) that the reservoir's effect on pH could be eliminated or even reversed.

**Page 3.2-69:**

Regarding meeting TMDL targets for algal toxins and chlorophyll-a, the DEIS states: *"This would require decades to achieve and it is highly dependent on improvements in nutrients in the upstream reach from Link River Dam to J.C. Boyle Dam (particularly Keno Impoundment including Lake Ewauna)."*

This should also mention Upper Klamath Lake, the source of the water in Link River, thus the suggested revision is: *"This would require decades to achieve and it is highly dependent on decreasing nutrients upstream in Upper Klamath Lake, Link River, and the Keno Impoundment including Lake Ewauna."*

**Page 3.2-70:**

*"Under existing conditions, chlorophyll-a concentrations during summer through fall in the Klamath River downstream of Iron Gate Dam are lower than those in Upper Klamath Lake and the KHP reservoirs due to interception of algae by the KHP dams. However, concentrations are variable by location and increase as a result of periodic seasonal (i.e., summer, fall) in-reservoir algal blooms that are transported into the lower river (see Section 3.2.3.7)."*

This first sentence is incorrect and confusing because it combines issues/processes that should be kept separate: 1) reasons for the decrease from UKL to above Copco Reservoir, 2) reasons for the increase from above Copco Reservoir to within the reservoirs, and 3) reasons for the decrease from within the reservoirs to below Iron Gate Dam). Also, since this section is about the Lower Klamath basin, it seems irrelevant to mention UKL (it would make more sense to discuss UKL in the preceding section: Upper Klamath Basin).

Therefore, the suggested revision is: *"Under existing conditions, chlorophyll-a concentrations during summer through fall in the Klamath River downstream of Iron Gate Dam are higher than those in the river directly above Copco Reservoir, due to in-reservoir algal blooms that are transported into the lower river (see Section 3.2.3.7)."*

**Page 3.2-70:**

*"The California Klamath River TMDLs include specific load allocations for TN and TP upstream of the Four Facilities to offset the reduced nutrient assimilative capacity in the reservoirs (see Section 3.2.2.4, Klamath River TMDLs); the decreased nutrient loads would limit algal growth and decrease chlorophyll-a and algal toxin levels in the KHP reservoirs toward the TMDL targets of 10 µg/L chlorophyll-a (growing season average), M. aeruginosa cell density 20,000 cells/L, and microcystin toxin <4 µg/L (NCRWQCB 2010a)."*

This should be revised to acknowledge the uncertainty of achieving the nutrient reductions and the effects of those reductions once met. The wording in the Upper Klamath Basin section on the previous page is better and therefore it is the suggested revision: "Additionally, the Oregon and California TMDLs include specific load allocations for TN and TP upstream of the Klamath Hydropower Facilities (see Section 3.2.2.4), which are intended to eventually limit the extensive algal blooms in Copco 1 and Iron Gate Reservoirs and thus decrease chlorophyll-a and algal toxin levels toward the TMDL targets of 10 µg/L chlorophyll-a (growing season average), *M. aeruginosa* cell density 20,000 cells/L, and microcystin toxin <4 µg/L (see Table 3.2-10)"

**Page 3.2-77:**

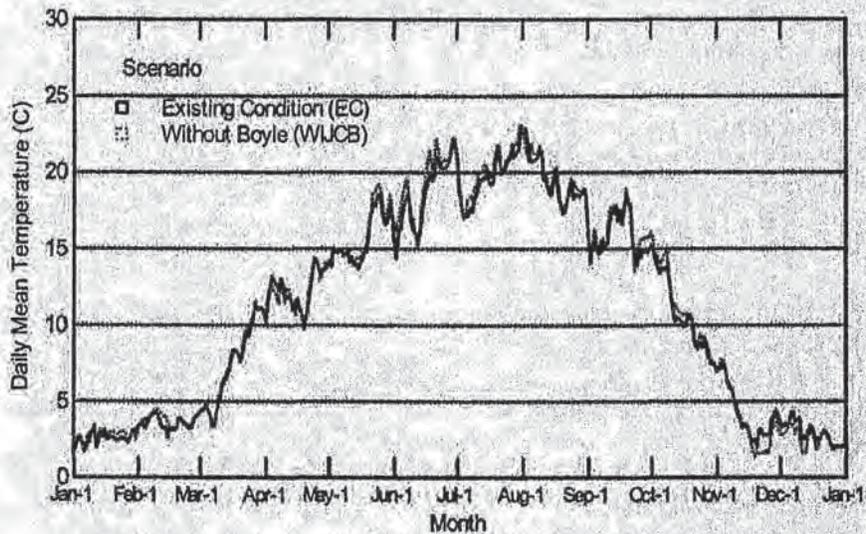
This page contains several sentences referenced to Asarian and Kann (2006a), however the information is not actually stated in the text of the cited report (which focused on nutrients, not temperature), but rather is derived from graphs created from PacifiCorp's water quality model outputs that are included as an electronic appendix to that report. The references should be clarified stating, instead, "data from electronic appendices of Asarian and Kann 2006a".

Here are the three sentences referenced to Asarian and Kann (2006a), with some suggested revisions:

1) "Higher daily fluctuations would also occur in the J.C. Boyle bypass reach because it would no longer be dominated by cold groundwater inputs at a relatively constant temperature of 11-12 C (Kirk et al. 2010, Asarian and Kann 2006a)" suggested revision: change citation to just "(Kirk et al. 2010)" (not necessary to cite Asarian and Kann 2006a).

2) "In the J.C. Boyle peaking reach model results indicate that water temperatures under the Proposed Action would be slightly lower (0.5-1 C [0.9-1.8 F]) than those predicted under the No Action/No Project and would exhibit lower daily fluctuation during June through September (NCRWQCB 2010a, Asarian and Kann 2006a)." The DEIS/DEIR Figure 3.2-3 shows water temperatures at Stateline in the peaking reach and does not indicate a consistent slightly lower overall (i.e. mean) temperature except in October and November, though it does indicate reduced daily fluctuations, i.e. lower maximum and higher minimum temperatures. Modeled mean temperatures are actually very similar between the two scenarios, with the No Action/No Project being generally very slightly lower (<0.5 C) in June - September, as illustrated in the following figure (generated from the data in the Asarian and Kann 2006a electronic appendix):

Stateline, KRWQM Outputs, Year 2000



The suggested revision is: "In the J.C. Boyle peaking reach model results indicate that water temperatures under the Proposed Action have lower daily maximums (0.0-2 C [0.0-3.6 F]) than those predicted under the No Action/No Project and would exhibit lower daily fluctuation during June through September (NCRWQCB 2010a) (Figure 3.2-3)."

3) "In the Klamath River downstream of the J.C. Boyle bypass and peaking reaches, TMDL model results indicate that water temperatures under the Proposed Action would be slightly lower (0.5-1C [0.9-1.8F]) than those predicted under the No Action/No Project and would exhibit lower daily fluctuation during June through September (NCRWQCB 2010a, Asarian and Kann 2006a; Figure 3.2-3)."

This is confusing. What is meant by "In the Klamath River downstream of the J.C. Boyle bypass and peaking reaches..."? Stateline (the location shown in cited Figure 3.2-3) is in the Peaking Reach. This should be clarified. Model results from Stateline would be a good approximation for the whole peaking reach (from the Boyle Powerhouse down to the upper end of Copco Reservoir) but the difference in temperature between the scenarios will be quite different between Stateline and downstream at Copco Dam and Iron Gate Dam due to the thermal mass of the reservoirs. For Copco Dam and Iron Gate Dam, it would be much better to use Figure 3.2-4 or Figure 3.2-5. Again, the citation of Asarian and Kann (2006a) is not necessary here.

Page 3.2-100:

The discussions how TN and TP would change with the removal of Boyle Reservoir should also reference some field data in addition to the TMDL modeling results. While there have been no in-depth empirical analyses of the effect of Boyle Reservoir, the effect can be inferred from comparing concentrations above/below the reservoir. For example, see Figure 4-4 PacifiCorp (2006a) showing TN and TP above/below Boyle Reservoir; and the PacifiCorp (2006a) statement that "Because of the short residence time, lack of stratification, and limited photic zone, the observed concentrations of total inorganic nitrogen (TIN), total nitrogen (TN), orthophosphate (PO<sub>4</sub>), and total phosphorus (TP) in outflowing waters from the reservoir are similar to those in inflowing waters (Figure 4-4), indicating the J.C. Boyle reservoir has no substantial effect on nutrients". Or just refer to Appendix C, which includes this statement: "In J.C. Boyle Reservoir (RM 224.7), the furthest upstream reservoir in this reach, concentrations of TN and TP measured between the inflow and outflow are typically similar, likely due to the shallow depth and short residence time characteristic of this impoundment (PacifiCorp 2006), indicating that relatively little nutrient retention occurs in this reservoir."

**Page 3.2-103:**

*"The TMDL model does not include denitrification as a possible nitrogen removal term in riverine segments (Tetra Tech 2009), meaning that TN concentrations under the Proposed Action (but also the No Action/No Project Alternative) may be slightly overpredicted."*

This is understating the issue. For example, using data from 2005-2008 Asarian et al. (2009) calculated that the TN retention in the Iron Gate to Seiad reach was ~15% (of inflow load) for the June-October period, whereas the TN retention predicted by the TMDL model for that same reach was 0% in June-October of 2000 (see table 3 in Tetra Tech 2009). Additionally, here is an excerpt from Asarian et al. (2009): "For example, in the July-September periods of 2007-2008, flow-weighted average TN concentrations decreased from 1.055 mg/L at Iron Gate to 0.388 mg/L at Orleans, a decline of 63%. Of that 63% decline, 65% was due to dilution and 35% due to retention. The percent reductions in concentration due to retention were lower for phosphorus parameters and ON than for TN, but higher for TIN. These results have important implications for Klamath River water quality computer models, because under-representation of natural retention processes in a model could substantially over-estimate nutrient concentrations in the lower Klamath River. For example, in the Iron Gate to Seiad TN example cited above, a dilution-only (no retention) model would predict an Orleans concentration of 0.620 mg/L, 60% higher than the measured value of 0.388 mg/L."

Therefore, the suggested revision is to remove the word "slightly" from the DEIS' sentence.

**Page 3.2-103:**

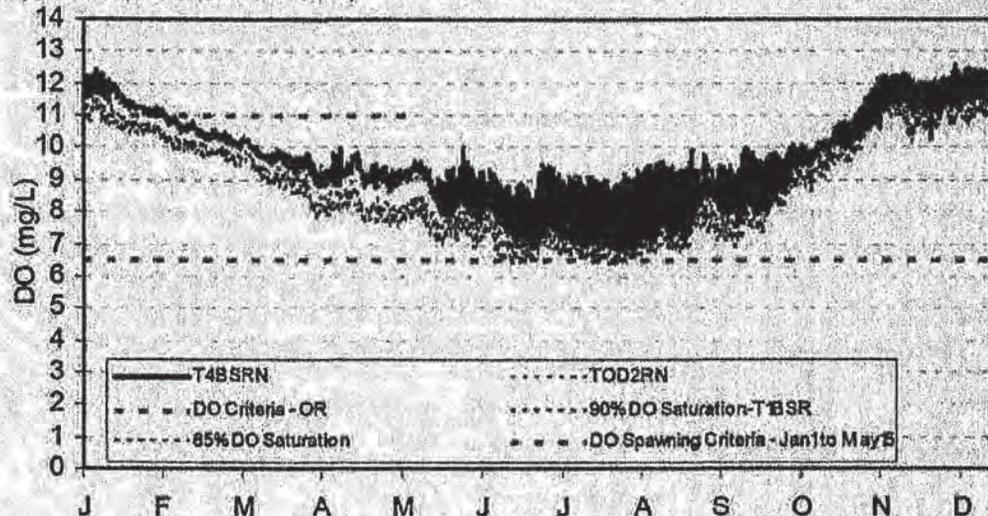
*"TMDL model results indicate that while resulting TP levels would meet the existing Hoopa Valley Tribe numeric water quality objective (0.035 mg/L TP) at the Hoopa reach (RM 45-46) of the Klamath River, TN levels would continue to be in excess of the existing objective (0.2 mg/L TN) (NCRWQCB 2010a)."*

It is important to interpret these model results in the context of the model's underestimation of nitrogen retention. Therefore, the suggested revision is: "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 exceed the existing objective (0.2 mg/L TN) in some months (NCRWQCB 2010a). However, as noted previously, TN concentrations in the model may be over-predicted and therefore the Hoopa Valley Tribe objective may in fact be met."

**Page 3.2-104:**

*"The Klamath TMDL model (see Appendix D) also predicts that daily fluctuations in dissolved oxygen at these locations during this same period may be greater under the Proposed Action (TCD2RN) than the No Action/No Project Alternative (T4BSRN), a condition potentially linked to greater periphyton biomass and associated daily photosynthetic swings in oxygen production in the free flowing river."*

That sentence is an incorrect summarization of the model results, because while the statement is correct for the below J.C. Boyle Dam site, it is incorrect for Stateline. The model predicts the opposite for Stateline: daily fluctuations are less under the Proposed Action (TCD2RN) than the No Action/No Project Alternative (T4BSRN). The figure presented in the DEIS/DEIR for Stateline D.O. is somewhat blurry. The following extraction of the TMDL figure (from NCRWQCB 2010a Appendix 7) shows it more clearly:



Interestingly, the TMDL model does predict increased periphyton biomass for the Proposed Action (TCD2RN), presumably due to slightly less trapping of nutrients and organic matter in J.C. Boyle Reservoir under a free-flowing condition. Thus, the prediction of decreased D.O. fluctuations under the Proposed Action (TCD2RN) is likely due to the lack of hydropower

peaking, not increased periphyton biomass. Note: the TMDL model does not incorporate scour into the mechanisms governing periphyton growth, so it likely over-estimates periphyton growth with peaking.

In summary, the suggested revision for the sentence quote above is: "The Klamath TMDL model (see Appendix D) predicts that daily fluctuations in dissolved oxygen directly downstream of J.C. Boyle Dam would be larger during this same period under the Proposed Action (TCD2RN) than the No Action/No Project Alternative (T4BSRN) (Figure 3.2-16), presumably due to the removal of the reservoir. In contrast, the TMDL model predicts reduced daily fluctuations in dissolved oxygen at Stateline in the peaking reach under the Proposed Action (TCD2RN) than the No Action/No Project Alternative (T4BSRN) (Figure 3.2-16), likely due to the lack of hydropower peaking."

**Page 3.2-110:**

This paragraph about the Klamath TMDL modeling results is confusing because it is unclear which locations are being referred to. The first sentence states "*immediately downstream of Iron Gate Dam*" but then refers to four figures that span from Iron Gate to about the Trinity River. Also, mention of the Hoopa WQ standards should be limited to the river on the Hoopa Reservation, not to other places on the Klamath (it is currently ambiguous what is being referred to). Also, regarding "Results also indicate that while minimum values may occasionally dip below the current Hoopa Valley Tribe minimum water quality objective (8 mg/L), they would not fall below the 90 percent saturation objective awaiting approval by USEPA (see Table 3.2-6)", please consult with the Hoopa Tribe to determine whether their standard is "awaiting approval by USEPA" (or is this referring to NCRWQCB's standard?).

**Page 3.2-112:**

*"The increased daily fluctuations in dissolved oxygen immediately downstream of Iron Gate Dam predicted by the PacifiCorp and Klamath TMDL modeling efforts are not entirely certain; the role of photosynthesis and community respiration from periphyton growth in the free-flowing reaches of the river replacing the reservoirs at the Four Facilities is unknown because nutrient cycling and resulting rates of primary productivity under the No Action/No Project Alternative are uncertain (see Section 3.4, Algae)."*

This statement is unnecessarily uncertain (the directionality of the effect is near-certain, it is the precise magnitude that is uncertain). Nothing is entirely "certain" but it is highly likely that predictions of increased intra-day and inter-day fluctuations will occur following dam removal are correct. The reasons are logical and well-supported by available data (modeling not required). Currently, water immediately below Iron Gate Dam reflects water discharged from depths of approximately 4.0 to 6.4 m below the water surface (see footnote on page 58 of Kann and Asarian 2007) where intra-day D.O. fluctuations are dampened because most of the

phytoplankton biomass (and hence photosynthesis and respiration), occurs closer to the reservoir surface (see Figure 41 in Kann and Asarian 2007 on page 68).

As the water flows downstream, intra-day D.O. dynamics are then dominated by periphyton and macrophytes, which exhibit a strong intra-day signal. Within some relatively short distance (exact distance unknown due to lack of data between Iron Gate and the Shasta River, but it is no further downstream than above the Shasta River) the reservoir's muting effect on intra-day D.O. is entirely overwhelmed by the river dynamics.

Under a dam removal scenario, there are no reservoirs, so the river at Iron Gate would have tens of miles of river upstream with strong intra-day influences on D.O. Therefore, regardless of changes in nutrient cycling, the river at Iron Gate Dam would exhibit a river D.O. signal with higher intra-day fluctuations, rather than the current reservoir-dampened signal. Note: increased *inter-day* D.O. fluctuations at Iron Gate with dam removal are due to the lack of the reservoir's thermal buffering effect (D.O. saturation is strongly affected by water temperature).

We suggest revising the first half of the sentence to read: "The magnitude of the increased daily fluctuations in dissolved oxygen immediately downstream of Iron Gate Dam predicted by the PacifiCorp and Klamath TMDL modeling efforts are somewhat uncertain..." and deleting also "potentially" from "...the Proposed Action would cause long-term increases in summer and fall dissolved oxygen in the lower Klamath River immediately downstream of Iron Gate Dam, along with potentially increasing daily variability."

