NONGOVERNMENT ORGANIZATION LETTERS

Charlton H. Bonham
TROUT UNLIMITED

Brian Barr
WORLD WILDLIFE FUND

Kelly Catlett
FRIENDS OF THE RIVER

Curtis Knight
CALIFORNIA TROUT

Steve Rothert
AMERICAN RIVERS

(*addresses provided on signature page*)

September 24, 2003

Mr. Todd Olson
PacifiCorp
825 NE Multnomah, Suite 1500
Portland, OR 97232

Re: American Rivers, California Trout, Friends of the River, Trout Unlimited, and World Wildlife Fund Comments on Draft Application for New License, Klamath Hydroelectric Project, Klamath River, F.E.R.C. No. 2082

Dear Mr. Olson:

American Rivers, California Trout, Friends of the River, Trout Unlimited, and World Wildlife Fund (Conservation Groups)[1] thank PacifiCorp (PC) for the opportunity to comment as interested stakeholders on the Company's Draft License Application

[1] American Rivers is a national organization dedicated to the protection and restoration of America's rivers for the benefit of the fish, wildlife and human communities who depend on healthy rivers. CalTrout is a statewide conservation organization whose purpose is to protect and restore California's wild trout, native steelhead, and their habitats. FOR is California's statewide river conservation organization committed to protecting and restoring California's rivers, streams, and watersheds. TU is the nation's largest coldwater fisheries conservation organization, and is dedicated to protecting, conserving, and restoring North America's native trout and salmon and their habitat. WWF is the world's largest conservation organization whose mission to save life on Earth by conserving endangered spaces, safeguarding critically endangered species, and addressing global environmental threats that imperil all of Earth's ecosystems. Conservation Groups have been active in all stages of this relicensing to date.

(DLA) for new license for the Klamath Hydroelectric Project, Klamath River, F.E.R.C. No. 2082 (Project). We provide our comments below on the DLA and organize those comments around four areas: (A) timely relicensing; (B) history of issues and collaborative relicensing efforts; (C) lack of data interpretation and unorganized presentation; and, (D) deficiencies in the DLA and attached technical appendices.[2]

Conservation Groups acknowledge PC's willingness to augment its elected traditional relicensing process with a collaborative commitment. Like PC (and many other stakeholders), we have been involved in this relicensing from the beginning, and while much improvement can be made on using stakeholder collaboration to its best advantage in this proceeding, we do think progress has occurred. To be clear, however, substantive disagreement remains on many threshold issues in this relicensing. Conservation Groups believe now is the time to address those disagreements with all stakeholders at the collaborative table. The likelihood of creating a solution to this relicensing that all stakeholders can live with is much greater, if PC will lead us there. We are confident about getting to that solution.

I. Timely Relicensing

The Project license expires on March 1, 2006. The period between today and the March 1, 2004 deadline to file the Project's Final License Application (FLA) will greatly influence many crucial aspects of this relicensing, including but not limited to discussion of Project impacts and joint development of protection, mitigation, and enhancement measures. Such measures—and stakeholder actions to develop those measures—must be evaluated against the Federal Power Act's directive to give equal consideration to power and non-power values.

G1-1 We stress that in our experience *licensees greatly control the timeliness and manner of relicensing hydroelectric projects.* Making supportable relicensing decisions clearly requires that PC present adequate and sufficient information to all participating parties and FERC. Conservation Groups believe that the DLA has not discharged this duty.

Responsiveness to federal and state agency, tribal, and interested stakeholders' concerns, requests for studies and information, and comments throughout the entire three stages of the FERC traditional relicensing consultation process will contribute to accomplishing two goals: (1) timely relicensing; and, (2) developing sufficient information to make relicensing decisions. Moreover, this approach increases the likelihood that substantial evidence will exist to support decisions regarding proposed

[2] The DLA expressly states that it "does not address PM&E's or continuing Project impacts as is usual in the 2nd stage of the relicensing process". DLA, Vol. 2, Ex. E, p. 1-1. PC served numerous draft technical appendices with the DLA. These technical reports are also unfinished. Thus, Conservation Groups hereby defer responding to certain portions of the DLA and certain portions of the technical reports. We reserve our right to further comment upon receipt of additional information..

AR, CalTrout, FOR, TU, WWF Comments on DLA
2

Response to Comment G1-1

PacifiCorp provided available information up to the submission of the DLA. The omission of some study results and future PM&E measures was partially a result of parties not being able to agree on the scope of study plans. In some cases, studies were not fully underway until study plans were approved by the Working Groups and the Plenary. Most study plans, following collaborate approval, also included additional work tasks that took longer to complete, or were seasonally driven. The final license application includes the results of almost all studies identified through the collaborative pre-filing consultation process.

G1-2 actions. These benefits run to all stakeholders participating in this relicensing. We note that working groups within the relicensing appear to be turning to more difficult and complex questions like defining Project impacts, with greater regularity. Conservation Groups strongly believe that this evolution must advance more rapidly.

G1-3 We stress that immediate identification of continuing Project impacts to natural resources is essential to developing license measures and conditions in a timely fashion for the final license application. Put simply, for us, the absence of protection, mitigation, and enhancement measures (PM&E) in the DLA raises the collaborative bar going forward. (*See e.g.*, E4.6, p. E-100; *see also* E4.7, p. E-100.) *There can be no material delay in collection, interpretation, and distribution of study results, if Conservation Groups are to remain fully vested in a collaborative solution to natural resources issues in this relicensing.*

II. History of Issues and Collaborative Efforts

Conservation Groups recognize that since our last written comments regarding the Second Stage Consultation Document, PC has undertaken positive changes in this relicensing's process and structure and provided independent facilitation services, established communication protocols, initiated dialogue on natural resources management objectives, and attempted to jointly develop and implement study plans. We appreciate this change.