**Page 3.2-113:**

The discussion of how the Proposed Action would affect pH in the Upper Klamath Basin and the Hydroelectric Reach is incomplete and misses the "big picture" because it is all about how pH will change in the reaches that are *current free-flowing river reaches*. There is no explicit discussion of how pH will change in the reaches *that are currently reservoirs*. In our opinion, this is just as important and worthy of mention. Dam removal would eliminate the extremely high pH that occurs in the surface waters of the Iron Gate and Copco Reservoirs during peak summer blooms. We recommend that a discussion of this topic be added. Information about high pH in the reservoirs can be found in Asarian et al. (2009) and in PacifiCorp's annual water quality monitoring reports by Raymond (various years). For example, Figure 7 in Asarian et al. (2009) shows pH >9 at the surface of Iron Gate Reservoir (note: variation in the time of day that measurements were taken confounds detailed interpretation; however, the data do document the presence of very high pH):

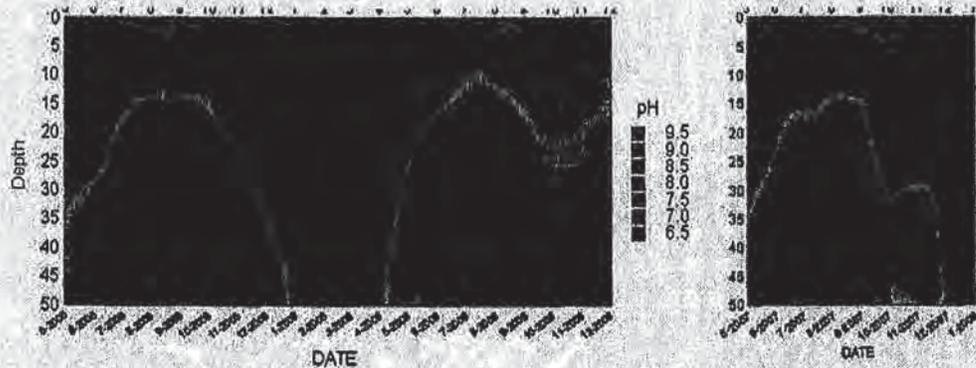
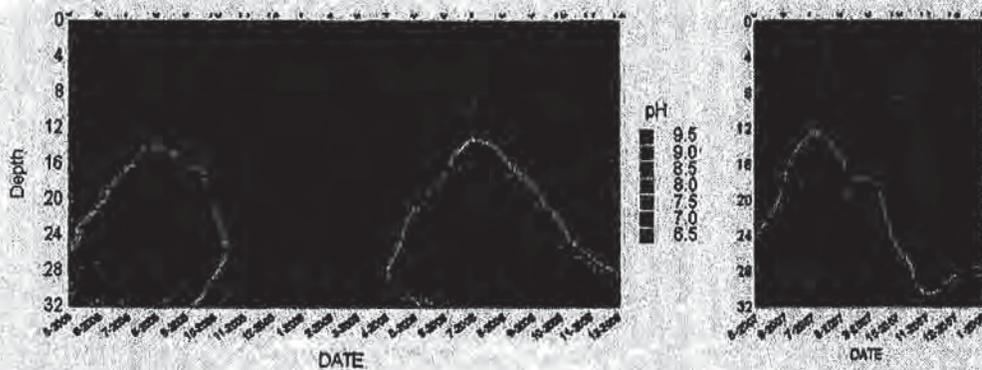


Figure 6 in Asarian et al. (2009) shows pH >9 at the surface of Copco Reservoir:



**Page 3.2-113:**

The conclusion that *“Under the Proposed Action, the short-term (<2 years following dam removal) and long-term (2–50 years following dam removal) decrease in high summertime daily pH fluctuations in the Hydroelectric Reach would be beneficial”* is not supported by Figure 3.2-23, which shows increased (not decreased) intra-day variability under the Proposed Action in the summer at Stateline (and nearly no change directly below J.C. Boyle Dam). Also, as noted in the previous comment, there is no mention of how pH will change in the reaches that are currently reservoirs. Therefore, we recommend that the sentence be changed to *“Under the Proposed Action, the short-term (<2 years following dam removal) and long-term (2–50 years following dam removal) decrease in high summertime daily pH fluctuations in portions of the Hydroelectric Reach, such as the J.C. Boyle Peaking Reach and the surface waters of Copco and Iron Gate Reservoirs, would be beneficial.”*

**Page 3.2-117:**

While mostly correct, the following statement is misleading because it overstates the risk of toxin export from UKL: *“While algal toxins and chlorophyll-a produced in Upper Klamath Lake may still be transported into the Hydroelectric Reach at levels exceeding water quality objectives*

*for Oregon and California, additional in situ production of the toxins and chlorophyll-a associated with suspended algae would be significantly less likely to occur in the freeflowing river under the Proposed Action."*

We are not aware of any evidence that algal toxins are being exported from UKL at levels that exceed WQ objectives for California or Oregon (high chlorophyll from UKL is mostly from *Aphanizomenon*). The highest levels of toxins in UKL are in the northern part of the lake, or in Agency Lake. Therefore, this sentence should be expanded and revised: "While algal toxins and chlorophyll-a produced in Upper Klamath Lake may still be transported into the Hydroelectric Reach, currently available data indicates that the concentration of microcystin toxin leaving Upper Klamath Lake has rarely, if at all, exceeded levels that would exceed water quality objectives for California and Oregon. Under the proposed action, additional in situ production of the toxins and chlorophyll-a associated with suspended algae would be significantly less likely to occur in the freeflowing river under the Proposed Action."

**Page 3.2-125:**

*"3.2.4.3.2.9 East and West Side Facilities Decommissioning the East and West Side Facilities could cause adverse water quality effects. Decommissioning of the East and West Side canals and hydropower facilities of the Link River Dam by PacifiCorp as a part of the KHSa will redirect water flows currently diverted at Link River Dam into the two canals, back in to Link River. Following decommissioning of the facilities there will be no change in outflow from Upper Klamath Lake or inflow into Lake Ewauna. Therefore, implementation of the East and West Side Facility Decommissioning action would result in no change from existing conditions."*

Actually, there could be some subtle slightly beneficial effects on water quality at the mouth of Link River. Although short, Link River is turbulent and well oxygenated. More water flowing through the entire length of the Link River, rather than the canals, could decrease oxygen demand slightly through turbulent breakup/decomposition of algal cells, which could slightly improve dissolved oxygen conditions in Keno Reservoir.

In addition, during times when there are high ammonia levels in UKL (following algal bloom crashes), more water flowing through Link River would allow for more nitrification (conversion of ammonia to nitrate), resulting in slightly reduced concentrations of ammonia entering Keno Reservoir, which could slightly reduce ammonia toxicity in Keno Reservoir. Although water quality dynamics in Link River have not been studied intensively, supporting evidence for this phenomenon can be inferred from the Deas (2008) study which found substantial nitrification in the short turbulent river reach between Keno Dam and J.C. Boyle Reservoir.

**Page 3.2-134:**

Regarding the "Partial Facilities Removal Alternative", the DEIS states that "Long-term summertime increases in pH would be beneficial for the Hydroelectric Reach and the lower Klamath River from Iron Gate Dam to the confluence with the Scott River."

This is inconsistent with what is stated for the Proposed Action and needs to be corrected. Increased summer pH is generally not beneficial in the Klamath River.

**Page 3.2-134**

This page contains a discussion of the water quality effects of decommissioning the East and West Side Facilities that fails to mention that decommissioning will slightly improve water quality conditions through more rapid decomposition of algal cells and increased nitrification. Details are provided above in the comments regarding a similar section on page 3.2-125.

**Page 3.2-135:**

The sentence contains some erroneous information and requires revision: *"Under the Fish Passage at Four Dams Alternative, the reduction in frequency of J.C. Boyle peaking operations (from daily to weekly) and overall higher flow releases would result in warmer and more variable water temperatures in the bypass reach during summer and early fall, and cooler temperatures in late fall and winter."*

Temperatures will be warmer during summer and early fall, but will not be more variable. The cause of the increased temperatures would be increased amounts of warm river water in that reach. The cause of increased variability in the Proposed Action is the lack of thermal mass of J.C. Boyle Reservoir. In Alternative 4, however, the reservoir and its thermal mass are still present so there will be no increased variability (because there will be no mechanism causing increased variability). Therefore, the suggested revision is to delete "...and more variable..."

**Page 3.2-135:**

This sentence is erroneous and requires correction: *"Similar to the Proposed Action, water temperatures in the peaking reach would be slightly cooler and less variable, also due to higher overall flows and the lower frequency of peaking operations at the J.C. Boyle Powerhouse."*

It is true under water temperatures in the peaking reach under Alternative 4 will be similar to those under the Proposed Action; however, those effects are mis-characterized here. See comment regarding page 3.2-77, above, for details.

**Page 3.2-135:**

This is erroneous and requires correction: *"Further downstream, at the Oregon-California state line, water temperatures would likely be similar to those under the No Action/No Project"*

*Alternative since large temperature effects of the peaking operations do not extend this far downstream."*

Stateline is in the peaking reach. See comments regarding page 3.2-77 above for details.

**Page 3.2-137:**

*The following passage has three issues that require correction: "Since Alternative 5 would include no peaking power generation or release of flow for recreation at J.C. Boyle, water temperature effects in the J.C. Boyle bypass and peaking reaches would be the same as under the Proposed Action i.e., warmer and more variable water temperatures in the bypass reach during summer and early fall, and cooler temperatures in late fall and winter; and, slightly cooler and less variable water temperatures in the peaking reach during summer and early fall. Further downstream, at the Oregon-California state line, water temperatures would be similar to those under the No Action/No Project Alternative since large temperature effects of the peaking operations do not extend this far downstream. Within the remainder of the Hydroelectric Reach, effects on water temperature under the Fish Passage at J.C. Boyle and Copco 2, Remove Copco 1 and Iron Gate Alternative would be the same as effects for the Hydroelectric Reach under the Proposed Action."*

The suggested revision is to replace the above excerpt with: "Since Alternative 5 would include no peaking power generation or release of flow for recreation at J.C. Boyle, water temperature effects in the J.C. Boyle bypass would be the same as Alternative 4, i.e., warmer water temperatures in the bypass reach during summer and early fall, and cooler temperatures in late fall and winter. In the peaking reach, water temperatures would be similar to those under the Proposed Action, i.e. decreased daily fluctuation due to the lack of peaking. In the current beds of Copco and Iron Gate Reservoirs, temperatures would also be similar to those under the Proposed Action."

The three issues are discussed in the following text, providing justification for the proposed changes requested above:

- 1) The effects of Alternative 5 on water temperature in the Peaking Reach will not be the same as the Proposed Action. Temperatures will be warmer during summer and early fall, but will not be more variable. The cause of the increased temperatures is increased amounts of warm river water in that reach (which occurs in both the Proposed Action and Alternative 5). The cause of increased variability in the Proposed Action is the lack of thermal mass of J.C. Boyle Reservoir; however, in Alternative 5 the reservoir and its thermal mass are still present so there will be no increased variability (because there will be no mechanism causing increased variability)
- 2) The DEIS states "Further downstream, at the Oregon-California state line, water temperatures would be similar to those under the No Action/No Project Alternative since large temperature effects of the peaking operations do not extend this far downstream." This sentence is erroneous (Stateline is in the peaking reach, so the lack of peaking in Alternative 5

will result in different water temperatures than the No Action/No Project Alternative) and duplicative (water temperature effects of the peaking reach were already discussed in the preceding sentence) and thus should be deleted.

3) "Within the remainder of the Hydroelectric Reach, effects on water temperature under the Fish Passage at J.C. Boyle and Copco 2, Remove Copco 1 and Iron Gate Alternative would be the same as effects for the Hydroelectric Reach under the Proposed Action." It should be clarified what is meant by "the remainder of the Hydroelectric Reach", because the effects between Stateline and above Copco Reservoir are different than those at downstream sites (Copco Dam and Iron Gate Dam). Which one is intended here? (the river reach between Stateline and above Copco Reservoir, or further downstream at Copco Dam/Iron Gate Dam?).

**Page 3.2-137:**

This sentence is partially erroneous: *"Under the Fish Passage at J.C. Boyle and Copco 2, Remove Copco 1 and Iron Gate Alternative, long-term (2-50 years following dam removal/construction of fish passage facilities) increases in summer/fall water temperatures and daily fluctuations in the J.C. Boyle bypass reach due to the elimination of hydropower peaking operations would be a significant impact."*

Hydropower peaking does not affect the bypass reach. The suggested revision is to end the sentence with "...in the J.C. Boyle bypass reach due to the increased dilution of consistently cool springs by additional Klamath River water would be a significant impact."

**Page 3.2-137:**

This sentence about the effects of Alternative 5 on water temperature requires revision: *"Slight decreases in long-term summer/fall water temperatures and less daily fluctuation in the J.C. Boyle peaking reach would be beneficial."* There will be less daily fluctuation in the peaking reach (due to no peaking) under Alternative 5; but there will not be a slight decrease in summer/fall water temperatures. See comments above on Page 3.2-77 for details.

**Page 3.2-137:**

This sentence about the effects of Alternative 5 on water temperature is erroneous and should be deleted: *"From the J.C. Boyle peaking reach to Copco 1 Reservoir, long-term water temperature effects would be similar to those under the No Action/No Project Alternative (i.e., no change from existing conditions),"* because the peaking reach ends at Copco 1 Reservoir (so there is no "J.C. Boyle peaking reach to Copco 1 Reservoir" separate from the peaking reach). There will be less daily fluctuation in the peaking reach (due to no peaking) under Alternative 5.

**Page 3.2-151 and Page 3.2-152:**

These two statements about the effects of the reservoirs on algal-derived (organic) suspended material in the Hydroelectric Reach are somewhat contradictory: *"Continued impoundment of water in the reservoirs could cause short-term and long-term seasonal (April through October) increases in algal-derived (organic) suspended material in the Hydroelectric Reach due to in-reservoir algal blooms."* (Page 3.2-151) and: *"Dam removal could eliminate the interception and retention of algal-derived (organic) suspended material behind the dams and result in long-term increases in suspended material in the Hydroelectric Reach."* (Page 3.2-152)

These two statements describe the two opposing effects of the reservoirs on algal-derived suspended material: 1) the settling algal-derived material from upstream sources (as well as settling of in-reservoir growth) and 2) internally-generated (i.e. re-growth) of algal material. There may be some CEQA-specific or NEPA-specific reason to address these items as two separate potential impacts; however, from a common-sense perspective it would seem to make more sense to assess the combined effects of these opposing forces and make a judgment about the net effect.

**Page 3.2-153:**

Similar to the comment above regarding the effects of the reservoirs on algal-derived (organic) suspended material in the Hydroelectric Reach, this same issue applies to the Lower Klamath Basin where these two seemingly contradictory statements are made: *"Continued impoundment of water in the reservoirs could result in short-term and long-term seasonal (April through October) increases in algal-derived (organic) suspended material in the KHP reservoirs and subsequent transport into the Klamath River downstream of Iron Gate Dam."* and: *"Dam removal could eliminate the interception and retention of algal-derived (organic) suspended material behind the dams and result in long-term increases in suspended material in the lower Klamath River, the Klamath Estuary, and the marine nearshore environment."*

These two statements describe the two opposing effects of the reservoirs on algal-derived suspended material: 1) the settling algal-derived material from upstream sources (as well as settling of in-reservoir growth) and 2) internally-generated (i.e. re-growth) of algal material. There may be some CEQA-specific or NEPA-specific reason to address these items as two separate potential impacts; however, from a common-sense perspective it would seem to make more sense to assess the combined effects of these opposing forces and make a judgment about the net effect.

**Page 3.2-154**

*"Continued impoundment of water in the reservoirs could cause long-term interception and retention of TP and TN on an annual basis but release (export) of TP and TN on a seasonal basis"*

This statement overstates the degree to which the reservoirs can increase nutrient concentrations downstream of Iron Gate Dam. Because this section is regarding the Klamath River below Iron Gate Dam, the use of the word "export" implies release of nutrients from the

reservoirs into the river downstream (i.e. that nutrient concentrations are higher at some point in time at Iron Gate Dam under current conditions than they would be without the dams/reservoirs). Basically this does not occur for TN (only for TP). So the suggested revision is to change "...release (export) of TP and TN on a seasonal basis" to "...release (export) of TP on a seasonal basis".

Note that earlier on that same page (3.2-154), it is stated that regarding the Upper Klamath Basin (i.e. Hydroelectric Reach) that "Continued impoundment of water in the reservoirs could cause long-term interception and retention of TP and TN on an annual basis but release (export) of TP and TN on a seasonal basis". In that case it is okay to mention "export" of TN because in that context it signifies release from the reservoir sediments to the reservoir water column (not from the reservoirs into the Klamath River), which does occur and could potentially contribute to in-reservoir algal blooms.

**Page 3.2-155:**

*"Dam removal and conversion of reservoir areas to free-flowing river conditions could cause long-term increases in dissolved oxygen, as well as increased daily variability in dissolved oxygen, in the Hydroelectric Reach."*

As is noted above on comments regarding page 3.2-104, this statement is not true for the entire Hydroelectric Reach, just parts of it. In particular, the Proposed Action would cause decreased intra-daily variability in D.O. at Stateline (not increased as stated here). Perhaps this potential effect should be split up into multiple pieces, according to the differing effects by specific location?

**Page 3.2-155:**

*"Continued impoundment of water at the Four Facilities could result in long-term seasonal and daily variability in dissolved oxygen concentrations in the Klamath River downstream of Iron Gate Dam, such that levels do not meet California North Coast Basin Plan and Hoopa Valley Tribe water quality objectives and adversely affect beneficial uses."*

The impoundment of water in the reservoirs does not contribute to *daily variability* in D.O. below Iron Gate Dam, but it does contribute to decreased overall (i.e. daily mean) D.O. (for example, see Figure 3.2-19 and 3.2-20 in the DEIS/DEIR). In addition, we are not aware of any evidence that the reservoir impoundments have a negative effect on dissolved oxygen on the Hoopa reservation (the only areas where the Tribe's water quality objectives apply); thus, the reference to "and Hoopa Valley Tribe" should be deleted probably be deleted if the intent is to discuss the effects of the dams (however, if it is just to describe generally the conditions in the river then it is fine to leave it in). Therefore, the suggested revision is to either delete "and daily variability" from the sentence, or replace the sentence with "Current dissolved oxygen concentrations in the Klamath River downstream of Iron Gate Dam are adverse, such that levels do not meet California North Coast Basin Plan and Hoopa Valley Tribe water quality objectives

and adversely affect beneficial uses. Continued impoundment of water at the Four Facilities could result in continued release of water with low dissolved oxygen concentrations from Iron Gate Dam into the Klamath River, contributing to those adverse conditions, particularly in the immediate vicinity of the dam."

**Page 3.2-156:**

This sentence appears to be an erroneous near-duplicate (it is very similar to the next row, but reaches some different conclusions) and therefore should be deleted: *"Dam removal and conversion of the reservoir areas to a free-flowing river could cause short-term and long-term decreases in summertime pH in the lower Klamath River, Klamath Estuary, and the marine nearshore environment."* The information presented on pages 3.2-115 to 3.2-117 is more correctly described by the next row in the table, which is the Potential Impact *"Dam removal and conversion of the reservoir areas to a free-flowing river could cause long-term summertime increases in pH in the lower Klamath River downstream of Iron Gate Dam" with Significance Pursuant to CEQA of "LTS (from Iron Gate Dam to confluence with the Scott River) NCFEC (Klamath River just downstream of Seiad Valley, the Klamath Estuary, and the Marine Nearshore Environment)".*

There is inconsistency regarding the pH issue in the DEIS/DEIR. In some sections, it is stated that the Proposed Action will increase pH below Iron Gate Dam, whereas in other places it is stated that it will decrease. See comments above regarding page 3.2-67.