G1-4 Despite these more recent process turnarounds, it is our direct experience that many issues are not yet resolved. Moreover, these unresolved issues will possibly decide the future of this collaborative relicensing effort. In some cases, these threshold issues even remain un-discussed. Conservation Groups have no crystal ball. However, as we commented responsive to PC's First Stage and Second Stage Consultation Documents, the universe of threshold issues in this relicensing, in our opinion, is discrete, and includes the following:

G1-5
- Cumulative impacts analysis that is commensurate in geographic and temporal scale and scope to Project impacts;
- Robust alternatives analysis consistent with applicable law;
- Project impacts to physical riverine and other biological conditions including but not limited to geomorphology, water quality, hydrology, sediment, instream flow assessment, habitat typing, entrainment, and ramping; and,
- Project impacts to native anadromous fish, volitional passage throughout the entire Project area, and development of a fish passage analytical approach that gives adequate consideration to a suite of parameters including, but not limited to: biological parameters; hydrological parameters; structural parameters; economic parameters; and a full range of decommissioning variations.

Response to Comment G1-2

Comment noted. The shift to discussions on Project impacts unfortunately did not occur for most Working Groups until fall of 2003.

Response to Comment G1-3

Following the distribution of the DLA, PacifiCorp worked very hard to present study results as available to the Working Groups. In many cases presentations were made at monthly meetings in an almost "real time" basis as information was coming in from researchers. This information can be found in the final license application.

Response to Comment G1-4

PacifiCorp maintains that although the Stage 2 consultation has come to a close with the submission of the FLA to FERC in February 2004, parties still have the opportunity to work together to address unresolved issues.

Response to Comment G1-5

PacifiCorp has addressed the commentor's four bulleted items in the final license application. At the request of relicensing participants and in the interest of collaboration, PacifiCorp conducted intensive fish passage and water quality modeling of at least five variations on dam removal, volitional fish passage and run-of-river operations. In addition, PacifiCorp

worked with relicensing participants to try and identify all of the implications of implementing numerous facility and operations scenarios through an exercise entitled System Landscape Options Analysis.

If collaboration is truly the hallmark of this relicensing, stakeholders must now turn to resolving these issues together.

PC will realize tangible benefits from real collaboration in this relicensing. For us, a significant turning point for this relicensing was February 22, 2001, when "[PC] formally agree[d] to work collaboratively with stakeholders to conduct a 'high level' options analysis, including some without Project scenarios, to explore fish passage options." While stakeholders appropriately continue to refine and build upon this commitment, there will of course continue to be differences of opinion. We believe this commitment in 2001 benefited PC because it broke an impasse. Something similar is needed now. *Collaborative relicensing efforts in our experience can forge differences into better results for all interested parties, including the licensee.*[3] Turning differences into resolutions in this relicensing stands as a tangible benefit to PC, when compared to the scale of uncertainty and confrontation in this proceeding over time if there is not a mutually agreeable solution. Thus, Conservation Groups recommend that PC embrace the stakeholder proposal to use significant portions of remaining meeting time in 2003 to begin Project impact and PM&E discussions.

G1-6

III. Data Interpretation and Organization

The DLA suffers from a lack of data interpretation. The DLA—and the basis for the DLA, which we presume to be the various draft technical reports—presents substantial quantities of data, but insufficient data analysis or interpretation. Conservation Groups request that this error be remedied in the FLA by summarizing in chart, or other efficient form, data, data analysis, and identified Project impacts.

G1-7

In addition, Conservation Groups found the DLA organization confusing. First, the relationship between the DLA and the Draft Technical Reports (DTR) is unclear. Study methods and results are dispersed to two documents. The DLA, generally, provides an overview of study method and objectives, while the DTRs catalogue raw data exhaustively. (*See e.g.*, Fisheries DTR, pp. 2-2 to 2-91; Water Quality Modeling DTR, pp. 4-63 to 4-97; Sediment and Bedload Sampling DTR, p. 6-71.) Conservation Groups request that the FLA not piecemeal this cumulative information. We also request that PC make the presentation of certain data more readable in the FLA. (*See* Figure E3.3-18, p. 3-65; Figure E3.3-27, p. 3-74; Figure E3.3-28, p. 3-75.)

G1-8

[3] For example, as to study plans, it is clear that collaboration benefits PC because "[r]esolving study disputes pre-filing would save about 15.3 months in total processing time." *Hydroelectric Relicensing and Nuclear Energy: Hearings Before the Subcomm. on Energy and Air Quality, and of the House Comm. on Energy and Commerce*, 107th Congress (June 27, 2001) (statement of Curt Hebert, Jr., Chairman, Federal Energy Regulatory Commission). Resolving study disputes pre-filing of a final license application saves licensees money. *See id.*

Response to Comment G1-6

Following the submission of the DLA in summer 2003, the collaborative process shifted to presentation of study results. In the fall of 2003, the process shifted towards discussing the future Project and potential PM&E measures as related to Project impacts.

Response to Comment G1-7

The lack of data interpretation in the DLA was a result of PacifiCorp agreeing to expand the scope of studies within the limited time frame for publication of the DLA. The FLA is much more comprehensive in addressing Project impacts and identifying PM&Es.

Response to Comment G1-8

The technical reports are intended as technical appendices to the FLA, thus information in the technical reports is "exhaustive." The FLA is specifically organized to address just those subject areas as referenced in 18 CFR, Section 4.51 to assure consistency with code requirements.

The cited figures have been reproduced in the FLA in a manner that affords better data interpretation.

IV. Deficiencies in DLA and Attached Technical Appendices

When a draft license application contains deficiencies, it is more likely that additional information and study requests will occur, thereby causing delay in relicensing. Thus, *DLA deficiencies can result in relicensing delays*. Conservation Groups strongly believe that PC is presented with a window of opportunity to remedy as many flaws in the Project's DLA as possible before filing a FLA. By seizing this opportunity, PC can proactively address the question of whether or not substantial evidence will exist to support relicensing decisions, achieve cost-effectiveness in the Klamath Project relicensing, and set the stage for productive discussions among stakeholders.