**Page 3.2-157:**

*"Dam removal and conversion of the reservoir areas to a free-flowing river would cause short-term and long-term decreases in levels of chlorophyll-a and algal toxins in the Hydroelectric Reach."*

The changes will be major, particularly for algal toxins (chlorophyll-a will still occasionally be high due to upstream blooms of *Aphanizomenon*). Therefore, the suggested revision is: *"Dam removal and conversion of the reservoir areas to a free-flowing river would cause short-term and long-term decreases in levels of chlorophyll-a and substantially reduce or eliminate algal toxins in the Hydroelectric Reach."*

**Page 3.2-158:**

*"Dam removal and conversion of the reservoir areas to a free-flowing river would cause short-term and long-term decreases in levels of chlorophyll-a and algal toxins in the lower Klamath River and the Klamath Estuary."*

The changes will be *major*, particularly for algal toxins (chlorophyll-a will still occasional be high due to upstream blooms of *Aphanizomenon*). Therefore, the suggested revision is: *"Dam removal and conversion of the reservoir areas to a free-flowing river would cause short-term*

and long-term decreases in levels of chlorophyll-a and substantially reduce or eliminate algal toxins in the lower Klamath River and the Klamath Estuary."

**Page 3.2-160:**

*"Decommissioning the East and West Side Facilities could cause adverse water quality effects."*

Nowhere in the DEIS/DEIR is it described how the decommissioning of the East and West Side Facilities cause adverse water quality effects. In fact, as described above in comments on Page 3.2-125, it is likely that decommissioning these facilities would result in a minor improvement to water quality in Keno Reservoir.

**Page 3.2-169:**

The citation for Perry et al. (2011) is missing the OFR number. It should be "2011-1243"

### **3.3 Aquatic Resources**

**Page 3.3-40**

The study results referencing Vanderkooi 2010 are overstated. The Vanderkooi et al 2010 reference is not a report or a study, it is a 2 page fact sheet that was never published.

There was disagreement as to whether microcystin was actually the cause of the lesions. No one has ever reviewed the data or report. Thus, unlike the Klamath River studies where microcystin was found and confirmed directly in fish tissue, the UKL results are highly speculative and have not been confirmed.

**Page 3.3-40**

The sentence describing the bioaccumulation in salmonids leaves out some of the data. The 3 of 7 Chinook salmon livers that were positive for toxin were for September. Samples collected on the 14th and 15th of October also showed that 1 of 7 Chinook livers had a high level of microcystin-RR (121 ppb), and 1 of 15 steelhead livers had a high level of microcystin-LR (152 ppb), both of which exceeded public health guideline levels.

The October chinook and steelhead need to be included- especially the steelhead because it is confirming of the Fetcho 2006 detection.

### **3.4 Algae**

**Page 3.4-2:**

"quite" should be changed to "quiet" in this sentence: "*Submerged aquatic macrophytes may also be present in quite backwater areas in the Klamath River..*"

**Page 3.4-4:**

Reference for elevated pH in UKL:

Kann, J., and V. H. Smith, 1999. Chlorophyll as a predictor of elevated pH in a hypereutrophic lake: estimating the probability of exceeding critical values for fish success using parametric and nonparametric models. *Can. J. Fish. Aquat. Sci* 56: 2262-2270

**Page 3.4-4:**

VanderKooi et al. 2011 is cited at several places on this page but is not listed in the references section. Should it be added to the references list, or is this an incorrect citation?

**Page 3.4-4:**

"several occasions" should be changed to "many occasions" in the following sentence: "The World Health Organization (WHO) guidelines for exposure to microcystin have been exceeded in Upper Klamath Lake (VanderKooi et al. 2011) and the middle and lower Klamath River on several occasions.."

**Page 3.4-4:**

This sentence overstates the abundance of *Anabaena* in the KHP reservoirs: "*Large Anabaena flos-aquae blooms occur in the Klamath Hydroelectric Project reservoirs, along with M. aeruginosa, and their toxin has been documented in the reservoirs and downstream (Raymond 2009).*"

For example, here are some excerpts from the cited Raymond (2009) document, documenting that *Anabaena* does not have "large blooms" in the reservoirs: "*Anabaena flos-aquae* was present briefly at low abundance." and "*Anabaena flos-aquae* was observed only in Iron Gate reservoir in 2008. It was largely confined to surface samples, appearing only once in the 8 m integrated sample. It did not appear to collect preferentially at the surface; samples taken at 0.5 m depth typically had greater biovolume than samples collected at the surface. *Anabaena planctonica* was observed in one 8 m integrated sample from Iron Gate reservoir." Additional information on *Anabaena* in sampling in Iron Gate and Copco reservoir by the Karuk Tribe and PacifiCorp in 2005-2010 can be found in Asarian and Kann (2011). The sentence should be revised accordingly.

Anatoxin was only detected once in Iron Gate reservoir in September of 2005 at levels ranging from 20-34 ug/L. (Trina Mackie CA DHS 2005).

**Page 3.4-5:**

This sentence is way too simplistic and limited, with no supporting references: *"Periphyton abundance and community composition appears to be controlled in large part by nutrient availability and flow rates, with high flow rates frequently corresponding to low periphyton abundance, and nutrient enrichment corresponding to an increased abundance of Cladophora."*

The recommended revision is to replace that sentence with: "The factors influencing periphyton abundance and community composition are complex and include abiotic factors such as nutrients, substrate, flow velocity, shading, light availability, and water temperature (Biggs 2000), as well as ecological factors such macroinvertebrate grazing that interact with abiotic factors (Powers et al. 2008)."

**Full citations:**

Biggs, B.J.F. 2000. New Zealand Periphyton Guideline: Detection, Monitoring, and Managing Enrichment of Streams. Prepared for Ministry of Environment. NIWA, Christchurch. Accessed online 11/4/2008 at: <http://www.mfe.govt.nz/publications/water/nz-periphyton-guide-jun00.pdf>

Power, M.E., Parker, M.S., Dietrich, W.E., 2008. Seasonal reassembly of a river food web: floods, droughts, and impacts of fish. *Ecological Monographs* 78, 263–282.

**Page 3.4-6:**

*"However, this decreasing trend is interrupted by large blooms of blue-green algae in Copco 1 and Iron Gate Reservoirs (Kann and Asarian 2006, Asarian et al. 2009)."* An additional good reference to add here would be Asarian and Kann (2011):

Asarian, E. and J. Kann. 2011. Phytoplankton and Nutrient Dynamics in Iron Gate and Copco Reservoirs 2005-2010. Prepared by Kier Associates and Aquatic Ecosystem Sciences for the Klamath Basin Tribal Water Quality Work Group.

**Page 3.4-6:**

*"Blue-green algae dominate the algal community during the mid-summer to fall months, with large blooms of Anabaena flos-aquae and M. aeruginosa in the reservoirs (Kann 2006, FERC 2007)."*

Actually, *Aphanizomenon* is much more abundant than *Anabaena* (though *Anabaena* is present). Also, neither of the cited documents mentions *Anabaena*. A newly completed report by Asarian and Kann (2011) analyzes the PacifiCorp and Karuk Tribe's 2005-2010 phytoplankton data collected in the Iron Gate and Copco and would be a good citation for this sentence. Additionally, blue-green algal blooms can be large in July (not late summer).

Therefore, the suggested revision is: "Blue-green algae dominate the algal community during the mid-summer to fall months, with large blooms of *Aphanizomenon flos-aquae* and *M. aeruginosa* in the reservoirs (Asarian and Kann 2011)."

Full citation:

Asarian, E. and J. Kann. 2011. Phytoplankton and Nutrient Dynamics in Iron Gate and Copco Reservoirs 2005-2010. Prepared by Kier Associates and Aquatic Ecosystem Sciences for the Klamath Basin Tribal Water Quality Work Group.

**Page 3.4-12:**

*"As described above for phytoplankton (i.e., blue-green algae), full and successful implementation of Oregon and California TMDLs would decrease nutrients in the Klamath River and would result in decreased spatial extent, temporal duration, and/or biomass of phytoplankton mats."* Since this passage occurs in the section about periphyton, this sentence should end with "...periphyton mats.", not "...phytoplankton mats."

**Page 3.4-12:**

*"Increases in nutrient availability may also cause a shift in periphyton community composition from that dominated by nitrogen-fixing periphyton species to that dominated by non-nitrogen fixers."*

Where is the evidence that would support this conclusion? In order for this to be true (increasing non-nitrogen fixers), climate change would have to increase N more than it increased P (and what are the mechanisms that would cause such a change?). If evidence is not presented, this sentence should be deleted.

**Page 3.4-14:**

*"Moreover, dam removal would allow the substantial groundwater resources within this area of analysis to cool water temperatures during the summer months (Hamilton et al. 2010). This would further reduce the suitability of conditions for blue-green algae growth and mitigate for the effects of climate change."*

Are the "substantial groundwater resource" referred to here the springs below J.C. Boyle Dam? These springs are incorporated into the water quality models developed for the PacifiCorp relicensing and TMDL, and are discussed in Section 3.2 of the EIS. Those modeling results indicate that under the Proposed Action, it is the termination of hydropower peaking (not groundwater inflow) that will reduce daily water temperature fluctuations and maximum daily water temperatures in the J.C. Boyle Peaking reach, but that daily mean temperatures will remain very similar (i.e. see Page 3.2-77).

The models do predict summer cooling under the Proposed Action at Copco Dam and Iron Gate Dam, but these temperature effects are due to elimination of the reservoirs' thermal mass, not groundwater inflow. Certainly the springs below J.C. Boyle Dam are currently (and will continue into the future) have important effects on Klamath River water temperature, but the Proposed Action will not have much, if any, effect on those springs. Thus, it is probably not accurate to say that the "groundwater resource" will result in additional cooling of the river under the Proposed Action. Furthermore, the temperature issue is probably not worth even mentioning here because its effect on phytoplankton is so minor relative to the overwhelming effect of the change from stagnant to free-flowing conditions. Therefore, the suggested revision is to delete the two sentences.

**Page 3.4-17:**

These sentences requires some revision: *"Despite the overall increases in absolute nutrient concentrations anticipated under the Proposed Action (see Section 3.2.4.3.2.3 Nutrients – Lower Klamath Basin), the relatively greater increases in Total Nitrogen (TN) may not result in significant biostimulatory effects on periphyton growth. Existing data indicate that the Klamath River is generally N-limited (TN:Total Phosphorus (TP) <10), with some periods of co-limitation by N and P (see also Section 3.2.3.4 and Appendix C, Section C.3.2.1)."*

It is very important here to mention the minor increase in phosphorus because that is the driver of the predicted lack of substantial biostimulatory response. As currently worded, the emphasis is on the fact that TN will increase more than TP, which is actually less important than the fact that TP will only increase a small amount. Also, TN:TP ratios in the Klamath River do not indicate N-limitation, they indicate *the potential* for N limitation. Therefore, the suggested revision is:

*"Despite the overall increases in absolute nutrient concentrations anticipated under the Proposed Action (see Section 3.2.4.3.2.3 Nutrients – Lower Klamath Basin), the large increase in Total Nitrogen (TN) may not result in significant biostimulatory effects on periphyton growth because it will be accompanied by only a relatively minor increase in Total Phosphorus (TP). Existing data regarding TN:TP ratios suggest the potential for the Klamath River to be generally N-limited (TN:TP) <10), with some periods of co-limitation by N and P (see also Section 3.2.3.4 and Appendix C, Section C.3.2.1)."*

**Page 3.4-17:**

These sentences require some revision: *"In addition, N-fixing species dominate the periphyton communities in the lower reaches of the Klamath River where inorganic nitrogen concentrations are low (Asarian et al. 2010). Since these species can fix their own nitrogen from the atmosphere, increases in TN due to dam removal may not significantly increase their biomass, particularly if overall TN increases are less than those predicted by existing models due to implementation of TMDLs and general nutrient reductions in the Klamath Basin."*

The first sentence should be revised to clarify that it refers to existing conditions (change "N-fixing species dominate" to "N-fixing species currently dominate"). The second sentence should mention the very small increase in TP, and be rephrased to avoid saying "their biomass" because species composition could shift with increased TN.

Therefore, the suggested revision is to revise the second sentence to read: "Since these species can fix their own nitrogen from the atmosphere, increases in TN due to dam removal may not significantly increase periphyton biomass in these reaches because it will be accompanied by only a relatively minor increase in TP. In addition, overall TN increases could be less than those predicted by existing models due to implementation of TMDLs and general nutrient reductions in the Klamath Basin."

**Page 3.4-18:**

The second sentence here requires some revision: *"As discussed for the lower Klamath River downstream of Iron Gate Dam, periphyton growth under the Proposed Action could be affected by increased nutrient availability following dam removal. However, since the long-term increase in nutrients in the Klamath Estuary would be a less-than-significant impact due to the implementation of TMDLs and KBRA (see Section 3.2.4.3.2.3 Nutrients – Lower Klamath Basin), it is likely that increases in periphyton growth would also be less than significant."*

It is important to note here that the Klamath estuary is a long distance downstream of Iron Gate Dam, and that much dilution and nutrient retention occurs between two locations. Therefore, the suggested revision is to replace the second sentence with: "However, since the long-term increase in nutrients in the Klamath Estuary would be relatively small due to the effects of tributary dilution and nutrient retention in the 190 miles between Iron Gate Dam and the Estuary (Asarian et al. 2010), and would be a less-than-significant impact due to the implementation of TMDLs and KBRA (see Section 3.2.4.3.2.3 Nutrients – Lower Klamath Basin), it is likely that increases in periphyton growth would also be less than significant."

**Appendix C Water Quality Supporting Technical Information**

**Page C-29:**

The sentence *"Only minor increases in ammonia (0.05–0.1 mg/L) have been observed to occur in Copco 1 and Iron Gate Reservoirs, most often during October and November (Kann and Asarian 2005, 2007)."* could be misinterpreted to be about ammonia inside the reservoirs, whereas it is actually intended to be about the river stations above and below the reservoirs. Therefore, it should be revised to *"Only minor increases in ammonia (0.05–0.1 mg/L) have been observed to occur between above Copco 1 and below Iron Gate Reservoirs, most often during October and November (Kann and Asarian 2005, 2007)."*

**Page C-31:**

This sentence requires correction: *"Ratios of TN to TP (TN:TP) measured in the Klamath River suggest that the system is generally N-limited with some periods of co-limitation by N and P."* TN:TP ratios in the Klamath River do not indicate N-limitation, they indicate the *potential for N limitation*. The following common-sense analogy is a helpful illustration of this idea; if one person is in a room where there are 500,000 hot dogs and 50,000 buns, which food resource is limiting growth of that person, hot dogs or buns? (answer: neither). Therefore, the suggested revision is *"Ratios of TN to TP (TN:TP) measured in the Klamath River suggest the potential for the system to be generally N-limited with some periods of co-limitation by N and P."*

**Page C-57:**

Statement regarding 2009 microcystin being below 1 ug/L in free-flowing river sites is incorrect for the section below IG to Klamath-- there were numerous exceedances of both 1 ug/L and the 8 ug/L public health level. In fact this is noted on the next page C-58: *"Additional public health advisories were issued in 2009 and 2010 in Copco 1 and Iron Gate Reservoirs, as well as downstream locations in the Klamath River (including locations on the Yurok Reservation), for microcystin levels in ambient and/or freshwater mussel tissue (Kann et al. 2010a, Kann et al. 2010b, Fetcho 2010)."*

Also see page C-60.

**Page C-58:**

*"the majority of exceedances occurred in the reservoirs..."* Although true, the wording minimizes the fact that microcystin and *Microcystis* levels have consistently exceeded public health advisory levels for riverine sites downstream of the reservoirs as well (Kann and Courm 2007; 2009; Kann et al. 2010).

**Page C-61:**

Again the statement regarding 2009 microcystin being below 1 ug/L in free-flowing river sites is incorrect for the section below IG to Klamath. This is not consistent with the data. From P C-62 on following page: *"As described for the Klamath River from Iron Gate Dam to the Salmon River (Section C.6.2.1), there have been numerous exceedances of public health guidelines in the Klamath River from the Salmon River confluence to the Klamath Estuary, particularly in 2010. Public health advisories were issued in 2009 and 2010 in this reach (including locations on the Yurok Reservation) for elevated microcystin levels in ambient and/or freshwater mussel tissue samples (Kann et al. 2010a, Kann et al. 2010b, Fetcho 2010). In addition, substantial bioaccumulation (exceeding public health guidelines) of microcystin in freshwater mussels has been shown in this reach (Kann 2008, Kann et al. 2010b)."*

The statement above regarding exceedances in the reservoir vs. the river along with the citations to Watercourse 2011 regarding 2009 levels are misleading in that they imply that public health levels are rarely exceeded for the river below Iron Gate. This is clearly not the case.

## Appendix D Water Quality Environmental Effects Determination Methodology Supplemental Information

### Page D-6:

Footnote 4 under Table D-2 describes the hydrology used in the TMDL water quality model. Mention should be added that hydropower peaking in the J.C. Boyle Peaking Reach was not included in the TOD2RN, TCD2RN, and T1BSR scenarios (please first verify that with TetraTech to confirm it is correct).

### NEW REFERENCES CITED

Note: If a document we cited above in our comments is already included in the reference lists in the DEIS/DEIR, it is generally not repeated here. In some cases however we include a reference here even though it may exist already in the DEIS/DEIR (to save ourselves the time of looking through all the various reference lists in the DEIS/DEIR).

Asarian, E. and J. Kann. 2011. Phytoplankton and Nutrient Dynamics in Iron Gate and Copco Reservoirs 2005-2010. Prepared by Kier Associates and Aquatic Ecosystem Sciences for the Klamath Basin Tribal Water Quality Work Group.

Biggs, B.J.F. 2000. New Zealand Periphyton Guideline: Detection, Monitoring, and Managing Enrichment of Streams. Prepared for Ministry of Environment. NIWA, Christchurch. Accessed online 11/4/2008 at: <http://www.mfe.govt.nz/publications/water/nz-periphyton-guide-jun00.pdf>

PacifiCorp. 2004. Final License Application for the Klamath River Hydroelectric Project (FLA). Filed with the Federal Energy Regulatory Commission on February 25, 2004. PacifiCorp, Portland, OR. 7000 p.