G1-9 The DLA proposes a new license term of 50 years. (*See* DLA, Vol. 1, Initial Statement, p. 1.) Conservation Groups believe that such a license term is excessive. The DLA "does not address PM&Es or continuing project impacts as is usual in the second stage of the relicensing process." (DLA, Vol. 2, Ex. E, p. E.1-1.) We, therefore, make the reasonable assumption that the FLA will propose a status quo Project; namely, a proposed Project that involves little or no redevelopment, new construction, new capacity, or environmental mitigation and/or enhancement measures. Our experience shows that the Commission issues new 50-year licenses, only if the licensee implemented significant costly improvements relative to the project's annual net benefit *and* there was a settlement where all parties agreed to the license term. We see a clear disconnect between not providing PM&E's *and* requesting a maximum license term. Conservation Groups believe that if the Klamath Project were relicensed, a 30-year license term would be appropriate.

A. Specific Draft Application Comments and Substantive Disagreements

G1-10 We organize these specific comments responsive to the DLA's order. Conservation Groups make the following two global recommendations, which we believe are applicable to the entire DLA: (1) the FLA should contain adequate PM&E measures and (2) the FLA should include all known relevant information and analysis.

1. Exhibit A

G1-11 • Conservation Groups request that the Project description in the FLA be revised to adequately describe the flow regulation functions of the Bureau of Reclamation-owned Link River Dam, Iron Gate development, and Copco No. 1. (*See* Ex. A, Table 2.1-1, p. 2-11.)

G1-12 The DLA leaves the misimpression that these facilities do not significantly store and release water or otherwise contribute to flow management over substantial periods of time, when in fact each of these Project features do or may play an integral role in providing flows needed to comply with minimum instream flow requiremenets.

G1-13 • Conservation Groups request that the Spring Creek diversion be described as not *currently* a part of the FERC 2082 project. (*See* A8.1, p. 8.1.)

AR, CalTrout, FOR, TU, WWF Comments on DLA
5

Response to Comment G1-9

PacifiCorp has not proposed a license term in the license application, however we have completed the economic analysis based on a 30-year period.

Response to Comment G1-10

The FLA contains a discussion of PM&Es as well as providing information on the analyses completed at the time of publishing the FLA.

Response to Comment G1-11

As described in Exhibits A and B, the active storage in the Klamath Hydroelectric Project represents about 4.4 percent of the average annual flow of the Klamath River at Iron Gate. Because of this limited amount of storage, the Project reservoirs are operating a diurnal cycle, storing water at night for use during the day to meet peak loads. The J.C. Boyle reservoir has about 1,700 acre-feet of active storage, equivalent to a 24-hour flow of about 870 cfs. The reservoir does not significantly affect the ability to meet minimum flow release requirements at Iron Gate dam (IGD). In a dry year, the IGD minimum flow requirements are 515 cfs July 16 through 31, the lowest minimums of the year. The active storage at J.C. Boyle reservoir represents about 41 hours of storage at this flow. This is not considered a significant ability to store and release water.

Copco 1 has 3.6 times more active storage than J.C. Boyle; storage which represents about 6 days of flow at 515 cfs. Again, this is not considered a significant ability to store and release water. Copco 2, which has no storage, is operated as a

run-of-river plant at all times. Copco 2 inflows are the same as the releases from Copco 1. At IGD, there is almost 51,000 acre-feet of active storage. At the minimum release requirement of 515 cfs, this represents about 50 days of storage, a more significant amount. This storage helps to assure that minimum release requirements below IGD can be met at all times.

Response to Comment G1-12

See response to comment #11, above.

Response to Comment G1-13

The FLA describes that the Spring Creek facility is not included in the current FERC Project, but that it is proposed for inclusion in the future Project.

2. *Exhibit B*

G1-14 • Conservation Groups request that the FLA be consistent with 18 C.F.R. § 4.51(c)(1) and provide a description of existing operations under adverse, mean, and high water years. (*See* DLA, B2.3, p. 2.7; *see also* B2.4, p.2.7.) Such description is crucial to
G1-15 informing stakeholders on operational flexibility under different scenarios—*i.e.*, run-of-river, peaking, block-loaded, or load-followed—and for a range of water year
G1-16 types. We also request a similar approach to describe operations at the Fall Creek development.

G1-17 • Conservation Groups request that the FLA provide for each Project facility dependable capacity (18 C.F.R. § 4.51(c)(2)), critical stream flow (18 C.F.R. § 4.51(c)(2)(i)), and powerhouse capability versus head (18 C.F.R. § 4.51(c)(2)(v)). (*See* DLA, B5.0 to B11.10, pp. 5-1 to 11-7.) The FLA should also provide operational rule curves for each facility, including for the Keno facility.

G1-18 • Conservation Groups request that PC provide assurances that any addition of the Spring Creek diversion to the FLA will be conditioned on stakeholder study development and PM&E measures. (*See* DLA, B13.0, p. 13-1.) We recommend augmenting the references to such collaboration in DLA Exhibit A (A8.1) and Exhibit B (B11.4).

3. *Exhibit C*

• No comments at this time. Conservation Groups reserve their right to provide comments in the future.

4. *Exhibit D*

G1-19 • Conservation Groups request that the FLA be consistent with 18 C.F.R. § 4.51(2)(e). The DLA provides insufficient information. For example, the DLA does not provide an estimate of Project fair value. (*See* DLA, D.3.1.) This deficiency prevents
G1-20 informed consideration of the reasonableness or feasibility of certain PM&Es. The DLA also does not provide an estimate of severance damages (*see* DLA, D3.3.) and does not provide annual project costs (*see* DLA, D4.0). Such blank spots will only unfairly force stakeholders to discuss relicensing solutions under a cloud of uncertainty.

G1-21 • Conservation Groups believe that the DLA overestimates the cost of replacing Project power by at least 10 percent. (*See* DLA, D6.0.) The DLA estimates replacement power costs based on the annual generation of 715,879 MWh, which is described as the average over the past 30 years. The California Energy Commission estimates the average annual energy output closer to 656,200 MWh, and our own analysis indicates annual production is 650,000 MWh. Using the higher figure overestimates the cost of replacing project power.

Response to Comment G1-14

Project operations are not significantly different under different water year conditions. The difference is in the amount of energy that can be generated. The differences from one water year condition to the next is whether to peak generation for a few hours or base load generation for more hours. Given the inflow and outflow constraints, this choice can only be made at J.C. Boyle (to the extent there is limited active storage) and Copco No. 1 and No. 2 (where there is somewhat more active storage in Copco reservoirs).

Fall Creek is a run of river project. There is no active storage.

Response to Comment G1-15

See response to comment #14, above.

Response to Comment G1-16

This information has been provided in the FLA.

Response to Comment G1-17

See response to comment #16, above.

Response to Comment G1-18

PacifiCorp will follow the appropriate processes and procedures. References to future stakeholder collaboration on Spring Creek are provided in Section E1 of the FLA.

Response to Comment G1-19

PacifiCorp has prepared the License Application to be consistent with FERC application requirements. An

estimation of Fair Value is presented in the License Application.

Response to Comment G1-20

Due to the uncertainty of study results, proposed enhancement measures were not included in the DLA. As such, certain financial information could not be appropriately provided. These values are now included in the license application.

Response to Comment G1-21

In the license application estimated power costs have been revised to exclude the East Side and West Side developments. A description of how the Project's annual generation was determined is now included in Exhibit D. Average annual generation can be defined using various time periods. PacifiCorp uses a 30-year average. It is unclear if Conservation Groups or CEC used a different period in their estimates.

- G1-22 Conservation Groups believe the DLA overvalues the average value of Project power produced by establishing a valuation of $56.71 per MWh. Power values, of course, vary on a daily and seasonal basis. The Project's power production rate also varies on an hourly, daily and seasonal basis. Thus, the DLA formula of multiplying Project megawatt-hours by this average price cannot accurately depict the value of production. We request that the FLA provide the basis for this valuation figure; including (1) whether it is a reasonable assumption that electricity demand and prices in PC's service area will increase by 2.1% annually, which is more than double Energy Information Administration (EIA) and Northwest Power and Conservation Council (NPCC) forecasts, and (2) whether the DLA's methodology overestimates the cost of procuring replacement power by $11 million.
- G1-23 The DLA makes no mention of the new 484 MW cogeneration facility that came online in Klamath Falls, Oregon, in 2001, nor of two applications for a total of over 1,500 MW in combined-cycle power plants in Klamath County currently before the Oregon Office of Energy for review. Conservation Groups believe this information is reasonably related to DLA sections D7.0, Consequences of License Denial, and D7.1, which addresses potential power sources to replace Project generation. Please describe whether the existing cogeneration facility would sufficiently replace Project generation and meet local grid demand. Please describe whether the proposed new projects that are pending approval would facilitate PC's need to cover any supply and demand gap between existing resources and system reliability requirements.
- G1-24 Conservation Groups request that the FLA correct the DLA's deficiency and provide sufficient information regarding sources and extent of financing and annual revenues. (*See* DLA, D8.0.)

5. *EXHIBIT E*

Fish Resources, Chapter 4

- G1-25 The fisheries assessment data presented for river reaches in the Project affected area are inadequate. Specifically, the effort expended does not appear to match the scope of the issues. (*See e.g.*, lamprey sampling insufficient to establish species presence and distribution (E4.2.1, pp. 4-35 to 4-53).)
- G1-26 Adequate species assessment data is crucial to determining Project impacts and PM&E measures regarding, among other things, sediment transport, instream flow, and fish passage.
- G1-27 Limited data timeframes restrict the utility of the data set. Specifically, section E4.2.1.2.6 states that seasonal relative abundance of redband trout do not show a trend in the Fall Creek bypass reach. This conclusion is based apparently on only 4 seasons of data (covering approximately 1 year), which is insufficient time to prove or disprove relative abundance trends.
- G1-28 The fisheries assessment data presented for Project reservoirs are inadequate. Sampling methodologies and sampling site selection targeted shortnose and Lost River suckers during a 2-year netting survey possibly to the exclusion of other

Response to Comment G1-22

The License Application includes information on how the values of Project power produced was estimated and our assumptions regarding demand and prices.

Response to Comment G1-23

Although new generation projects are now located or may soon be located in the Klamath Basin, such projects are non-regulated plants and not available within PacifiCorp's direct use to meet customer demand. It is unknown how much generation is available for purchase from those plants (or any other for that matter) should the Klamath Hydroelectric Project cease operation. If generation is available, cost per megawatt would be expected to be based on open market scale as the plants are operated for profit and not under Public Utility Commission regulations.

Response to Comment G1-24

Exhibit D of the FLA has been augmented.

Response to Comment G1-25

PacifiCorp feels that the fish assessment work conducted in 2000 and 2001 as part of relicensing, combined with other existing fish assessment work done in the Project area (e.g. OSU, Salt Caves, Hardy and Addley) is sufficient to characterize the existing fish community. Please see Exhibit E, Section 4, for a detailed discussion on Project effects to aquatic resources and proposed mitigation.

Response to Comment G1-26

The fish assessment studies were expanded in the interim between the DLA and FLA.

Response to Comment G1-27

Comment noted.

Response to Comment G1-28

PacifiCorp conducted hydroacoustic sampling in concert with vertical gill netting in Iron Gate and Copco Reservoirs in August and November 2003, and plans on repeating the sampling in April 2004. Please see the Fish Resources FTR for the results of the August 2003 sampling. A final technical report for all sampling events will be available in 2004.

species. Limited surveys restrict data extrapolation. (*See e.g.*, E4.2.2, pp. 4-53 to 4-64.) We request the expanded use of hydroacoustic surveys—supplemented with vertical gill nets to assign species to hydroacoustic data—to improve the understanding of fish using off-shore and deep-water habitats in Copco No. 1 and Iron Gate reservoirs. This approach should be applied over a range of seasons. We also request electrofishing surveys in J.C. Boyle, Copco, and Iron Gate reservoirs to improve relative abundance estimates of the entire fish community. G1-28