Power, M.E., Parker, M.S., Dietrich, W.E., 2008. Seasonal reassembly of a river food web: floods, droughts, and impacts of fish. *Ecological Monographs* 78, 263–282.

### Conclusion

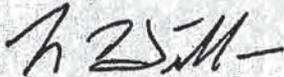
Comment 1b - Approves of Dam Removal

The Klamath Facilities Removal Draft EIS/EIR demonstrates that the positive benefits of the Klamath settlement agreements on the resources of the Klamath basin vastly outweigh potential adverse effects. We believe that on the whole, the DEIS represents a technically sound consideration of the alternatives. Thus, the Karuk Tribe supports alternative 2, full facilities removal. If economic constraints are a factor to consider, the Tribe would support

implementation of alternative 3, partial facilities removal, which would achieve many if not all of the project objectives.

We appreciate the hard work of the agencies and individuals involved in developing the DEIS and related studies. We look forward to continuing our participation in the process.

Yootva,

A handwritten signature in black ink, appearing to read "L Hillman", written over a horizontal line.

Leaf Hillman  
Director of Natural Resources

**Karuk Tribe of California**  
Department of Natural Resources  
P.O. Box 282  
Orleans, CA 95556

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Elizabeth Vasquez  
U.S. Department Of the Interior, Bureau of Reclamation  
2800 Cottage Way,  
Sacramento, CA 95825



**Comment Author** Hillman, Leaf  
**Agency/Assoc.** Karuk Tribe  
**Submittal Date** December 23, 2011

<b>Comment Code</b>	<b>Comment Response</b>	<b>Change in EIS/EIR</b>
IT_LT_1223_094-1	Master Response GEN-2 Some People Approve of Dam Removal, Others Oppose Dam Removal.	No
IT_LT_1223_094-2	Master Response ALT-4 Elimination of Alternative 8 - Dam Removal Without KBRA from Detailed Study.	No
IT_LT_1223_094-3	The Lead Agencies acknowledge that the comment author believes that the river could be eligible as a riverscape (cultural landscape, traditional cultural property) and that the removal of the dams will restore the health of the riverscape. EIS/EIR Section 3.13, Cultural and Historic Resources, identifies potential impacts within the area of potential effect which would include these sections of riverscape, potential adverse effects may occur to sites associated with the riverscape. Mitigation Measure CHR-3 would specifically address these effects through additional consultation under NHPA Section 106 as applicable.	No
IT_LT_1223_094-4	While the estimated whitewater boating users days on the lower Klamath River presented in Table 3.15-16 may show a decline in use in more recent years, it would be incorrect to attribute this decline solely to toxic blue green algae as several factors can affect the level of use in any particular year (e.g., condition of the economy and weather). Furthermore, for the same reasons and based on available data it would also be incorrect to assume that the lower use levels exhibited in recent years implies a long term trend of decreased use. The data show similar patterns of use for both the Upper Klamath and Lower Klamath during this time period. While the removal of dams is expected to improve water quality as it relates to toxic blue green algae, the ability to isolate this effect on the level of whitewater boating use, considering the numerous factors that can affect use in any particular year, is not possible based on available data. In general, this same rationale would also apply for estimates of use levels for other recreational activities.	No
IT_LT_1223_094-5	The Draft EIS/EIR acknowledges in the Effects Determination (3.15.4.2 pages 3.15-48, 3.25-64, 3.15-81,3.15-85 and 3.15-87 that water quality, specifically toxic algae could have negative impacts to property values in the long-term and full and partial dam removal could reverse that situation. However, how long from now and to what extent is too speculative to quantify.  These effects are also considered in the Environmental Justice Section 3.16 .4.2.	No
IT_LT_1223_094-6	Please see Section 3.15, Socioeconomics, for a discussion of changes in water reliability and potential impacts on property values and agricultural land and operations.	Yes

**Comment Author** Hillman, Leaf  
**Agency/Assoc.** Karuk Tribe  
**Submittal Date** December 23, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_LT_1223_094-7	Please see Section 3.15, Socioeconomics, page 3.15-48, for a discussion of the impacts to property values under the No Action Alternative (i.e. the dams remain in place).	No
IT_LT_1223_094-8	Change has been made.	Yes
IT_LT_1223_094-9	Master Response GEN-1 Comment Included as Part of Record.  Master Response WQ – 4 Hydroelectric Project Impacts to Water Quality Anticipated KHSA/KBRA Improvements.  The comment author has not provided any information to support their position.	No
IT_LT_1223_094-10	As noted in the Draft EIS/EIR on p. 3.3-12, rainbow trout ( <i>Oncorhynchus mykiss</i> ) exhibit a wide range of life-history strategies, including anadromous forms (steelhead, described above) and resident forms, described here. The Klamath Basin has two subspecies of rainbow trout. Behnke (1992) identifies the inland form as the Upper Klamath redband trout, <i>Oncorhynchus mykiss newberrii</i> , but considers steelhead and resident rainbow trout downstream of Upper Klamath Lake to be primarily coastal rainbow trout, <i>Oncorhynchus mykiss irideus</i> .	No
IT_LT_1223_094-11	The comment refers to the portion of the Draft EIS/EIR describing effects to freshwater mussels from the No Action/No Project Alternative, yet discusses how the species <i>Margaritifera falcata</i> may benefit from the Proposed Action. The potential effects to freshwater mussels resulting from the Proposed Action are discussed on p. 3.3-131 through 3.3-133 of the Draft EIS/EIR.  Information regarding freshwater mussels is also provided in the Draft EIS/EIR on p. 3.3-16 and 3.3-17.  The uniqueness of the Klamath river <i>G. angulata</i> population as mentioned by the comment author has been noted in the Final EIS/EIR Sections 3.3.3.  This comment will be included as part of the record and made available to decision makers prior to a final decision on the Proposed Action.	Yes

**Comment Author** Hillman, Leaf  
**Agency/Assoc.** Karuk Tribe  
**Submittal Date** December 23, 2011

<b>Comment Code</b>	<b>Comment Response</b>	<b>Change in EIS/EIR</b>
IT_LT_1223_094-12	<p>Comment author concerns have been noted</p> <p>Master Response AQU – 25 Habitat Upstream of Iron Gate.</p> <p>The water temperature section of the Draft EIS/EIR Section 3.3.4.3 (P. 3.3-57 and 3.3-58) includes a discussion of water temperature issues downstream of Iron Gate Dam, as well as the section on species-specific effects on steelhead (p. 3.3-66 and 3.3-67).</p> <p>The EIS/EIR has been revised in Sections 3.3.3 and 3.3.4 to include a similar discussion within the Fall Chinook salmon and coho salmon species-specific effects sections and reflects limitations of cold water sources for the No Action Alternative in respect to aquatic resources.</p>	Yes
IT_LT_1223_094-13	<p>Comment has been noted.</p> <p>Hamilton et al. 2005 concluded that the farthest distribution of coho salmon extended at least as far as Spencer Creek (p16).</p> <p>Section 3.3.3 of the EIS/EIR has been revised to include information from Snyder (1931) that coho salmon were said to migrate to the headwaters of the Klamath River to spawn, but that most people did not distinguish between the species.</p>	Yes
IT_LT_1223_094-14	<p>Comment author concerns have been noted.</p> <p>Master Response AQU-1 Sediment Amounts and Effects to Fish.</p> <p>The Draft EIS/EIR discloses multiple lines of evidence and sources of information to support findings. The projections on p. 3.3-113 state “up to 36% mortality is predicted...”. Mortality may be less. The Draft EIS/EIR also notes the mobility of steelhead to avoid degraded habitats, and that “the predictions described here are likely more dire than would occur. It is likely that at least some would enter tributaries if conditions within the mainstem were adverse (Draft EIS/EIR Section 3.3.4.3, p. 3.3-114).</p> <p>The Suspended Sediment Effects analysis uses severity of ill effects scores developed by Newcombe and Jensen (1996). These scores were derived from a wide variety of literature sources that include observations from both natural environments and laboratory studies. The comment is incorrect in its assertion that the model is based entirely on laboratory experiments.</p>	No

IT\_EM\_1120\_085

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 From: Tane' Beard[SMTP:TANESADDRESS@GMAIL.COM]  
 Sent: Sunday, November 20, 2011 12:15:43 PM  
 To: BOR-SHA-KFO-Klamathsd  
 Subject: Dam deconstruction  
 Auto forwarded by a Rule  
 November 20, 2011

Bureau of Reclamation  
 2800 Cottage Way  
 Sacramento, CA 95825  
 via email: [KlamathSD@usbr.gov](mailto:KlamathSD@usbr.gov)

To all this concerns,

My husband and I are residents of Shasta County and business owners in both Siskiyou and Shasta counties. He was raised on the Hupa Indian Reservation and has family still residing there. The destruction of the dams has personal and economic consequences that affect all of us and all of our voices should be heard.

Comment 1 - Disapproves of Dam Removal

Comment 2 - Hydropower

We are opposed to the removal of the dams for a myriad of reasons. We need the power generated by the hydroelectric dams. If we do not have access to the cheaper electricity we will have to rely on extremely expensive propane where we live and that would put us right out of business. The economy in the North State has already been struggling with more severe challenges than in most counties of California. We have had a consistently higher unemployment rate resulting in massive business losses and home foreclosures. Those of us trying to hang on through this severe downturn cannot bear further increases in our power costs.

Comment 3 - Hydrology

In The North State, the runoff from the Cascades and the Trinity mountains pose a constant risk of flooding and the dams help to control it. Just look at last years rainfall and what that would have meant to the populations in the path of the floods without our dams. We stand to lose not only the Indian burial grounds, but all of our lands will be at risk.

Comment 4 - ITAs

We need access to good quality water year around not only for all cities in California but for farming and ranching which is how rural areas make their living. Do you not remember the drought years? Do you not know that we WILL have drought again, just as sure as weather has been cycling for as long as the earth has turned? You would have to have been living in a cave to have not heard about global warming. We need MORE dams to ease the effects of disastrous droughts that we have had in the past. Just take a look the severity of the 2011 Texas drought. Do you think it may have eased the losses if they had more dams? What will happen to the Salmon then if there is no water? You know what will happen to ranchers and farmers, livestock and crops. If we cannot afford to raise your food then what? You going to look to China to raise your food too?

Comment 5 - Water Rights/Supply

Comment 6 - KHSA

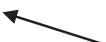


Who will really benefit by the destruction of the dams? The propane and natural gas industrialists? The few who own water rights ? Are they the ones behind this?

Your plans would be catastrophic to our communities, but more importantly they will have long reaching effects on the entire state economy, making a recovery even more elusive. The dismantling will bring jobs you say? They are TEMPORARY. It will cost how many more jobs and businesses in the long term? THINK. Why would Federal agencies step into our business and destroy such a critical element of our daily lives? What are they thinking?

Create jobs by managing better. Build ladders and more fish hatcheries, leave our dams alone! Help us to stop this now!

Comment 7 - FERC



Charles and Tane Horner  
Palo Cedro, CA

**Comment Author** Horner, Charles & Tane  
**Agency/Assoc.** Hoopa Valley Tribe  
**Submittal Date** November 20, 2011

<b>Comment Code</b>	<b>Comment Response</b>	<b>Change in EIS/EIR</b>
IT_EM_1120_085-1	Master Response GEN-2 Some People Approve of Dam Removal and Others Oppose Dam Removal.	No
IT_EM_1120_085-2	Master Response HYDP-2 Power Production at the Four Facilities.  Master Response GHG-2 Rate Increases.  Master Response GHG-3 Replacement Power.	No
IT_EM_1120_085-3	Master Response HYDG-1 Flood Protection.	No
IT_EM_1120_085-4	Master Response HYDG-1 Flood Protection.  The Draft EIS/EIR addresses potential impacts to cultural resources. The potential for damage to or vandalism of exposed sites was considered and is addressed in Mitigation Measure CHR-2 through the development of management plans and discovery plans, through consultations under the NHPA Section 106, as applicable.	No
IT_EM_1120_085-5	The water supply analysis (see Section 3.8 of the Draft EIS/EIR) includes hydrologic modeling to assist in impact analysis. The modeling includes a pattern of hydrology with drought periods to enable the evaluation to portray changes in hydrology during different types of hydrologic conditions. The dams, however, were not developed to provide long-term storage for droughts.  Master Response WSWR-1 Effects to Agricultural Water Supply.	No
IT_EM_1120_085-6	Master Response GEN-1 Comment Included as Part of Record.  Master Response GEN-20 PacifiCorp Private Ownership of Hydroelectric Facilities.  This EIS/EIR has been developed in accordance with the requirements of NEPA and CEQA to analyze the potential impacts to the environment from the removal of the four PacifiCorp dams on the Klamath River as contemplated in the KHSA and from the implementation of the KBRA. Together, these two agreements attempt to resolve long-standing conflicts in the Klamath Basin. Some of the conflicts and issues these agreements attempt to resolve are enumerated on Draft EIS/EIR p. ES-1 and ES-8-9. The activities leading to the development of the KHSA and the KBRA are discussed on p. ES-7-13. Both the KHSA and KBRA were negotiated and signed by a diverse array of over 40 parties with an interest in resolving Klamath Basin issues. The goal of the KHSA is found on p. 3 of the agreement and the goals of the KBRA are found on p. 4 of that agreement. See <a href="http://Klamathrestoration.gov">Klamathrestoration.gov</a> for the KHSA and KBRA.	No

**Comment Author** Horner, Charles & Tane  
**Agency/Assoc.** Hoopa Valley Tribe  
**Submittal Date** November 20, 2011

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<b>Comment Code</b>	<b>Comment Response</b>	<b>Change in EIS/EIR</b>
IT_EM_1120_085-7	Master Response GEN-2 Some People Support Dam Removal and Others Oppose Dam Removal.	No

IT\_MC\_1026\_060

KLAMATH DAM REMOVAL  
 DRAFT EIS/EIR HEARING  
 OCTOBER 26, 2011  
 PUBLIC TESTIMONY  
 ARCATA, CALIFORNIA

MS. HUTT: Hi. My name is Hayley Hutt,  
 H-a-y-l-e-y H-u-t-t, Hoopa Valley tribal council member.

Before I forget we do have our position and our  
 letter to Senator Merkley's office in the back, if anyone  
 is interested in seeing and reading that and picking that  
 up.

Comment 1 - Alternatives

The DEIS is deceptive with inadequate  
 alternatives analysis. Dam removal cannot occur under  
 the DEIS, unless Congress also passes unacceptable  
 legislation. Alternative 1, no action/no project, is, in  
 fact, the best route to dam removal, because it restarts  
 the FERC process. The DEIS did not examine  
 Alternative 8, full facility removal of four dams without  
 the KBRA, but it should have.

Comment 2- ITAs

If the California Water Board had enforced the  
 Clean Water Act, it would have triggered the FERC and we  
 would be much further along in this process. The KBRA  
 does not guarantee water for fish. It does not guarantee  
 dam removal. And it terminates our tribal rights.

Hoopa participated in the Klamath settlement  
 talks but refused to give up rights to protect water  
 quality and flows, in order to maintain its fishery as  
 guaranteed by federal law. Senator Merkley's bill will

terminate the federal trust responsibility for our  
federal reserved rights.

And here's exactly how it reads: "The  
United States, acting in its capacity as trustee for the  
federally recognized tribes of the Klamath Basin, hereby  
provides assurances that it will not assert tribal water  
or fishing right theories or tribal trust theories in a  
manner, or 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 Appendix E-1 in any  
administrative context or proceeding or jurisdictional  
(sic) proceeding or otherwise."

That's terminating our trust relationship, which  
was -- been in existence for over 150 years. It means --  
termination means that the United States will defend  
their right to take 378,000 acre feet and give it to the  
irrigators over the salmon's need for water.

In regards to terminating our trust  
relationship, I also want to state that the  
National Congress of American Indians and the Affiliated  
Tribes of the Northwest have passed resolutions that say  
they will not stand by while tribal rights are being  
terminated against our will. While some have  
volunteered, we have not volunteered to waive our rights.

This fish passage will cost more -- okay. I see  
I have 28 seconds left, so I better speed it up.

I won't be able to read all my comments here,  
but I would like to make two statements, and one is that  
the Hoopa Valley Tribe knows that the KBRA threatens  
Trinity restoration goals by the fact that the majority  
of fall Chinook mortalities in the Lower Klamath on the  
September 2002 fish kill were of Trinity River origin;  
and, also, that we think it's ironic that  
Secretary Salazar holds trust relationship as any kind of  
priority, while he is willing to not only -- well, if  
while tribes have to waive their rights to be a part of  
the deal --

MS. JONES: Thank you, Ms. Hutt. Your time is  
up.

MS. HUTT: -- that's their business, but waives  
our rights against our will. Thank you.

MS. JONES: Okay. If you wanted to put your  
comments in the box, they'll be included in full.

MS. HUTT: I already did that.

**Comment Author** Hutt, Hayley  
**Agency/Assoc.** Hoopa Valley Tribe  
**Submittal Date** October 26, 2011

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<b>Comment Code</b>	<b>Comment Response</b>	<b>Change in EIS/EIR</b>
IT_MC_1026_060-1	<p>The Draft EIS/EIR acknowledges that Congress must pass authorizing legislation before the Secretarial Determination can be made. The comment author implies that FERC is likely to require dam removal as part of the relicensing process, but FERC has not required removal of dams in the past as part of the relicensing process (reference).</p> <p>Master Response ALT-4 Elimination of Alternative 8 - Dam Removal Without KBRA from Detailed Study, includes a detailed description of why Alternative 8 was not carried forward for more detailed analysis in the Draft EIS/EIR.</p>	No
IT_MC_1026_060-2	Master Response TTA-1 Federal Trust Responsibility and the KBRA.	No

IT\_MC\_1019\_007

## PUBLIC HEARING ON THE KLAMATH DAM

---o0o---

CHILOQUIN, OREGON

OCTOBER 19, 2011

---o0o---

MR. JACKSON: My name is Charles Jackson. I am

Comment 1 - Approves of Dam Removal

a Klamath tribal member. I support the KBRA and I believe

that all the dams should be removed.

The cost that it is going to take to get the

dams out is minimal. Since I was a little kid, gas went

up from a dollar in the '80s, and now it's over \$3.82, so

inflation is going to take effect but it's not going to

matter because, sooner or later, the dams are going to

have to go. And it's -- now is the time to get rid of it.

90 years is a long time for a dam and, obviously, it's not

working. Um, to me, the dam has no effect at all.