- Exhibit E inadequately describes historical anadromous fish distribution in the Project and Project-affected area. (*See e.g.*, E4.1, pp. E4-2 to E4-34.) Conservation Groups request that PC remedy this descriptive inadequacy because "past environmental impacts are relevant in determining what measures are appropriate to protect, mitigate and enhance natural resources . . . ."[4] There is simply no way to describe this Project's continuing impact to native anadromous fish without such a revised descriptive approach. To the maximum extent possible, Conservation Groups request that PC describe the upstream extent of all anadromous fishes historically present in the Klamath River and connected waterways upstream of Iron Gate. This discussion should include as much detail as the historical record affords with respect to the presence and timing of various life history stages by reach within the Project affected reaches (from the Link River downstream to Iron Gate). G1-29 G1-30
- Conservation Groups also request that Exhibit E—Botanical and Wildlife Resources—state that Project failure to provide anadromous fish access upstream of Iron Gate dam potentially impacts any and all mammal and bird species that historically fed on salmon carcasses during the late fall and winter seasons, especially black bear, raccoon, river otter, mink, and bald eagle. (*See* E5.7.2, pp. 5-115 to 5-120.) G1-31
- Pursuant to 18 C.F.R. §§ 16.8(b)(4), (b)(5), (c), the three-stage consultation process by definition remains open to reasonable requests for information and analysis. Unlike 18 C.F.R. § 16.8(c)(2), which deals with additional information needs after conclusion of the consultation process, requests for information, analysis, and studies at this juncture of the Klamath relicensing do not suffer from arriving too late. In creating a dam decommissioning alternative analysis (which Conservation Groups request, *see infra* "Fish Passage" comments), it is reasonable to look to the past abundance of native anadromous runs in the Klamath Basin because that historical status is relevant to determining whether any variation of a dam decommissioning alternative is the right PM&E measure. "Enhancement may in many cases constitute a reduction of the negative impacts attributable to the project since its construction."[5] G1-32
- Conservation Groups request that PC expressly amend the DLA, at E.4.1.3.6.2, pp. E4-19 and 20, to ensure no ambiguity exists that under the *current and existing conditions* spring chinook salmon are not generally found in the Klamath River or tributaries upstream of the Salmon River confluence. Also, please describe the historical distribution of spring chinook salmon in the Klamath River basin before the G1-33

[4] *American Rivers v. F.E.R.C.*, 187 F.3d 1007, 1008 (9th Cir. 1999).
[5] *American Rivers v. F.E.R.C.*, 187 F.3d at 1018.

Response to Comment G1-29

PacifiCorp is continuing to work with stakeholders on the historic distribution and run size of anadromous fish that were above Iron Gate dam through the fish passage modeling subgroup.

Response to Comment G1-30

See response to comment #29, above.

Response to Comment G1-31

Comment noted. The Terrestrial section of Exhibit E addresses the availability of anadromous and other salmonid carcasses for terrestrial wildlife.

Response to Comment G1-32

PacifiCorp is not preparing a dam decommissioning analysis; however, PacifiCorp is continuing to work with stakeholders on the historic distribution and run size of anadromous fish that were above Iron Gate dam through the fish passage modeling subgroup.

Response to Comment G1-33

See the Fish FTR for information on spring Chinook salmon.

G1-33 construction of Copco No. 1 development. Similar revisions in this section are required for each anadromous stock/species addressed.

G1-34
- The DLA describes non-native species abundance in Iron Gate and Copco Reservoirs. (*See* DLA, Tables E4.2-28, p. E4-61; E4.2-29, p. E4-63.) Conservation Groups request that the FLA provide fishery management strategies to limit non-native species impact on native species, including strategies for reducing this impact on any future reintroduced native anadromous fish in any Project stream reaches. Such strategies should cumulatively consider and manage non-native species distribution and abundance in response to any proposed flow regimes and the resultant water temperature conditions. Conservation Groups have had success developing narrowly tailored adaptive management regimes to address non-native species management in other hydro project contexts.

G1-36
- Conservation Groups request that the FLA contain natural resource measures that are consistent with California Department of Fish and Game objectives for "Wild Trout Management Areas" within the Project. (*See* DLA, E4.3.1.4, p. E4-90) Specifically, we request that the FLA give considerable attention to Shovel Creek conditions, including but not limited to grazing impacts, spawning habitat, and habitat connectivity throughout the entire creek. (*See* DLA, pp. E4-14, E4-33, E4-43, E4-90.)

G1-37
- Section E4.2.1.2.6 states that seasonal relative abundance of redband trout do not show a trend in the Fall Creek bypass reach. This conclusion is based on slightly more than one year of data, which is insufficient time to prove or disprove relative abundance trends. (*See* E4.2.1.2.6, pp. 4-52 and 4-53.) The DLA further concludes relative abundance of redband trout collected in Fall Creek upstream of the diversion in Fall of 2001 was less than half of the relative abundance in the bypass reach that same season. Meanwhile, reported relative abundance in the Fall Creek diversion canal was over 3 times higher than that reported in the bypass reach. Thus, Conservation Groups certainly see a "trend" that suggests entrainment of redband trout could be a major impact to the population. Redband trout abundance appears significantly decreased upstream of the dam, and the diversion's lack of upstream fish passage facilities precludes or limits recruitment of individuals from the bypass reach resulting in a perpetually depressed population.

Fish Passage

G1-38
- The DLA contains insufficient information regarding fish passage at Project features, even though to Conservation Groups' knowledge results do exist for engineering reviews of proposed structural modifications, new facilities, or other fish passage options, including associated cost estimates. (*See* DLA, E4.5.6, pp. 4-97 to 4-98; *see also* DTR, Fish Resources, section 1.5.) We also note that the DLA does not contain or mention certain stakeholder work products that attempt to provide a "high level" analysis regarding dam decommissioning, such as the Systemwide Landscape Options Matrix (SLOM). Conservation Groups have not waived any request or argument for more detailed and robust dam decommissioning analysis.

G1-39

AR, CalTrout, FOR, TU, WWF Comments on DLA
9

Response to Comment G1-34

Comment noted. Fish management strategies would need to be done collaboratively with appropriate state and federal agencies. PacifiCorp is continuing to work with stakeholders on fish passage model scenarios and the issue of anadromous fish reintroduction in the Upper Klamath River Basin.

Response to Comment G1-35

See response to comment #34, above. Such considerations will be made when developing management strategies.

Response to Comment G1-36

See Section 4 of Exhibit E for a detailed discussion on Project effects and proposed mitigation.

Response to Comment G1-37

Comment noted. Please see Section 4 of Exhibit E for a detailed discussion on Project effects to Fall Creek and proposed mitigation.

Response to Comment G1-38

Section 4.3, Exhibit E of the FLA contains an updated discussion of fish passage considerations.

Response to Comment G1-39

The SLOM alternatives are currently being analyzed by the Habitat Modeling Subgroup. As some of the SLOM alternatives involve dam decommissioning, it is envisioned

that the analysis will be sufficient to meet the need for a more detailed analysis.

G1-40
- Conservation Groups request clarifying language be added to the FLA. The DLA states that "[f]ollowing a series of meetings, PacifiCorp, in response to stakeholder requests committed in February 2001 to a 'high level' assessment of fish passage alternatives including potential dam-out scenarios." (DLA, E4.5.6, p. 4-94.) We propose the following language for insertion immediately after this statement: "*During the meetings leading to this commitment by PacifiCorp, numerous stakeholders had strongly requested PacifiCorp to conduct in depth studies of dam removal as a fish passage alternative. PacifiCorp agreed to conduct only a "high-level analysis" of dam removal scenarios, as opposed to any in-depth studies.*" Our rationale is that although stakeholders may have agreed to this commitment by PC, Conservation Groups, at least, have not waived any request or argument for more detailed and robust dam decommissioning analysis. The DLA should not be read to imply any such waiver.

G1-41
- Conservation Groups request again that PC analyze dam decommissioning as a reasonable alternative for achieving volitional fish passage and include such analysis in their FLA. Conservation Groups believe that inadequate analysis of this subject will prevent stakeholders and PC from making informed recommendations and decisions about the most effective passage option. The removal of a certain structure(s) may be a more cost effective means of passing fish than other strategies. Selecting a less than optimal passage strategy, or more costly strategy makes no sense under the Federal Power Act, no sense for the company's shareholders, or for its customers pursuant to its public utility duties.

G1-42
- Conservation Groups request that the FLA be drafted to assure consistency with the Interagency Task Force (ITF) Report on NEPA Procedures in FERC Hydroelectric Licensing (May 2000), so that the licensee prepared informational record does not preclude FERC consideration of reasonable Project alternative scenarios.

G1-43
- The DLA discussion of Iron Gate Fish Hatchery operations should include an analysis of accidental hybridization of coho and chinook salmon during spawning operations. (*See* DLA, p. E-47.) Behnke (2003) noted that because of spawning time similarity and subtle differences in appearance, coho salmon and chinook salmon have been inadvertently spawned together at the Iron Gate Fish Hatchery resulting in a loss of genetic diversity and unique life history traits.

Water Quality, Chapter 3

G1-44
- Conservation Groups believe substantial data exists on certain issues, despite DLA claims to the contrary. For example, data known to us to be available, but not presented in the DLA, include Reservoir Bathymetry (*see* DLA, p. E3-150) (completed Fall 2001) and Water Quality Modeling for dissolved oxygen, nutrients, and pH (*see* DLA, p. E3-145). The DLA briefly discusses reservoir bathymetry. (*See* DLA, p. E3-150.) It directs stakeholders to the technical report *Bathymetry and sediment classification of the Klamath River hydropower impoundments* (Eilers and Gubala 2003). The DLA does not appear to contain this report, nor does any DTR. Bathymetry data was collected in 2001 (*see* DLA, p. E3-148). Conservation Groups

Response to Comment G1-40

Appendix E1-A contains a record of stakeholder collaboration, agreements, and disagreements.

Response to Comment G1-41

See response to comment #39, above.

Response to Comment G1-42

The final license application (FLA) provides a thorough description of the existing Project, its operation, and the Project's effect on the surrounding environment. In addition, the FLA provides a thorough description of the proposed Project, proposed Project operations, and the proposed Project's anticipated enhancement to the surrounding environment. The proposed Project was developed considering a number of factors, including the issues, questions and concerns raised by participants in the prefiling collaborative consultation process; existing information; and the results of over 38 environmental studies developed by the Klamath Collaborative.

It is not possible for PacifiCorp to accurately predict the alternatives, or all of the information that FERC may need to analyze these alternatives in their Environmental Impact Statement. Should FERC require additional information, they will likely request it from PacifiCorp.

At the request of relicensing participants and in the interest of collaboration, PacifiCorp conducted intensive fish passage and water quality modeling of at least five variations on dam removal, volitional fish passage and run-of-river operations. In addition, PacifiCorp worked with relicensing participants to try and identify all of the implications of implementing numerous facility and operations scenarios through an exercise

entitled System Landscape Options Analysis. All of this information is included in the appended technical reports and consultation record. PacifiCorp has addressed alternatives and their associated issues as a means to inform the subsequent NEPA process.

Response to Comment G1-43

Comment noted.

Response to Comment G1-44

Comment noted. Please see the Water Quality FTR and Section 3 of Exhibit E for the results of relicensing studies completed to date.

G1-44 assume this DLA oversight is accidental, and request that PC provide this data and analysis as errata to the DLA.

G1-45 • The DLA explicitly describes water quality modeling methodology. (*See* DLA, E3.7.5, pp. 141-45.) Conservation Groups request that the FLA provide equally

G1-46 detailed water quality modeling results and analysis, particularly for water quality conditions dissolved oxygen and temperature. (*See* DLA E3.7.5.1; *see also* DTR 4.7.12.2 (lack of water quality modeling results other than temperature).)

6. Exhibit H

G1-47 • Conservation Groups believe that Exhibit contains a factual error. It is not accurate to state that, "[t]ypically, once the irrigation season ends, all available flow from Upper Klamath Lake tributaries is stored in the Lake and released for irrigation purposes the next irrigation season." (H1.2, p. 1-3.) Flows from Upper Klamath Lake typically rise to over 4,000 cfs in November, decrease to 1000 cfs in February, and rise to over 3,000 cfs in April, before the onset of irrigation season reduces flow again below 1,000 cfs. (*See e.g.,* Initial Assessment of Pre- and Post-Klamath Project Hydrology on the Klamath River, Balance Hydrologics, 1996, Figure 22.)