My great-grandma was from the Hoopa tribe, and

I've got cousins down there, so I could go get salmon,

it's no big deal. And electricity, I could live without

it. You know, the beef can go away, the ranchers can go

away, the farmers can go away, it wouldn't matter to me,

because me and my family will never leave.

I am Modoc Yahooskin -- they couldn't even

classify it Yahooskin. They don't know if it's Paiute and

they don't know if it's more Shoshone than anything, but

the Shoshone were never around. They classified the Pit

River as a tribe.

So the different tribes, they never lived in peace, there's always something going on. But they respected each other and they did not destroy the other people's families and they didn't want to make anything harmful for the future generations, and it's the same thing today. We can't get along, it's proven, there's always violence, you see the crimes and everything, but there's always the good people and we make everything work.

That's why we have this government, because we are able to get along, and as long as we can get along and we are walking through this dam removal, it's in the best interests of everyone.

We have so much water in the land and, yet, we are arguing over cubic feet, how much this rancher gets because he was here in 1900, or how much water this rancher gets, and it's already 1970, so he doesn't get as much. So there's this water dispute and the dams don't have no part of it, they are so far downriver. Everyone is worried about the A Canal or the B Canal or whatever canal and, you know, maybe you shouldn't build another ranch or farm in the middle of the desert; they don't call it the high desert for nothing; just common sense.

But we see how good the Lost River is doing. I mean, that water is just destroyed. The whole ecosystem of the Tulelake is -- what is the -- what happens for, over agriculture.

And luckily, the tribes are here. We kept Crater Lake safe because of Roosevelt, Annie Creek is good, the Sprague River is just ripped because of the farmers and ranchers at Bly; the cows got more water than the fish do, but that's all that matters to some people.

My great-grandfather was Boyd Jackson, and he would tell my grandfather stories of spearing fish where the tule room (phonetic) is --they've got big rocks there, and there would be salmon going up, and tribal members could just go out there with the kids and they could spear salmon.

And I have a son, and I won't be able to spear salmon with him, but maybe his kids can spear salmon with

him. But Mary Gentry had a nice paper and she said a lot of nice stuff, and I support the KBRA and her, and I'm glad that everyone is here to listen to this, but we just have got to get rid of the dams and go green energy. I went to Portland last week and seen the people against, you know, big government, anti-stock

markets. I thought they were fools, you know. What's the big deal? They can't do nothing. But then, you know, the government is taking care of it. Just like down here, we don't have big protests or anything, but we don't have to walk in the streets like idiots, you know, we can go to our jobs and work, so I appreciate it.

THE FACILITATOR: Norma Cummings and Matt

Walter.

**Comment Author** Jackson, Charles  
**Agency/Assoc.** The Klamath Tribes  
**Submittal Date** October 19, 2011

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<b>Comment Code</b>	<b>Comment Response</b>	<b>Change in EIS/EIR</b>
IT_MC_1019_007-1	Master Response GEN-2 Some People Approve of Dam Removal, Others Oppose Dam Removal.	No

IT\_WI\_1027\_026

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From: moduck29@gmail.com[SMTP:MODUCK29@GMAIL.COM]  
Sent: Thursday, October 27, 2011 11:44:49 AM  
To: BOR-SHA-KFO-Klamathsd; werner@wrinkledog.com  
Subject: Web Inquiry: Agree With Dam Removal Auto forwarded by a Rule

Name: Charles Jackson  
Organization: Tribal Member

Subject: Agree With Dam Removal

Comment 1 - Approves Dam Removal

Body: We as god fearing Americans need to continue to work together in order to remove all the dams along the Klamath River. We need to remove the dam in Klamath Falls that holds back water from the Link River to Lake Ewauna. We need to think of the future we are placings for our children and grandchildren. Remove all the dams and restore the Klamath Tribes as a Sovereign nation.

**Comment Author** Jackson, Charles  
**Agency/Assoc.** The Klamath Tribes  
**Submittal Date** October 27, 2011

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<b>Comment Code</b>	<b>Comment Response</b>	<b>Change in EIS/EIR</b>
IT_WI_1027_026-1	Master Response GEN-2 Some People Approve of Dam Removal, Others Oppose Dam Removal.	No

KLAMATH DAM REMOVAL  
DRAFT EIS/EIR HEARING  
OCTOBER 27, 2011  
PUBLIC TESTIMONY  
KLAMATH, CALIFORNIA

Comment 1 - Approves  
of Dam Removal

MR. JACKSON: My name is Robert Jackson,  
Robert Seeley Jackson, R-o-b-e-r-t S-e-e-l-e-y Jackson.

I'm here because I wanted to speak for what I  
think that removing the dams is going to be huge for the  
fish. I know that more habitat will mean more fish.

I think that one of the most important parts is  
that, in view of whether the dams come out or not, that  
focus on having water for the fish. Because if the fish  
die, like we had the one year, we can't get them back.  
We lose that lineage of fish. Whereas, anything that's  
being grown up there can be regrown the next year. It's  
kind of ridiculous.

Comment 2 - General/Other

And a big thing, I think that, you know, it's a  
dust bowl up there. I think that there should be  
mandatory proper irrigation usage. It's disgusting the  
waste that you see up there. It's the sun beating down  
on a dry field, as this huge hose makes mud. It's  
ridiculous. It's sad. I went up there, and I was, like,  
"I wonder if that's my water that would otherwise be  
coming by me down here at the mouth."

And, you know, the fish aren't the only thing.  
We are a fish culture, but we are also a water people.

We need the water. It's not just the fish. It's the life that surrounds the river. We need to be in contact with the river.

And, you know, it's like when I take the kids up to the river, and we go up, and I don't tell them, "No. Don't swim." It's hot. It's a river. I tell them, when we get home, "Everybody jump in the shower," you know, because it's not safe. You know, and I could go check the levels every time. Whoop-de-doo.

But we know that it's due to the practices upriver, you know. They should -- there should be management on the amount of nutrients and stuff. It's, like, we're not talking about, like, a huge loss. I mean, I believe that the fish kill could have been prevented. They could have let those crops die that one year and prevented what we had. Comment 3 - Alternatives

So, I think that, yeah, the dams -- I was thinking Option 5 seemed like maybe the easiest one that was presented. We would get the most habitat, the most bang for our buck, whatever. Comment 4 - ITAs

But I think that in no way should we relinquish any of our water rights, because right now that's the only thing that can keep us alive is our water. And the federal government has made that promise to our people, and I think, no matter what, they should be -- they should have to uphold that promise to us. And that's it.

**Comment Author** Jackson, Robert  
**Agency/Assoc.**  
**Submittal Date** October 27, 2011

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<b>Comment Code</b>	<b>Comment Response</b>	<b>Change in EIS/EIR</b>
IT_MC_1027_057-1	Master Response GEN-1 Comment Included as Part of Record.	No
IT_MC_1027_057-2	Master Response GEN-1 Comment Included as Part of Record.	No
IT_MC_1027_057-3	Master Response GEN-1 Comment Included as Part of Record.	No
IT_MC_1027_057-4	Master Response TTA-1 Federal Trust Responsibility and the KBRA.	No

IT\_MC\_1026\_066

KLAMATH DAM REMOVAL  
 DRAFT EIS/EIR HEARING  
 OCTOBER 26, 2011  
 PUBLIC TESTIMONY  
 ARCATA, CALIFORNIA

MR. JORDAN: My name is Daniel Jordan, J-o-r-d-a-n. I represent a Hoopa fishing family. I have been involved with the Klamath and Trinity River issues, particularly Trinity River issues, for 30 years, working with the Hupa Tribe.

And my comment, the reason why I kind of passed earlier, is my disappointment with this process.

And I have raised this throughout the whole thing. There is no

Comment 1 - NEPA

legal connection between dam removal and the KBRA and water allocation.

That's a political issue.

The Secretary of the Interior is responsible for operating the water deliveries in the Klamath Basin. And remember back who killed fish in 2002.

It wasn't dams. It was Secretary Norton. And we all seen those photographs of turning those valves in violation of federal law. That's what killed those fish. And this deal continues to represent that --

really, that guise that we waive dam removal, throughout this whole process. And that's not what this deal is. This is a dam removal part as a bait to generate a 50-year water allocation agreement that the Secretary is interested in. And these things need to be separated.

There's no legal connection between the two until the Secretary, through these processes, connect them together.

And taking the dam removal, all of us support dam removal. The United States has a moral and legal obligation to remove those dams. They should have never allowed them to be built, in the first place. But you don't have to connect it to the unholy agreement of the

KBRA to get the Secretary to do his job.

Comment 2 - Water Rights/Supply

But the KBRA, itself, is -- if you look at its design, it's designed on exactly the same flawed western water policies that have destroyed California's water supply, that have destroyed the Delta. It is an over-allocation of water, with an under-commitment of applying the proper mitigation responsibilities on the water developers. The KBRA says that the water users are not obligated to pay for mitigation, yet they are the ones that continue to destroy the river. The KBRA also carries out the same flawed plan that the Delta is based on, is using the Endangered Species Act as a management prescription. The Endangered Species Act was never supposed to be a management tool. It was supposed to be a law that said, "When you destroy resources, you've got to stop.

You've got to reassess."

These deals, including the Klamath -- the KBRA, just like the Delta deal, say that the ESA becomes the highest management standard. We are living so close to the edge on this. One bad water supply, one bad year, is going to destroy these resources.

And, yet, these documents continue to build this on a plan that even has to be paid for by the taxpayers at a time when the federal deficit is -- they're driving the federal budgets down. This does not make sense.

**Comment Author** Jordan, Daniel  
**Agency/Assoc.** Hoopa Valley Tribe  
**Submittal Date** October 26, 2011

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<b>Comment Code</b>	<b>Comment Response</b>	<b>Change in EIS/EIR</b>
IT_MC_1026_066-1	Master Response ALT-7 Elimination of KBRA without KHSA including Alternatives 16 - Dredge Upper Klamath Lake and 18 - Partition of Upper Klamath Lake from Detailed Study.	No
IT_MC_1026_066-2	The KBRA is not using ESA as a management tool. The KBRA was designed to avoid the reactive nature of ESA, where actions are implemented after species declines, by developing a proactive overall program that may allow for a more robust water management system.	No

IT\_LT\_1230\_096



**Quartz Valley Indian Reservation**

13601 Quartz Valley Road  
Fort Jones, CA 96032  
ph: 530-468-5907 fax: 530-468-5908

December 30, 2011

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

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

Dear Ms. Vasquez,

Thank you for the opportunity to comment on the Klamath Hydroelectric Project Facilities Removal Draft Environmental Impact Statement and Draft Environmental Impact Report (DEIS/DEIR). While the Quartz Valley Indian Reservation (QVIR) is located in the Scott River basin, we see ourselves as having a profound stake in the health of the Klamath River. Culturally significant species of salmonids must pass through the Klamath to reach the spawning grounds of our Reservation in Shackelford Creek. Our Tribal members are descendants of the aboriginal peoples of the Klamath River basin and have relied upon the fish and resources of the river since as long as humans occupied this land.

Comment 1 - Approves of Dam Removal

The Quartz Valley Indian Reservation is in favor of healthy watersheds and wants to see fish swimming in our streams and rivers; for these reasons, we support the idea of dam removal in concept. However, we have three basic concerns we wish to convey regarding the way the government is approaching dam removal and the sufficiency of the DEIS/DEIR.

Before we present our concerns, we want it to be recognized that the QVIR has been an active participant in review and comment on the Federal Energy Regulatory Commission (FERC) Klamath Hydroelectric Project (KHP) relicensing process (QVIR 2004, 2006a) and we hereby incorporate by reference our previous submissions to FERC as part of your record. We also have paid close attention to the Clean Water Act driven Total Maximum Daily Load (TMDL) process aimed at cleaning up water pollution and restoring beneficial uses such as cold water fish, including salmon. Our comments on the Klamath River and Lost River TMDLs (QVIR 2006b, 2008, 2010) are particularly relevant to the DEIS/DEIR and we also wish that they become part of your record. We are attaching as Appendix A our consultant's analysis of how our previous recommendations under the FERC process, and in response to the Klamath River TMDL, would be dealt with in the event of an affirmative Decision by the Secretary of Interior on Klamath dam removal, passage of appropriate authorizing legislation and KBRA implementation.

*Quartz Valley Indian Reservation Klamath Dam Removal DEIS/DEIR Comments 12/30/11*

← Comment 2 - ITAs

**Our first concern with the DEIS/DEIR is that QVIR is largely dismissed as an interested or affected party in the text of the document.** The DEIS/DEIR mischaracterizes QVIR water and fishing rights. We are also concerned about KBRA language that would have damaging impacts to tribal rights, should there be an affirmative Secretarial Decision and authorizing legislation. Chapter 3 of the DEIS/DEIR covers cultural issues and makes the following statements regarding the QVIR's water and fishing rights:

"Any fishing and concomitant water rights to which the Quartz Valley Community may be entitled have not yet been determined." (3.8-11)

"The Quartz Valley Reservation does not have a reserved Klamath River fishery. The Tribe is not reliant on Klamath River water, nor does the Tribe retain Klamath River reserved water rights. The Tribe's land base is not along the Klamath River. Therefore, there are no primary effects on Quartz Valley trust resources and other resources traditionally used by the Tribe. While there may be secondary effects on tribal health and cultural well being, these were not asserted in the government-to-government consultation" (3.12-16)

"The Quartz Valley Reservation is not along the Klamath River and the Tribe does not have a reserved Klamath River fishery or reserved water rights. Therefore, implementation of the Proposed Action or alternatives would not affect Quartz Valley Reservation trust resources or other resources traditionally used by the Tribe." (3.12-18)

The fish on which QVIR relies for sustenance and that are needed for our spiritual well being need to survive their migration to the ocean; therefore, we have a major stake in Klamath River health. Highly valued Scott River fish species like the Chinook salmon, coho salmon, steelhead and Pacific lamprey need an ecologically functional Klamath River. Major problems with fish diseases (Nichols and Foot 2005, Stocking and Bartholomew 2007) and acute water quality problems in the mainstem Klamath River (FERC 2007) are affecting all Scott River anadromous fish species. This has been documented in hundreds of pages of previous QVIR comments on KHP relicensing and TMDLs. QVIR needs assurance that sufficient flow is released into the Klamath River to maintain its health and pollution remedied to protect the fish on which we rely.

QVIR members have historically fished for salmon, steelhead and eels (Pacific lamprey) in the Scott River and Shackleford Creek. The Tribe retains the right to take fish on their Reservation but also in places off the Reservation on the Klamath River that members have fished historically, despite the lack of a recognized right by the United States or the State of California. Many members of QVIR are of Karuk ancestry and resided along the Klamath River before being displaced and relocated by the government to Quartz Valley. QVIR members fish on the Klamath River, often with Karuk Tribe members to whom we are related, and have done so in an unbroken tradition dating back to time immemorial. This is a practice we intend to continue and a right we do not intend to relinquish. In sum, the health of the Klamath River has a direct relationship to our health and that of all Indian people in the Klamath Basin.

Comment 3 - ITAs

**Our second concern is that the QVIR was excluded from Klamath Settlement Agreement talks that lead to the KHSA and KBRA and yet our rights would be compromised by their implementation without our consent.** Since QVIR is not a signatory to the KBRA, QVIR is “zeroed out” in the proposed budgeted tribal allocations for fisheries management in Appendix C. There are rights that all Klamath Basin Tribes share, which are treaty rights and trust responsibilities that the government is bound to uphold and we are 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 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.

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.”

QVIR is concerned about language that could change this precedent in the KBRA (15.3.9) that are 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 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.” We interpret this language as switching DOI and U.S. Government priorities from protecting fisheries and Indian trust

← Comment 3 cont.

resources to water delivery to Klamath Project irrigators (Schlosser 2011) and we strongly object to this change.

The DEIS/DEIR ignores the fact we would be excluded as no non-Parties from participating on Klamath Basin Coordinating Council (KBCC) committees, such as for fisheries restoration and water quality, for the 50 year life of the KBRA (Appendix D1). The QVIR 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. We object to this discriminatory process and believe that eliminating participation by legitimate stakeholders, such as the federally recognized QVIR, in trust resource management oversight roles is illegal under the Federal Advisory Committee Act.

← Comment 4 - NEPA/CEQA

**Our third concern is that the government has included the Klamath Basin Restoration Agreement (KBRA) as a connected action to dam removal and we found that the KBRA potential was difficult to assess.** The document appears to be mostly a legal contract that lays out the nature of the agreement and describes limitations and requirements of the signers. It contains conditional statements that refer back onto other parts of the document making it extremely difficult to follow. More importantly, the details of the restoration programs are not described there. It appears that these plans will be developed according to the rules laid out in the KBRA. Again, since the QVIR was not invited to participate in the development of the KBRA, and are not signatory, they are not listed as a potential participant in coordinating committees that will likely develop various restoration plans. It is our perception that these restoration plans will include the entire Klamath Basin and the tributaries such as the Scott River and Shasta River. We believe we can contribute meaningfully to discussions, both from a scientific and an affected party perspective.

As non-participants, in the development of the KBRA, we are not able to determine how well the DEIS/DEIR addresses the cumulative impacts of the KBRA implementation as required by the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). For example, Table 4.2 lists bodies of water that are excluded from the cumulative effects—for example Upper Klamath Basin hydrology. Also, the cumulative effects section was difficult to read and get a clear sense of what the cumulative effects may be from KBRA implementation. We are unclear what the effects of subsidizing irrigation costs and associated intensive agricultural practices may be on long-term water quality trends. Is this in the best interests of the watershed? Is it the best scientific solution to the water pollution and fish disease problems that threaten the future of Klamath River salmon?

We wish to conclude by citing our Mission Statement:

“While on earth we must practice stewardship, protection, and enhancement of the air we breathe, the water we drink, the soil that supports us and the lives we cherish. It is our duty to protect and enhance these resources for the continued prosperity of the Quartz Valley Indian Tribe and our fellow brothers and sisters we share this earth with.”

While removal of the dams appears to offer benefits, particularly in removal of the barrier to fish, we fear that the current DEIS/DEIR avoids discussion of KBRA implementation impacts

*Quartz Valley Indian Reservation Klamath Dam Removal DEIS/DEIR Comments 12/30/11*

← Comment 4 cont.

that may be in conflict with restoring the ecological balance of the Klamath River. We are unable to clearly determine whether or not the companion actions in addition to dam removal would restore harmony to the basin, restore the sucker fish and the salmon and adequately address the water pollution that threatens the Klamath River. We would like to see that the DEIS/DEIR craft an ecologically-based approach (SER 2004) to restoring lakes and marshes in the upper basin as these are clearly connected to the flows downstream and are important to resolving the current water quality, and flow issues that are currently hurting the Klamath River.