G1-48 • Conservation Groups believe Section H.2.1 may over estimate load growth forecasts.

G1-49 • Conservation Groups comments regarding Exhibit D are applicable to Section H.2.1 and H.2.3, H.3.0, and H.3.3. Specifically, please provide the basis for the DLA's

G1-50 three annual growth rate forecasts of .7%, 2.1%, and 3.3% respectively. (See DLA, H.3.1, p. 3-1.) Also, please provide the basis for power cost assumptions in H.3.3.

G1-51 • Please provide the basis for the DLA conclusion that "if a new license is not issued, it would be quite costly for PacifiCorp to replace the spinning reserve that the two powerhouses provide with other, more costly resources."

G1-52 • Please explain whether the DLA conclusion that PC "would be required to acquire power and wheel it into the southern Oregon area via Bonneville Power Administration transmission lines, incurring fees for purchasing power and wheeling[,]" (DLA, p. H.2-7), if it lost Project generation, accounts for new and proposed local power generation facilities. Please explain whether this DLA conclusion is consistent with a second DLA conclusion that "if generation were to cease at the Klamath Project, PacifiCorp would still be able to service its local customers." (*id.*)

G1-53 • Please further explain the DLA conclusion that "PacifiCorp could have difficulty purchasing sufficient peak power from the existing power grid." (DLA, H.2.4, p. 2-8.) Please define "difficulty" as it is used in this conclusion.

B. Specific Technical Appendices Deficiencies and Substantive Disagreements

G1-54 We note the DLA admission that "at this time not all studies have been completed and, therefore, are not fully reported . . . ."[6] One objective should be to finish as many

[6] DLA, Exec. Summary, p. 2-1.

AR, CalTrout, FOR, TU, WWF Comments on DLA
11

Response to Comment G1-45

Comment noted. Please see Chapter 2, Exhibit E for a detailed discussion on the Project's effect on water quality and PacifiCorp's proposed mitigation measures.

Response to Comment G1-46

Comment noted. Please see Exhibit E for a detailed discussion on the Project's effect on water quality and PacifiCorp's proposed mitigation measures.

Response to Comment G1-47

Agreed, not all Upper Klamath Lake tributary flows are stored in Upper Klamath Lake outside of irrigation season. If climatic conditions are such that inflow is high and results in lake elevations above the flood rule curve, lake water is moved downstream.

Response to Comment G1-48

It is unclear as to why Conservation Groups feel that PacifiCorp may have over estimated load growth forecasts. The forecast comes from the company's Integrated Resource Plan (IRP). The IRP was developed with input from more than 30 stakeholders.

Response to Comment G1-49

The basis for the three annual growth rate forecasts and the basis for the power costs assumptions are provided in Exhibit H of the FLA.

Response to Comment G1-50

The basis for the three annual growth rate forecasts and the basis for the power costs assumptions are provided in Exhibits D and H.

Response to Comment G1-51

This section in Exhibit D of the license application has been re-written to help address this comment.

Response to Comment G1-52

If generation were to cease at the Klamath Hydroelectric Project, measures would need to be taken to maintain supply to Klamath basin customers. Sources include bringing available power in from outside the basin. BPA lines are already in the area and may be available for power transmission. Local power sources (e.g Klamath Cogeneration plant) may not be an available supplier as another entity via power contracts may already have purchased their generation.

.

Response to Comment G1-53

Depending on the balance of future western state electrical demands and generation supply, power may not be easily available to meet peak customer demands. Under such conditions, power may not be readily available or have limited transmission into the Klamath basin. This would be similar to the 2001 power crisis when rolling blackouts occurred.

Response to Comment G1-54

Study results were shared with the work groups as they became available within the interim period between the DLA and the FLA. All study results available in time for publication of the FLA have been reported in the FLA.

G1-54 studies as possible and provide as many study results as possible in the final license application. We reserve our right to respond to certain portions of the technical reports once all studies are fully reported. However, we do provide below limited comments below.

G1-55
- DTR Fisheries. 4.3.3.1 (4-27 to 4-29) – Caution should be exercised in employing the Smith River as a reference river for purposes of stage reduction magnitude and frequency at Iron Gate under current operational constrictions. The Smith River has a considerably different hydrologic regime (more rain dominated) and channel configuration (more confined) than the Klamath River, at least the reaches immediately downstream of Iron Gate dam. As a result of these factors, one would expect stage changes to be more rapid in the Smith than the Klamath. While it is also true that the fish species using these two rivers are similar, it may not necessarily be true that these similar species react to flow fluctuations in these rivers similarly. The DTR Fisheries should dampen its reliance on this tactic. It may be useful to show several other unregulated river data sets that share hydrologic and/or channel configuration characteristics with the Klamath River near Iron Gate for additional points of comparison. The Rogue River upstream of Prospect, Oregon is spring-fed and may be somewhat closer hydrologically to the Klamath River in the vicinity of the Project than the Smith River.

G1-56
- 5.4.3.5 (pp. 5-112 to 5-113) – PacifiCorp has collected limited information on the species and size classes of fishes collected during fish salvages in the J.C. Boyle canal. We assume that any fish collected during these salvages are the result of facility entrainment. We interpret this data—even in its preliminary state—to show that existing fish screen facilities fail to protect fish resources.

G1-57
- DTR, Fish Passage Planning and Evaluation (Study Plan 1.10) – We understand this study to be broader than the DLA acknowledges. The DLA states that the fish passage study "consists of three general components: 1) engineering evaluation of existing and potential new fish passage facilities, 2) modeling exercises to investigate the feasibility of re-introducing anadromous fish to the project area, and 3) evaluation of the Iron Gate fish hatchery." (DLA, Ex. E, p. 4-97.) This limited description does not accurately reflect the purpose of the fish passage study. As described in Study Plan 1.10, the purposes include: 1) to evaluate existing passage facilities and determine necessary improvements; 2) to assist in the development of a strategy for restoring the full compliment of historic native anadromous fish, including chinook salmon, coho, steelhead, and lamprey to areas blocked by Project facilities; 3) to develop and evaluate the relative contribution and engineering and biological impacts of various options and scenarios for fish passage, and rank relative effectiveness of fish passage options to include structural facilities as well as non-structural options, and dam removal; 4) develop conceptual engineering plans for new fish passage facilities; and 5) evaluate the Iron Gate hatchery. Moreover, the DLA appears to hedge on this study's defined purpose. Specifically, DLA states the study purpose is in part to evaluate the feasibility of reintroducing anadromous fish to the project area. As currently drafted, however, the Fish Passage study plan, and the modeling aspect

Response to Comment G1-55

Comment noted.