Sincerely,

Sherrie Kelley  
QVIR Tribal Council Vice-Chairperson

## References

Department of Interior (DOI). 1995. Memorandum of Regional Solicitor, Pacific Southwest Region to Regional Director, Bureau of Reclamation Mid-Pacific Region Re Certain Legal Rights and Obligations Related to the U.S. Bureau of Reclamation, Klamath Project (July 25, 1995).

Federal Energy Regulatory Commission (FERC). 2007. Final Environmental Impact Report for the Klamath Hydroelectric Project, FERC License 2082-027, Operated by PacifiCorp. FERC, Washington D.C.

Nichols, K. and J.S. Foott. 2005. Health Monitoring of Juvenile Klamath River Chinook Salmon, FY 2004 Investigational Report. USFWS California-Nevada Fish Health Center, Red Bluff, CA.

Quartz Valley Indian Reservation. 2004. Federal Energy Regulatory Commission (FERC) Klamath Hydroelectric Project (KHP) Relicensing Process Additional Study Requests. Letter to Magalie R. Salas of April 22, 2004. QVIR, Ft. Jones, CA. 35 p.

Quartz Valley Indian Community. 2006a. Klamath Hydroelectric Project, FERC No. 2082-027, Comments and Recommended Terms and Conditions for PacifiCorp. Quartz Valley Indian Reservation, Ft. Jones, CA. 57 p.

Quartz Valley Indian Community. 2006b. Comments Concerning the Klamath River TMDL Approach and Progress to Date. Memo to the U.S. EPA and North Coast Regional Water Quality Control Board of August 15, 2006. Quartz Valley Indian Reservation, Fort Jones, CA. 35 p.

Quartz Valley Indian Community. 2008. Preliminary comments on Administrative Draft (Chapters 1-5) Staff Report for the Klamath River Basin Temperature, Dissolved Oxygen, and Nutrient Total Maximum Daily Loads. QVIR, Ft. Jones, CA. 30 p.

Quartz Valley Indian Community. 2010 Comments on Public Review Draft, Staff Report for the Klamath River Total Maximum Daily Loads (TMDLs) and Action Plan Addressing Temperature, Dissolved Oxygen, Nutrient and Microcystin Impairments in California, the Proposed Site Specific Dissolved Oxygen Objectives for the Klamath River and California, and the Klamath River and Lost River Implementation Plans. Submitted by Crystal Bowman. QVIR, Ft. Jones, CA. 20 p. (Appendix A: Higgins comments Re: Fruit Growers Supply (FGS) Habitat Conservation Plan (HCP) and Draft Environmental Impact Report.) (Appendix B: Comments on State Water Resources Control Board Resolution 2009-0064 Regarding U.S. Forest Service Management Oversight.)

Schlosser, T. P. 2011. Dewatering Trust Responsibilities: The New Klamath River Hydroelectric and Restoration Agreements. Washington Journal of Environmental Law & Policy. 36 p.

Society for Ecological Restoration (SER). 2004. The SER International Primer on Ecological Restoration. Society for Ecological Restoration International Science & Policy Working Group. SER, Tucson, AZ. [http://www.ser.org/content/ecological\\_restoration\\_primer.asp](http://www.ser.org/content/ecological_restoration_primer.asp)

Stocking, R.W. and J.L. Bartholomew. 2007. Distribution and Habitat Characteristics of *Manayunkia speciosa* and Infection Prevalence with the Parasite *Ceratomyxa Shasta* in the Klamath River, Oregon-California. *Journal of Parasitology* 93(1), 2007, pp. 78-88.

U.S. Ninth Circuit Court of Appeals. 1999. *Klamath Water Users Protective Association v. Patterson* (U.S. BOR). U.S. Ninth Circuit Court of Appeals (204 F.3d 1206).

**Comment Author** Kelley, Sherrie  
**Agency/Assoc.** Quartz Valley Indian Reservation  
**Submittal Date** December 30, 2011

<b>Comment Code</b>	<b>Comment Response</b>	<b>Change in EIS/EIR</b>
IT_LT_1230_096-1	Master Response GEN-2 Some People Approve of Dam Removal, Others Oppose Dam Removal.	No
IT_LT_1230_096-2	Section 3.12 on the Quartz Valley Indian Reservation has been updated with the information submitted by the comment author. The Final EIS/EIR now more clearly acknowledges the traditionally used resources of the Quartz Valley Indian Reservation.	Yes
	Master Response TTA-1 Federal Trust Responsibility and the KBRA.	
IT_LT_1230_096-3	Master Response TTA-7 Tribal Involvement in Future Discussions of Water Management.	No
	Master Response TTA-1 Federal Trust Responsibility and the KBRA.	
IT_LT_1230_096-4	Master Response KHSA-1 Negotiations of KHSA and KBRA.	No
	Master Response N/CP-13 KBRA is Analyzed as a Connected Action.	
	Master Response N/CP-22 How KBRA was Analyzed.	
	The KBRA is a negotiated agreement and does not solve all water quality issues. The KBRA is a negotiated agreement that attempts to balance interests of fish and agriculture; this necessarily involves compromise on all sides.	

KLAMATH DAM REMOVAL  
DRAFT EIS/EIR HEARING  
OCTOBER 27, 2011  
PUBLIC TESTIMONY  
KLAMATH, CALIFORNIA

MS. KELLY: Iyee que. My name is Janice Kelly,  
J-a-n-i-c-e K-e-l-l-y.

Comment 1 - Envr. Justice

I am representing the Resighini Rancheria. The  
Resighini Rancheria was excluded from participating in  
the development of the KHSA and the KBRA. We are  
concerned with the negative impacts that these Agreements  
have on tribal water and our fishing right claims. We  
believe that our exclusion is a violation of the federal  
trust responsibility and that it violates environmental  
justice laws and policies.

One of our main concerns is that each federally  
recognized tribe in the Klamath Basin should have  
sovereign authority to choose to -- to accept these  
deals, called Agreements, without any forced provisions  
like the one in Section 15.3.9 of the KBRA. Our water  
and fishing rights are very important to us. If the KBRA  
is passed, our Klamath River senior water rights will be  
compromised.

Comment 2 - FERC

We understand what is going on. We understand,  
for the sake of money and profit, there are those that  
may kill our river. We understand that we have been sold

out to you for the sake of money. We understand the lure  
of money, and we understand the lure of power. Think of  
what you propose to do for the sake of cheap electrical  
power.

We are not opposing dam removal. We support  
giving the authority back to the Federal Energy  
Regulatory Commission, where it belongs, back to a  
process where we are all equally allowed to participate  
from the beginning to the end. Follow the law.

After months of study and review, we support the  
no action alternative. Thank you.

**Comment Author** Kelly, Janice  
**Agency/Assoc.** Resighini Rancheria  
**Submittal Date** October 27, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_MC_1027_047-1	<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 Group talks. 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 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 will 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 will 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>	No
IT_MC_1027_047-2	Master Response FERC-1 FERC Process Status.	No

# The Modoc Nation

Government for the Modoc people of Southern Oregon and  
Northern California - *Moatokni maklaks*

IT\_LT\_1012\_001

Oct 12th, 2011

To whom it may concern:

The Modoc Nation (formerly known as the "Modoc Tribe"), a federally recognized native nation by virtue of the Lakes Treaty of 1864 (referred to in KBRA as the "Treaty of Council Grove of 1864") and the Klamath Tribe Restoration Act of 1986, hereby submits the following issues and comments that we would like for the federal government to address with respect to the Klamath Hydroelectric Settlement Agreement (KHSA) and the Klamath Basin Restoration Agreement (KBRA), both of which are inextricably linked and the former of which was signed by Ken Salazar, Secretary of the U.S. Department of Interior.

## **Background information necessary to understand and properly respond to these comments**

It must be understood that although both the KBRA and the KHSA refer to the "Klamath Tribes" as if it were a single entity. It is not. In fact, Section 1.7 of the KBRA titled "Definitions and Acronyms" recognizes the plurality of the so-called "Klamath Tribes" on with the following definition: "**Klamath Tribes** shall mean: the Klamath and Modoc Tribes and the Yahooskin Band of Snake Indians, parties to the Treaty of Council Grove of 1864." (KBRA, p. 9) At the time of the signing of both water agreements on February 18, 2010, the three aforementioned tribes had a single government, which ostensibly represented the interests and agreement of the three federally recognized tribes of which it was then composed: the Klamath Tribe, the Modoc Tribe, and the Yahooskin Band of Snake Indians. These three tribes are not the same people – they each have unique tribal identities, cultures, histories, ancestral homelands, values and, perhaps most pertinent to the two water agreements, conflicting and competing interests. The three tribes were forced onto a single reservation by the federal government in 1864, and within a few years the local Indian Agent appointed a Klamath man named Allen David to be "Chief" of the three tribes. The constant harassment of the Modoc Tribe at the hands of the Klamath Tribe, the failure of the U.S. government to provide food and supplies required under the 1864 Treaty (leading to the Modocs' eating of their horses to stave off starvation), and the Indian Agent's disrespect of Modoc sovereignty by putting a Klamath in a position superior to their own leaders – all contributed to the Modoc Indian War of 1872-73.

When settlers came to the Upper Klamath Basin, began fencing the land and putting cattle out to graze, many feared raids by Indians. The Modocs had lost access to country where they had hunted game and gathered edible plants, many were starving. Ranchers and farmers did not want to fight; authorities did not want to contend with further massacres or Indian uprising.

Our leader, Keintpoos, whom whites knew as Captain Jack, asked Judge Elisha Steele, whom President Abraham Lincoln had appointed to draw up a treaty. Judge Steele, however, lacked the authority to do this. He may have known that Congress had rejected treaties made with numerous California tribes in 1851 and 1852, allowing their lands to be taken without compensation or legal claim. Nonetheless,

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Judge Steele made an agreement with Captain Jack to establish a reservation in the Tule Lake area. In return, Modocs were to stop stealing livestock.

Back in Washington, D.C., the Office of Indian Affairs decided to negotiate a different treaty that would remove all of the Indians of the Upper Klamath Basin onto a reservation on the Oregon side of the border. Indian Superintendent J.W.P. Huntington convened over a thousand Indians at a place they called Council Grove, north of Upper Klamath Lake. In return for ceding their traditional territories—more than 20 million acres of south-central Oregon and northeastern California, including an expanse of high desert country to the east of the Klamath Basin—the Modoc Tribe, the Klamath tribe, and the Yahooskin Band of Northern Paiutes were to inhabit less than 2 million acres on Klamath lands. No whites except for Indian agency employees and Army personnel were supposed to live there. In addition, the Indians were to receive thousands of dollars' worth of supplies over the next fifteen years, after which they were expected to become self-supporting. However, supplies did not arrive for several years, until the Senate ratified the treaty. Even after the goods came, the Indian agent failed to distribute them fairly or fully. As a result, Captain Jack's band of Modocs left the reservation, and the Treaty of 1864 helped to bring about what it was supposed to avoid: an uprising, a massacre, and a full-scale war. Captain Jack, John Schonchin, Boston Charley, Black Jim were hung with black hoods on. Hanging is one of the worst deaths considered by our people because their last breath cannot return to the Creator, Great Spirit. Barncho and Slolux received life imprisonment at Alcatraz; I would imagine it was a short time before their death. This was a great injustice done to our people, who were lied to by the Government from the beginning and only wanted to live in peace with our own people.

Note: The Klamath Indians were never part of our tribe and were enemies much of the time.

For almost one hundred years, the Modoc Tribe has never accepted the legitimacy of the Klamath tribal government because each government was based upon a singularly flawed constitution that employed a one-person-one vote system to elect a single tribal "executive committee" or, as it is now called, "tribal council." Because the Klamath Tribe outnumbers the Modoc Tribe and the Yahooskin Band of Snake Indians by a ratio of at least ten to one, the latter two tribes are essentially disenfranchised. Even worse, the system fails to address or protect the separate tribal status of the component tribes. The result is dictatorial rule by the Klamath Tribe over the Modoc Tribe and the Yahooskin Band of Snake Indians. The Modoc Tribe and people have ignored and endured the Klamath dominated tribal government's well-known culture of corruption and oppression until; finally they could no longer do so.

### **Modoc Repudiation of the Klamath tribal government and the formation of a Modoc government named the Modoc Nation**

On November 20, 2008, some 15 months before the signing of the two water agreements, the Modoc Tribe began a long and arduous process of disentangling itself from the Klamath tribal government. On

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that day we drafted the *Declaration of the Rights of the Free and Sovereign People of the Modoc Indian Tribe (Mowatocknie Maklaksüm)*, the first declaration of rights issued by any native tribe or nation in the Americas to be based on the *Declaration of the Rights of Indigenous Peoples* enacted by the United Nations General Assembly in September 2007. We began circulating the Declaration and signature sheets for its ratification among the Modoc People. Public meetings were held on October 9, 2009 and January 29, 2010. The main point of this document is that the Modoc Tribe and people have the right to preserve their unique identity and culture through political and economic self-determination. We now have numerous enrolled citizens in our Nation who have proven Modoc ancestry. A website has been placed on the Internet at (<http://www.modoc-nation.blogspot.com>). You can also find us at The Modoc Nation on Facebook.

We presented our people with a constitution for their consideration and scheduled a gathering and election for June 19, 2010. We placed in two local weekly classified-ads papers one-quarter page ads that appeared every week during the month prior to the election. On the 19<sup>th</sup> of June the Modoc People gathered at the Lava Beds National Monument in northern California and, exercising our sovereignty as a federally recognized Indian tribe, changed our government by unanimously adopting a new constitution and electing a new government. We then issued a *Unanimous Declaration of the Modoc Nation*, a four-page document in which we set forth our reasons for repudiating all allegiance and dissolving all political ties to our former illegitimate government – the *de facto* confederation of three tribes known as the “Klamath Tribes,” described above. We then entered into joint declarations with two other federally recognized tribes, the Pit River Tribe and the Yahooskin Band of Snake Indians, in which each of those native governments formally recognized our new government as “the sole legitimate government” of the Modoc people.

### **Conflicting and competing interests, water agreements in contravention of Klamath Tribes Constitution**

Although Joe Kirk represented himself as the “authorized representative” of the three Klamath Tribes in the settlement negotiations, he was not authorized by the Modoc Tribe to represent our interests. In fact, during all the negotiations, we were never polled as to what our interests were or are, and we were all kept in the dark about the “horse-trading” and “back-room” deals that were taking place – even though the subject of those deals were Modoc ancestral lands and waters and hunting, fishing and gathering rights, which ended up being traded away for programs and deals that benefit the Klamath Tribe at the expense of the Modoc Tribe. It should be apparent to any reasonable person that such a process is undemocratic and unconscionable on its face. Accordingly, and for the reason that the agreements signed by Joe Kirk and voted on by the Klamath Tribes are a clear violation of the Tribes’ constitutional mandate to protect and preserve the waters of all three tribes for future generations, The Modoc Nation (formerly “Modoc Tribe”) does not recognize the validity of the Klamath Tribes General Council vote to approve the water agreements. Such vote was null and void as being in contravention of the Tribes’ Constitution and also for the reason that the voters of the three tribes were never adequately informed

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as to the contents of the two water agreements on which they were voting. Therefore, we repudiate both of the agreements and take the position that they are inapplicable and non-binding as to the Modoc Nation. But these are legal positions that we expect to result in litigation and/or congressional action, subjects not strictly relevant to our scoping comments.

### Geographical scope of the Modoc Nation's Interest

We have presented this background in order to present comments that apply to our people, The Modoc Nation, who are self-governed, not the Klamath people, who are still a part of the Klamath Tribes. Or the Modocs of Oklahoma, who have for reasons of logistics and time spent away from our people, have decided to stay in that location which the Government forced them to go.

We wish to address the issues "consideration of potential impacts on affected local communities and Tribes" (KHS § 3.3.1), our comments are directed to the potential environmental and cultural impacts of the two water agreements as they apply to Modoc ancestral homelands. For purposes of the two water agreements, this includes: all of the Klamath Basin, as that term is defined in KBRA § 1.7, pg. 9, with the exception of those portions that lie north of Modoc Point on Upper Klamath Lake and west of Yamsey Mountain, and those portions east of the Lost River drainage and south of the Medicine Lake Highlands and Mt. Shasta. Our ancestral lands specifically include, but are not limited to, for purposes of the two water agreements: all of the Sprague River valley east of the Junction of present day Lone Pine Road with the Sprague River Highway and all the drainage into the Sprague river north to Yamsey Mountain; all of the land east of Yamsey Mountain running to Winter Rim and including the Upper Sycan River, the Sycan Marsh, the Lower Sycan River limited to the drainage into those bodies of water; all land south of that just described, running through the Gerber Valley and Barnes Valley areas to the Lost River and all its drainage and tributaries; Clear Lake and its tributaries; the Tule Lake Basin and its drainage area to the south known as the Medicine Lake Highlands; the Lower Klamath Lake Basin and all its tributaries; Upper Klamath Lake south of Modoc Point and all its drainage from the Crest of the Cascade Mountain Range south of a line running west from Modoc Point; Link River; Lake Ewauna, the Klamath River reach that runs from Lake Ewauna to the mouth of Fall Creek and all of its drainage lands and tributaries to the north, including Spencer Creek and Fall Creek all the way up to Howard Prairie Reservoir on the north and Shovel Creek on the south; Long Lake and Round Lake; and all of the land between the aforesaid stretch of the Klamath River and Stukel Mountain. This list is not intended to be all-inclusive.

### **Spiritual and cultural concerns of the people of the Modoc Nation**

The Modoc people have lived, hunted, fished and gathered resources from our ancestral lands from time immemorial. Some archeologists hold that the Clear Lake area has villages that were continuously occupied for 14,000 years, and that these people, who originally hunted elephants, never left the region, making the Modoc people the oldest indigenous holders of any area in the United States. We have a very deep spiritual connection to the land and to its natural resources and to all of our relations: the

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plants and animals indigenous to our ancestral homeland. *Kumush*, our name for the Creator threw the bones of our first ancestors onto this land and said, "This shall be your land forever."

"Kumush and Isis traveled for a long time before they came to the river that is now called Lost River. Kumush made a basket and caught a salmon in it. Then he said: 'I want salmon always to be in this river, and many of them so people will have plenty to eat. . . The bones for the Modoc Indians he threw last and he said to them: 'You will eat what I eat, you will keep my place when I am gone, and you will be bravest of all.'" Jeremiah Curtin, *Myths of the Modocs*, (Boston: Little, Brown, and Company, 1912), pp. 11, 45. Taken from the firsthand accounts of Ko-a-lak'-ak-a in 1884, the oldest living woman of the Klamath or Modoc Tribe at the time.

It is our spiritual duty to protect our ancestral homeland, natural resources, plants and animals. Doing so in the proper way also ensures for our people not only spiritual harmony and balance, but also the possibility of sustained economic development and prosperity for all of our people. It is from this perspective that we submit these comments, and it is from this perspective that we hope the government agencies receiving these comments will address the issues we now raise.

Comment 1 - Proposed Project/Action

**A short list of issues The Modoc Nation (formerly "Modoc Tribe") would like to see addressed:**

1. Both the KBRA and KHSA make it clear that both the Keno Dam and Link River Dam will not be removed. Since the entire premise of both agreements is that the removal of all or a part of the four dams below Keno Dam is an action necessary to remove obstacles to fish runs, to restore health to the Klamath River, its tributaries and its habitat for the ultimate purpose of preserving and enhancing salmonid populations, logic would dictate that the same actions and purposes would apply to the Keno Dam and the Link River Dam.

Comment 2 - Fish

a) What impact will the continued existence of the Keno Dam, operated for the express purpose of providing "water levels upstream of Keno Dam for diversion and canal maintenance consistent with Contract #14-06-200-3579A executed on January 4, 1968, between Reclamation and PacifiCorp (then COPCO) and historic practice" (KHSA §7.5.4) have on the reintroduction of salmon into the streams and lakes of the Upper Klamath Basin that are in our ancestral lands described above? In other words, how will the salmon get past the Keno dam so that they can enter the upper reach of the Klamath River, the Lost River, the Sprague River and the Sycan River?

Comment 3a - ITAs

b) What impact upon the Modoc Nation's spiritual, cultural and economic interests and well-being can be expected if salmon are not able to get past the Keno dam and Link River Dam?

c) What benefits does either of the two water agreements provide to the people of The Modoc Nation to offset any adverse impacts just described? Please do not cite projects or land swaps that run to the benefit of the Klamath Tribe, such as the Mazama Tree Farm, as all of those take place north of our ancestral homelands, and we do not see how they benefit us, especially since we have severed all political relations with the Klamath tribal government as of June 19, 2010.

Comment 4 - ITAs

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Comment 3b - ITAs

2. What would be the environmental, ecological and biological impact on Modoc ancestral lands, particularly on Lower Klamath National Wildlife Refuge (LKNWR) and Tule Lake National Wildlife Refuge (TLNWR) and their respective plant and wildlife populations if the Keno Dam were removed to allow natural stream flows and fish passage?

Comment 5 - Keno

3. How can the separate study required of the Secretary of Interior with respect to the Keno Dam by KHSA § 7.5.1. be considered scientifically and methodologically sound when the decision as to the continued existence and operation of the dam in a manner designed "to provide water levels upstream of Keno Dam for diversion and canal maintenance consistent with Contract #14-06-200-3579A executed on January 4, 1968, between Reclamation and PacifiCorp (then COPCO) and historic practice" has been predetermined?

4. Section 9 of the KBRA provides an overview of a Klamath Basin Fisheries Program, the specific purpose of which is set forth in KBRA § 9.2.1.A., which reads as follows: "...provides for reintroduction of anadromous Species throughout their historic range above Iron Gate Dam, including tributaries to Upper Klamath Lake but excluding the Lost River sub-basin, and for reestablishment and maintenance of the ecological functionality and connectivity of Fish habitat." (Emphasis added). KBRA 9.2.3., which covers the geographic scope of the project, states in pertinent part: "*The Agreement is not intended and shall not be implemented to establish or introduce populations of salmon, steelhead, or Pacific lamprey in the Lost River or its tributaries or the Tule Lake Basin.*" (Emphasis added)

Comment 6 - KBRA

a) What environmental, ecological or biological diversity purpose is served by excluding the Lost River sub-basin, the Lost River or its tributaries or the Tule Lake Basin from the program for fisheries restoration and the reintroduction of species that were indigenous to those places prior to the construction of the Klamath Reclamation Project and the five dams on the Klamath River?

Comment 3c - ITAs

b) What impact will this provision have on the very deeply held and specific spiritual and cultural concerns of The Modoc Nation and its people, as set forth in the section preceding the listing of issues our Nation would like to see addressed.

Comment 7 - KBRA

c) What benefit or benefits does The Modoc Nation and its people receive under the two water agreements to offset this catastrophic and devastating spiritual, cultural and economic loss?

Comment 3d - ITAs

d) Why among all the tribes party to or affected by the two water agreements has the Modoc Tribe been selected as the only tribe to be deprived of the restoration of its native fisheries and the reintroduction of anadromous species? How can any reasonable person see this situation as fair and reasonable to The Modoc Nation and its people or expect them to merely accept this outrageous and intolerable injustice?

5. KBRA Section 1.2.3. **Sustainable Tribal Communities** provides: "Tribes have lived in the Klamath River Basin since time immemorial and are expected to continue to do so using sustainable resource-based economies. There are tribal fishing rights in various locations that have associated water rights for the fish to propagate and produce sufficient numbers for harvest. The Tribes, irrigators, and the United

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States have differed in administrative and judicial settings over the amounts of water needed for fish. This Agreement seeks to resolve these substantial differences and also to provide the Tribes with both sustainable natural resources and sustainable communities." (Emphasis added) KBRA Section 15.3.2.B.iii (Non-Use of Findings and Judgment/Decree), Section 15.3.3 (Assurances of Non-Interference with Klamath Reclamation Project Diversions by the Klamath Tribes, and Section 15.3.5 (Relinquishment and Release of Claims against the United States by the Klamath Tribes) all run to the effect that although the Modoc Nation retains its underlying treaty water, hunting, fishing, hunting and gathering rights, it is waiving its right to assert them in any way that will interfere with deliveries of water to irrigators through the Klamath Reclamation Project.

Comment 3e - ITAs

a) How can the above-referenced provisions of Sections 9 (discussed above) and Section 15 be reconciled to the stated goal of Section 1.2.3? In other words, how does The Modoc Nation sustain the natural resources of its ancestral lands, particularly those of the two National Wildlife Refuges, necessary build a sustainable community based on our traditional spiritual, cultural and economic values, when Section 15 deprives us of the right to protect those very resources and way of life through the assertion of claims either before regulatory agencies or the courts?

b) How does the provision set forth in KBRA §15.3.2.B.iii, which states: "... the Tribes and the United States shall not, directly or indirectly assert in any manner, water rights recognized for the Claims in the findings and order issued pursuant to ORS 539.130(1) or a judgment/decree issued under ORS 539.150(4) including in water rights or other contexts, that interferes with the diversion, use, and reuse of water for the Klamath Reclamation Project" improve or otherwise impact the environment, ecology or biological diversity of any of the lands in the Klamath Basin, especially those of our Modoc ancestral homelands in the Lost River Circle and the LKNWR and TLNWR?

c) KBRA § 15.3.3. provides in pertinent part, "The Klamath Tribes hereby provide interim Assurances as stated in Section 15.3.8.B, and conditional permanent Assurances that the Klamath Tribes will not assert: (i) tribal water or fishing rights theories or tribal trust theories in a manner, or (ii) Klamath tribal water or trust rights in the State of California, 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 any judicial proceeding, or otherwise . . ." (emphasis added)

Comment 3f - ITAs

i. What is the purpose of subparagraph (ii) other than to single out The Modoc Nation and people, who among the three tribes that formerly made up the Klamath Tribes (as stated above, The Modoc Nation on June 19, 2010 dissolved all political ties to the Klamath Tribes and formed its own government) is the only tribe to have ancestral lands situated in California?

Comment 8 - KBRA

ii. How does KBRA § 15.3.3. improve or otherwise impact the environment, ecology or biological diversity of any of the lands in the Klamath Basin, especially those of our Modoc ancestral homelands in the Lost River Circle and the LKNWR and TLNWR?

## The Modoc Nation

Government for the Modoc people of Southern Oregon and  
Northern California - *Moatokni maklaks*

Comment 9 - KBRA

d) How does the provision set forth in KBRA § 15.3.5.A.i. that requires the Klamath Tribes (including the Modoc Nation) to release of any and all claims we may have against the federal government "resulting from (a) water management decisions, including the failure to act, or (b) the failure to protect, or to prevent interference with, the Tribes' water or water rights, that relate to damages, losses, or injuries to water, water rights, land, or natural resources due to loss of water or water rights (including damages, losses, or injuries to hunting, fishing, gathering rights or other activities, due to loss of water or water rights)" improve or otherwise impact the environment, ecology or biological diversity of any of the lands in the Klamath Basin, especially those of our Modoc ancestral homelands in the Lost River Circle and the LKNWR and TLNWR?

Comment 10 - ITAs

e) How can the waiver of our rights to assert claims designed to protect and preserve the water we deem necessary to preserve and protect the land, waters, plants and wildlife that are essential to our spiritual, cultural and economic well-being not be construed constitute a severe adverse impact The Modoc Nation and its citizens?

Comment 11 - KBRA

f) What benefit or benefits does The Modoc Nation and its people receive in return for giving up the major rights enumerated in KBRA Section 15? Again, please address this issue directly with respect to The Modoc Nation and its people, not the "Klamath Tribes" in general.

Respectfully submitted,

Chief Greywolf, Jeff Kelley

The Modoc Nation

Modoc-nation.blogspot.com

The Modoc Nation on Facebook

[Modoc-nation@hotmail.com](mailto:Modoc-nation@hotmail.com)

503-838-0280

Some parts were previously submitted on July 21<sup>st</sup>, 2010

**Comment Author** Kelley, Jeff  
**Agency/Assoc.** The Modoc Nation  
**Submittal Date** October 12, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_LT_1012_001-1	<p>Appendix A, Final Alternatives Report, from the Draft EIS/EIR describes the alternatives considered during development of the document. Alternatives 14 and 15, Full Removal of Five Dams and Full Removal of Six Dams, consider the removal of Keno Dam and Link River Dam in addition to the Four Facilities. Alternative 14 was not carried forward for more detailed analysis in the EIS/EIR because it would not avoid or lessen environmental effects of the Proposed Action. Alternative 15 was not carried forward for more detailed analysis in the EIS/EIR because it would not avoid or lessen environmental effects of the Proposed Action. Implementation of Alternative 15 would also not be likely to meet Endangered Species Act requirements or tribal trust water rights within Upper Klamath Lake.</p>	No
IT_LT_1012_001-2	<p>The Keno Dam is owned by PacifiCorp. The primary purpose of the Keno Dam is to maintain water levels in Keno Impoundment/Lake Ewauna for gravity delivery of water into irrigation canals. It has no hydroelectric capacity. The 20-mile Keno Reach of the Klamath River receives large loads of decaying organic matter (blue-green algae) from Upper Klamath Lake, producing extremely low dissolved-oxygen levels that persist in the summer and fall (EIS/EIR Section 1.1.3.2). All of the alternatives examined in the EIS/EIR retain the Keno facility because of the role it plays in regulating irrigation water and providing water to the U.S. Fish and Wildlife Service National Wildlife Refuge. With implementation of the KHSA in Alternatives 2 and 3, ownership of the Keno Dam would be transferred to the Department of Interior. Operations of the Keno facility under DOI would be consistent with current terms and conditions of operations (EIS/EIR Section 2.4.3.7; 3.2.4.3.2.8). Removal of the Keno Dam was considered, but was not carried forward as an Action Alternative because removal of the Keno facility would be inconsistent with the KHSA (EIS/EIR Section 2.3).</p> <p>Alternatives 2, 3, 4 and 5 would include seasonal salmon transport consistent with DOI and NOAA Fisheries Service fishway prescriptions. These include a measure to seasonally trap and haul fall-run Chinook salmon upstream and downstream around the Keno Impoundment. The prescriptions call for seasonal trap and haul operations from June 15 to November 15 when water quality conditions are not suitable for fish (dissolved oxygen concentration less than 6 mg/l or temperature above 20 degrees Celsius) (U.S. Department of the Interior 2007; National Fisheries Service 2007). Upstream operations would include construction of a collection and handling facility downstream of Keno Dam; these fish would be released upstream of Link River Dam (EIS/EIR Section 2.4.5.5). Downstream operations would include construction of a collection and handling facility at Link River Dam (EIS/R Section 2.4.5.5). These fish would be released downstream</p>	No

**Comment Author** Kelley, Jeff  
**Agency/Assoc.** The Modoc Nation  
**Submittal Date** October 12, 2011

Comment Code	Comment Response	Change in EIS/EIR
	<p>from Keno Dam. Low DO concentrations generally occur from July through October and could affect migration of fall Chinook adults. The Chinook expert panel did indicate that seasonally low DO concentrations in the Keno Reach would be an issue for migrating fall adult Chinook salmon (Goodman et al. 2011) but did not acknowledge fishway prescriptions in their report. Because of the timing of various life stages, this low DO would not significantly affect spring Chinook, steelhead, or the general outmigration of fall Chinook. If dams are removed, there would likely need to be a seasonal (Sept and October) "trap and haul" of fall Chinook adults around this 20 mile stretch of river. Depending on the speed and effectiveness of TMDL and KBRA implementation, this seasonal trap and haul above Keno would likely continue for a few decades, but it could be for a shorter period if successful engineering solutions for the problems in the Keno reach are implemented.</p> <p>DO problems are one of the items for which the KBRA seeks funding of engineering solutions.</p>	
IT_LT_1012_001-3	<p>The Klamath Tribes consist of the Klamath, Modoc, and Yahooskin Peoples. Although a faction of people of Modoc decent have declared independence from the Klamath Tribes and created the Modoc Nation the federal government does not recognize the Modoc Nation as a tribal government separate and distinct from the Klamath Tribes. The Klamath Tribes, whose stated mission is to protect, preserve, and enhance the spiritual, cultural, and physical values and resources of the Klamath, Modoc, and Yahooskin Peoples, negotiated and signed the KBRA as representatives of the Modoc People. It can be inferred that the spiritual and cultural concerns of the Modoc People were taken into account when the Klamath Tribes approved the KBRA.</p>	No
IT_LT_1012_001-4	<p>Projected changes associated with the KSD and KBRA would improve water quality and the Klamath River fishery. These projected changes are not related to any specific agreements with any specific tribes. Projected changes in water quality and the Klamath River fishery would likely benefit the Modoc Nation and improve its ability to acquire resources and engage in its traditional cultural practices.</p>	No
IT_LT_1012_001-5	<p>Although the KHSA calls for a separate study with respect to the transfer of Keno Dam, the Action Agencies have determined that the transfer of Keno Dam would best be addresses in context with the Proposed Action, instead of through a separate study. Therefore, the transfer of Keno Dam is analyzed in the EIS/EIR instead of a separate study. Section 7.5.1 of the KHSA specified that the separate study should address the following issues:</p>	Yes

**Comment Author** Kelley, Jeff  
**Agency/Assoc.** The Modoc Nation  
**Submittal Date** October 12, 2011

Comment Code	Comment Response	Change in EIS/EIR
	<p>1 - Water Quality. Since February of 2010 when the KHSA was signed, the States of Oregon and California have finalized TMDL for the Klamath river in accordance with the Clean Water Act, and California Water Code Division 7, Chapter 4 Article 3 and OAR Chapter 340, Division 42, respectively. Section 3.2, Water Quality, of the EIS/EIR, describes the TMDLs in detail. The TMDLs will remain in effect following the transfer of ownership of Keno Dam. The transfer of ownership of Keno Dam is not intended to improve water quality, the FRP of the KBRA specifies that it will 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).</p>	
	<p>2 – Fish Passage. To protect fish from impaired water quality before the TMDLs take effect and actions under the FRP are implemented, anadromous fish will be trapped below Keno dam and transported to avoid the area of impaired water quality. This trap and transfer of fish will continue until the water quality conditions are sufficiently improved to support anadromous fish. Keno Dam currently has a functioning fish passage structure. Should the fish passage structure require remediation in the future, the remediation will be addressed through the FRP.</p>	
	<p>3 - Transfer of title to the Keno facility. Transfer of the Keno facility is addressed in an Agreement in Principle for the Transfer of Keno Dam (Reclamation and PacifiCorp, 2012.) between the U.S. DOI 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 DRE provides notice to the Parties [to the KHSA] and to the Federal Energy Regulatory Commission that J.C. Boyle Facility Removal is ready to commence (KHSA, Section 7.5.2). .</p>	
	<p>4 – Landowner agreements. The disposition and continued fulfillment of landowner agreements are also addressed in the Agreement in Principle.</p>	
	<p>5 – Operation and maintenance of the Keno Facility. Following transfer, Reclamation will be responsible for future operations and maintenance of Keno Dam as described in the Agreement in Principle between PacifiCorp and Reclamation (Reclamation and PacifiCorp, 2012).</p>	

**Comment Author** Kelley, Jeff  
**Agency/Assoc.** The Modoc Nation  
**Submittal Date** October 12, 2011

Comment Code	Comment Response	Change in EIS/EIR
	<p>6 - Maintaining the benefits that Keno Dam currently provides. In order to maintain the benefits that Keno Dam currently provided, it will be operated to maintain water levels upstream of Keno Dam to provide for diversion and canal maintenance consistent with Contract No. 14-06-200-3579A executed on January 4, 1968 between Reclamation and PacifiCorp (then California Oregon Power Company (COPCO)) and historic practice and subject to Applicable Law (KHSA, Section 7.5.4). Changes to the operation of Keno Dam which do not maintain these benefits, or the removal or replacement of the facility, is not a part of the Proposed Action and is therefore not analyzed within this EIS/EIR.</p>	
IT_LT_1012_001-6	<p>The geographic scope of the KBRA is limited to the main Project area that is supplied by UKL or the Klamath River. It does not include Lost River basin above Harpold Dam. The reintroduction of fish species to the Lost River Subbasin and the Tule River Subbasin as suggested by the comment author represents an alternative to the KBRA. Alternatives to the KBRA were not considered in this EIS/EIR.</p> <p>Master Response ALT-7 Elimination of KBRA without KHSA Including Alternative 16 - Dredge Upper Klamath Lake and Alternative 18 - Partition of Upper Klamath Lake from Detailed Study.</p>	No
IT_LT_1012_001-7	<p>The Klamath Tribes consist of the Klamath, Modoc, and Yahooskin Peoples. Although a faction of people of Modoc decent have declared independence from the Klamath Tribes and created the Modoc Nation the federal government does not recognize the Modoc Nation as a tribal government separate and distinct from the Klamath Tribes. The Klamath Tribes, whose stated mission is to protect, preserve, and enhance the spiritual, cultural, and physical values and resources of the Klamath, Modoc, and Yahooskin Peoples, negotiated and signed the KBRA as representatives of the Modoc People. It can be inferred that the spiritual and cultural concerns of the Modoc People were taken into account when the Klamath Tribes approved the KBRA.</p>	No
IT_LT_1012_001-8	<p>Through Section 15, the KBRA provides for an allocation of water to the Lower Klamath and Tule Lake National Wildlife Refuges and as such provide ecological benefits and support of biological diversity within the LKNWR and TLNWR. These effects are described in the EIS/EIR in Sections 3.3 and 3.5.</p>	No
IT_LT_1012_001-9	<p>The referenced section of the KBRA is one element of the agreement in which the Klamath Tribes would release claims for damages in exchange for other provisions of the KBRA including the removal dams on the Klamath River, a fisheries restoration</p>	No

**Comment Author** Kelley, Jeff  
**Agency/Assoc.** The Modoc Nation  
**Submittal Date** October 12, 2011

Comment Code	Comment Response	Change in EIS/EIR
	<p>program, water allocations for the LKNWR and TLNWR, etc. Potential effects on the ecology and biological diversity of the Klamath Basin are analyzed programmatically in the EIS/EIR because the implementation of many elements of the KBRA is unknown and not reasonably foreseeable at this time. The KBRA analysis in this EIS/EIR is programmatic, as described in Section 15168 of the CEQA Guidelines. A program-level document is appropriate when a project consists of a series of smaller projects or phases that may be implemented separately. Under the programmatic EIR approach, future projects or phases may require additional, project-specific environmental analysis including an evaluation of compliance with federal laws such as the Clean Water Act and the Endangered Species Act. Consequently, appropriate NEPA compliance will be completed for the separate KBRA components in the future.</p>	
IT_LT_1012_001-10	<p>The federal government's trust responsibility to Indian nations has long been recognized by the courts, by Congress, and by the executive branch. However, there is no single court decision, federal law, or Presidential proclamation that first identified this doctrine of trust responsibility.</p> <p>Most commentators have stated, as Professor Tsosie from Arizona State University wrote in 2003, that the roots of the trust doctrine "extend back to the earliest treaties between European governments and Indian nations," as well as similar treaties between the United States government and Indian nations. See Rebecca Tsosie, "The Indian Trust Doctrine After The 2002-2003 Supreme Court Term," 39 Tulsa Law Review 271, 272 (2003).</p> <p>The federal government has a responsibility to ensure that trust resources, such as water and fishing rights, and other associated rights are properly managed for the benefit of each federally recognized tribe. By definition, Indian Trust Resources cannot be sold, leased, or otherwise encumbered without approval of the United States. The federal government has the responsibility to safeguard fishing rights and to maintain any federally recognized water rights. Projected changes to the Klamath River as a result of the KHSA and KBRA would likely facilitate continuation of the non-federally recognized Modoc Nation's traditional cultural practices.</p>	No
IT_LT_1012_001-11	<p>The Klamath Tribes consist of the Klamath, Modoc, and Yahooskin Peoples. Although a faction of people of Modoc decent have declared independence from the Klamath Tribes and created the Modoc Nation the federal government does not recognize the Modoc Nation as a tribal government separate and distinct from the Klamath Tribes. The Klamath Tribes, whose stated mission is to protect, preserve, and enhance the spiritual, cultural, and</p>	No

<b>Comment Author</b>	Kelley, Jeff
<b>Agency/Assoc.</b>	The Modoc Nation
<b>Submittal Date</b>	October 12, 2011

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**Comment Code**

**Comment Response**

**Change in  
EIS/EIR**

physical values and resources of the Klamath, Modoc, and Yahooskin Peoples, negotiated and signed the KBRA as representatives of the Modoc People. It can be inferred that the spiritual and cultural concerns of the Modoc People were taken into account when the Klamath Tribes approved the KBRA.

IT\_MC\_1027\_048

KLAMATH DAM REMOVAL  
DRAFT EIS/EIR HEARING  
OCTOBER 27, 2011  
PUBLIC TESTIMONY  
KLAMATH, CALIFORNIA

MR. KINNEY: Javier Kinney, J-a-v-i-e-r, middle initial I., last name K-i-n-n-e-y.

Good evening. My name is Javier Kinney. I currently serve as the Director for the Office of Self Governance for the Yurok Tribe. We appreciate the opportunity to share our comments today with you in regards to the enormous amount in the leadership of not only the Yurok Tribe but the various community members and community organizations that have been working in this process for quite some time.

I received my Bachelor of Arts degree in history and Native American studies from University of California at Davis, my Master of Arts degree in law and diplomacy from Fletcher School, Tufts University, and my Juris Doctorate from Suffolk University Law School. And one of the important things, and more importantly, I received a traditional education from many of the elders and the traditional people that our family derived from.

I'm currently a resident of Weitchpec, California. And, again, the ancestral villages in that community are important to and integral to everything that we do.

In regards to the traditional values and principles that have been passed down, as well as integrated into our everyday lives, the Yurok Tribe, as a contemporary tribal company, has needed to address and resolve issues that have not necessarily been produced by us. In many ways, our interests and the fishing rights of the Yurok people have been attempted to be divested from our communities.

My two children, ages 9 and 11, have continuously practiced their traditional fishing rights in and around our village areas. And the important value that is placed on that is not only encouraged but is lived out every day of our lives.

Comment 1 - Approves  
Dam Removal

In addition, the technical expertise that has been provided by the Yurok Tribe and, again, the leadership and the policy actions that have been recommended by the Tribe is why we are encouraging and providing the support for Alternative 2 and the removal of all four dams.

Again, there is many people in this room that have stood up and taken offense to that divestment of fishing rights, but, more importantly, the importance of having a balance of traditional culture, of traditional values, has sought to address and, again, prevent the further decrease in our tribal rights.

Lastly, again, there has been numerous attempts

over history to seek to extract the highest value of our natural resources, at the same time at the lowest cost. Those days are over. Our traditional people have continuously carried out their fishing rights, in not only fishing on the river in traditional ways but, in contemporary times, are continuing to carry out that important right.

Lastly, again, the technical expertise and the leadership by the Yurok Tribal Council will continue to fight not only for the collective vision of protecting the natural resources but also protecting the ways of life of our communities and the resources that are associated with that responsibility. The Yurok Tribe has made a commitment, not only as a tribal government, but, as you can see from the public scoping meetings, the communities are coming out in support of these actions.

Thank you very much, and I appreciate your time.

**Comment Author** Kinney, Javier  
**Agency/Assoc.** Yurok Tribe  
**Submittal Date** October 27, 2011

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<b>Comment Code</b>	<b>Comment Response</b>	<b>Change in EIS/EIR</b>
IT_MC_1027_048-1	Master Response GEN-2 Some People Approve of Dam Removal, Others Oppose Dam Removal.	No

IT\_MC\_1020\_019

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

MR. GARY LAKE: Good evening, my name is Gary

Lake, L-a-k-e.

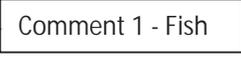
I'm a past councilman for the Karuk tribe, or

Karok or Kayrok, I'm not sure how they pronounce it

anymore, and also a past vice-chairman of the Shasta

People.

Comment 1 - Fish



And I believe in 1827, the Klamath Lake Indian  
guide that was for the Peter Skene Ogden party that was  
camped near what is presently known as J. C. Boyle Dam,  
their Indian guide told his party members that no salmon  
came past that point, which is presently that dam, the  
location of the J. C. Boyle Dam. This is historical fact.  
The Klamath River is a reverse watershed and is  
historically warm. While many cold water rivers might  
benefit from dam removal, the Klamath River will not.  
Let it be known, I was a councilman for the  
 Karuk tribe, and we were approached, repeatedly  
 approached, the council, by the Department of Natural  
 Resources -- Craig Tucker is a good friend, Lee Hillman --  
 and, um, basically, we were told that we could turn the  
 Coho salmon into a new spotted owl and we could run the

white man, the miners, and the Shastas off the Klamath  
River and steal back the land.

Comment 2 - Cultural Resources

Um, political correctness. You guys talk about  
all these other tribes but you never mention the Shasta  
people. 50 percent of the entire Klamath River is within  
the Shasta territory, and that's a fact. All the dams  
that are slated for removal are within Shasta territory.  
The Shasta territory will be split between two interloping  
tribes, the Karuk, Karok, whatever, and the Klamath, and  
it will basically exterminate the Shastas.  
If you look at all the stuff that the Karuk  
tribe and everybody else opposed then, they never mention  
anything about the Shasta people. It's Karuk this, Karuk  
that, tribal territory and everything.  
The bottom line is, they are socio-economically  
exterminating us, and you are a part of that and you will  
eventually have to deal with that, of course, as truth be  
told and history is told.  
Um, you know, I could say a bunch of other  
things, but the bottom line is this, you know, there's  
Mount Shasta, there's Shasta Lake, there's Shasta City,  
there's Shasta River. There's no Mount Karuk. There's  
Shasta Cola. There's no mountain -- you know, there's no  
Karuk Cola, you know, there's -- they are a supplement to

Treaty O, and we all know they are not a treaty or a  
tribe, and they are being allowed, with basically, you  
guys' help, to exterminate the Shasta people. That is  
what I have to say.

You have to really think about that in the  
future because you and everybody else will be held  
accountable.

Thank you.

**Comment Author** Lake, Gary  
**Agency/Assoc.** Karuk Tribe  
**Submittal Date** October 20, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_MC_1020_019-1	<p>Historical distributions of anadromous fish are described in the Draft EIS/EIR in Section 3.3.3.1, Aquatic Resources. Historical records reviewed by Hamilton et al. (2005) and information obtained from archaeological sites analyzed by Butler et al. (2010) indicate that prior to the construction of Copco 1 Dam, Chinook salmon and steelhead spawned in the tributaries upstream of Upper Klamath Lake, including the Sprague, Williamson, and Wood rivers.</p> <p>The question regarding the historical distribution of salmon and steelhead above Iron Gate Dam was also addressed in proceedings before Administrative Law Judge Honorable Parlen L. McKenna who concluded that agencies had met their burden of proof on this issue (EIS 1.2.6.2, Federal Energy Commission Relicensing). Among other findings, Judge McKenna determined (Administrative Law Judge 2006) that:</p> <ul style="list-style-type: none"> <li>• While the precise geographic distribution is uncertain, historical records and Tribal accounts demonstrate that anadromous fish (Chinook salmon, Coho salmon, and steelhead trout) migrated past the present site of Iron Gate Dam which provided a viable ecosystem and habitat for those stocks of fish (FOF 2A-3, p. 12).</li> <li>• Chinook salmon (both spring and fall-run) were abundant in the tributaries of the Upper Klamath Basin, including Jenny, Fall, and Shovel Creeks, as well as the Wood, Sprague, and Williamson rivers (FOF 2A-4, p. 12).</li> <li>• Steelhead trout utilized habitat in Spencer, Shovel, Fall, Camp, and Scotch creeks, and they were likely distributed as far upstream as Link River (FOF 2A-5, p. 12).</li> <li>• Coho salmon spawned in Fall Creek (FOF 2A-6, p. 12).</li> <li>• The record shows that those anadromous fish proximate to Iron Gate Dam are genetically most similar to those populations that existed in the Upper Klamath Basin prior to the construction of the dams (FOF 2A-22, p. 15).</li> </ul> <p>Additionally, the Federal Energy Regulatory Commission (Federal Energy Regulatory Commission 2007) concluded that anadromous fish occurred historically above Iron Gate Dam.</p> <p>The effect of dam removal on water temperature varies seasonally, and by river reach:</p> <ul style="list-style-type: none"> <li>• From the upstream end of J.C. Boyle Reservoir to Iron Gate Dam the reservoir drawdowns would allow tributaries and springs such as Fall, Shovel, and Spencer Creeks and Big Springs to flow directly into the mainstem Klamath River, creating patches of cooler water that could be used as</li> </ul>	No

**Comment Author** Lake, Gary  
**Agency/Assoc.** Karuk Tribe  
**Submittal Date** October 20, 2011

Comment Code	Comment Response	Change in EIS/EIR
IT_MC_1020_019-2	<p>temperature refugia by fish (Hamilton et al. 2011). Water quality conditions would also improve further downstream in the Hydroelectric Reach. From Copco 1 to Iron Gate Reservoir, removal of the Four Facilities would result in a 2-10 degree centigrade decrease in water temperatures during the fall months and a 1-2.5 degree centigrade increase in water temperatures during spring months (PacifiCorp 2004a, Dunsmoor and Huntington 2006, NCRWQCB 2010a, Perry et al. 2011; see also Section 3.2.4.3.2.1), an increase dissolved oxygen concentrations (PacifiCorp 2004b, NCRWQCB 2010; see also Section 3.2.4.3.2.4), and eliminate reservoir habitat that creates ideal conditions for seasonal nuisance and/or noxious phytoplankton blooms (see Section 3.4, Algae) (Draft EIS/EIR Section 3.3.4.3, p. 3.3-87).</p> <ul style="list-style-type: none"> <li>• In the Lower Klamath River downstream of Iron Gate Dam the thermal lag formerly caused by water storage in reservoirs and the associated increased thermal mass would be eliminated in the lower Klamath River. This elimination would cause water temperatures to have natural diurnal variations and become more in sync with historical migration and spawning periods for Klamath River Chinook salmon, warming earlier in the spring, and cooling earlier in the fall compared to existing conditions (Stillwater Sciences 2009b; Hamilton et al. 2011). These changes would result in water temperature more favorable for salmonids in the mainstem (Draft EIS/EIR Section 3.3.4.3, p. 3.3-87).</li> </ul> <p>The comment, as written, provides an anecdotal account from 1 party in 1827 to support the argument that anadromous fish did not occur upstream of Iron Gate Dam. No evidence is provided to support the argument that water temperatures in the Klamath River would not benefit by dam removal.</p>	No
	<p>Master Response CUL-1 Shasta Nation Participation.</p> <p>Master Response CUL-2 Federal Recognition.</p>	

**Klamath Settlement**



EIS/EIR PROCESS

# Comment Form

IT\_MF\_1020\_032

Please mail your comments to:

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

OR

**Mr. Gordon Leppig**  
California Dept. of Fish and Game  
Northern Region,  
619 Second Street  
Eureka, CA 95501

**Email:**  
KlamathSD@usbr.gov

**Website:**  
KlamathRestoration.gov

**Fax:**

Comment 1 - Approves of  
Dam Removal

All comments on the Draft EIS/EIR must be received by November 21, 2011.

(Please print legibly)

**Name:** KRISTI LEWIS

**Organization:** HUPA TRIBE

**Title:** Human Being

**Address:** P.O. Box 1231 Hoopa Ca. 95544

**Email:** k24s15@yahoo.com

**Comments:** I am a direct descendant

of Lucinda Griffith from the Karuk

tribe. I have spent many years

growing up on the Klamath River. I support

Alternative 2 - Full Facilities Removal of four

Dams to better preserve my family's culture.

We have depended on fish to feed our

family for lots of generations. It is important

that we extend these resources for future

generations.

**Public Disclosure:** It is not required that you submit personal information. If you decide to do so, please note that this information may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

**Comment Author** Lewis, Kristi  
**Agency/Assoc.** Hoopa Valley Tribe  
**Submittal Date** October 20, 2011

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<b>Comment Code</b>	<b>Comment Response</b>	<b>Change in EIS/EIR</b>
IT_MF_1020_032-1	Master Response GEN-2 Some People Approve of Dam Removal and Others Oppose Dam Removal.	No

KLAMATH DAM REMOVAL  
DRAFT EIS/EIR HEARING  
OCTOBER 26, 2011  
PUBLIC TESTIMONY  
ARCATA, CALIFORNIA

MR. MARSTON: Good evening. I'm Les Marston.

Comment 1 - ITAs

I'm the tribal attorney for the Resighini Rancheria.

And I'm here tonight to state that it's the position of the Resighini that the draft environmental document is inadequate and was prepared in violation of both NEPA and CEQA, for the following reasons: The Resighini have an off-reservation right to fish in the Klamath River. The Resighini, in the exercise of their right as part of the physical environment, you have to include a description of the physical environment in the document. If you don't include an adequate description, you can't assess the impacts.

There's no description, whatsoever, not even an acknowledgment that the Resighini have an off-reservation right to fish, let alone a description of how they exercise that right, the fishing stations and locations where they exercise that right. If you don't have a physical description of the environment, you can't assess the impacts. And so, the environmental document contains48 no analysis of the impacts from the project on the Resighini's off-reservation right to fish.

In addition, there's no description, whatsoever, of how the impacts from the project will affect the

cultural practices of the Resighini, based on that  
off-reservation fishing right. Likewise, there's no  
analysis -- because there's no description of the right  
or acknowledgment of the right, there's no analysis of  
what the cumulative impacts will be on the  
off-reservation fishing right.

And then, of course, if you don't acknowledge  
the right and you don't have any analysis of what impacts  
the project will have on the exercise of the right, you  
can't develop any mitigation measures. And, of course,  
the Environmental Impact Statement is void of any  
mitigation measurements designed to mitigate the impacts  
that the project will have on the Resighini's  
off-reservation right.

And just to illustrate, I'll give you one  
example. For example, you have no idea, because you  
haven't done -- acquired any information and you have  
done no analysis of the extent and nature of the right.

So, let's just say, hypothetically speaking, that  
Resighini fishermen, some of the Resighini fishermen,  
fish with spear and they're riffle fishermen and they<sup>49</sup>  
fish at critical riffles. And those are locations where  
the river will narrow out and become shallow. Okay? If  
dam removal increased flows and the increased flows  
happens to inundate a critical riffle at a location where  
a riffle fishermen has fished for, you know, the last  
decade or so, you have now just eliminated one of the

Resighini's fishing stations.

So, you've got -- your physical description is inadequate. Your impact of the -- your analysis of the impacts are inadequate. You have no analysis of the cumulative impacts, so that's inadequate. And you have no draft mitigation measures to address how the impacts are going to affect their right, including the cultural practices and how the cultural practices are related to their right.

So, it's our position that the Environmental Impact Statement is inadequate and in violation of applicable law. And I'll be submitting written comments.

MR. LYNCH: Thank you.

**Comment Author** Marston, Lester  
**Agency/Assoc.** Resighini Rancheria  
**Submittal Date** October 26, 2011

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<b>Comment Code</b>	<b>Comment Response</b>	<b>Change in EIS/EIR</b>
IT_MC_1026_064-1	Master Response TTA-4 1988 Hoopa-Yurok Settlement Act.  Information on effects of the proposed action on the Resighini Rancheria is contained in section 3.12.3.4.	Yes