Response to Comment G1-56

Comment noted.

Response to Comment G1-57

Comment noted. PacifiCorp and the stakeholders are currently modeling the SLOM alternatives to determine the benefits and risks to anadromous reintroduction for each alternative. This work is on-going, and we expect to have results to report in mid-2004.

G1-57 of it, is designed to assist in *developing a strategy for reintroducing anadromous fish*, including identifying the most effective passage technology.

- The Fish Resources DTR discusses a two-tiered modeling regarding anadromous fish passage and reintroduction. (*See* Fish Resources DTR, p. 5-108.) This section is dated and should be amended to reflect the status of modeling efforts. The FLA should unambiguously convey the decision of the Fish Passage Working Group to use a set of models as gaming tools to assess and prioritize mitigation strategies and options. The first model, KlamRas, focuses on dam/reservoir passage efficiencies. The second model, Ecosystem Diagnostic and Treatment (EDT) will be used to assess existing and potential fish capacity and productivity in the upper Klamath River basin. Consensus or lack of consensus at the Fish Passage Working Group, Modeling sub-group level should be documented in the FLA for model population issues like (i) model data needs, (ii) identification of passage scenarios to model and (iii) for what fish. The FLA should also clearly state an acknowledgment to the effect that there is no fully correct model. Conservation Groups view models as tools for organizing a problem solving effort. To limit the inherently misleading aspects of models, the DTR process here should ensure a thorough understanding of model assumptions, inputs, structure, behavior and outputs necessary to reduce possible misleading information and affirm stakeholders' confidence. Thus, we recommend a task specifically targeted at increasing the collaborative groups "comfort level" of the model and results. We suggest a stakeholder process that: (i) reviews biological rules; (ii) reviews interactions between model parameters; (iii) develops an efficient approach to sensitivity analysis; and, (iv) develops a validation approach that compares consistency of EDT production functions with biological information and other models. (G1-58)
- The cost estimate for the trap and haul option in DTR Fish Resources does not include the likely substantial costs of upgrading roads to allow an effective trap and haul program. (G1-59)
- DTR, 4.7.12.2, Water Quality Analysis and Modeling Process – Conservation Groups appreciate PC's approach to this technical subject, which includes extensive graphs and tables summarizing water quality modeling results for temperature for the three different scenarios: existing conditions, steady flow and without project. We believe this approach is a useful reference for the fish passage-working group. (G1-60)

V. Conclusion

Again, Conservation Groups thank PacifiCorp for the opportunity to comment on the Draft License Application for the Klamath Project. We intend to continue our longstanding participation in the Klamath Project relicensing process because we believe mutual success can be achieved and that PC will foster and facilitate the opportunity for meaningful joint development of natural resources license conditions. We can commit to a joint effort with every other stakeholder to attempt to resolve this relicensing in a collaborative fashion that works for all, including PacifiCorp. We urge PacifiCorp to lead this process to that end. Significant work remains before we can start to make sound

AR, CalTrout, FOR, TU, WWF Comments on DLA
13

Response to Comment G1-58

Related sections in the Fish Resources FTR and Exhibit E have been revised to reflect that the models are gaining tools - they can help us understand the alternatives. Preliminary model results are included in the FLA. As the modeling group completes its analysis, results, disagreements, assumptions etc. will be conveyed to the stakeholders.

Response to Comment G1-59

At this time it is uncertain as to whether or not roads in the area need to be improved. The need for road improvements could vary by alternative (which route) and time of year the trapping system is operational.

Response to Comment G1-60

The Fish Passage Work Group has access to these study results. We assume that the work group will utilize this information as needed in modeling SLOM alternatives.

recommendations for future license conditions, or Project protection, mitigation, and enhancement measures. Our desire is to begin that work now. Please feel free to contact any of us with any questions you may have regarding these comments.

Respectfully,

/s/
Charlton H. Bonham
California Counsel
Trout Unlimited
828 San Pablo Avenue, Suite 208
Albany CA 94706

/s/
Brian Barr
Program Officer
World Wildlife Fund
116 Lithia Way, Suite 7
Ashland, OR 97520

/s/
Kelly Catlett
Hydropower Reform Policy Advocate
Friends of the River
915 20th Street
Sacramento, CA 95814

/s/
Curtis Knight
Regional Conservation Director
California Trout
PO Box 650
Mt. Shasta, CA 96067

/s/
Steve Rothert
Associate Director, Dams Program
American Rivers
409 Spring Street
Nevada City, CA 95959

cc: John Mudre, FERC
Klamath Collaborative Relicensing Distribution List

AR, CalTrout, FOR, TU, WWF Comments on DLA
14

Klamath Forest Alliance
PO Box 820
Etna, Ca 96027

Mr. Todd Olson
PacifiCorp
825 NE Multnomah - Suite 1500
Portland, Oregon 97232

Re: The Klamath Forest Alliance Comments on Draft License Application for New License, Klamath Hydroelectric Project, Klamath River, F.E.R.C. No. 2082

September 24, 2003

Dear Mr. Olson:

The Klamath Forest Alliance or KFA is submitting the following comments to PacifiCorp/Scottish Power for the Draft License Application for New License, Klamath Hydroelectric Project, Klamath River, F.E.R.C. No. 2082 .

A) General Comments

The Klamath Forest Alliance (KFA) has participated in the license application since its inception. This has included participation in the collaborative process – including the Socio-economic work group, the Plenary and the TANGO. During countless hours of meetings, we have engaged with PacifCorp/Scottish Power (PC), its consultants and other collaborators on many issues. Through the hard work of all of the collaborators good results have been achieved. While more remains to be done as detailed in our specific comments and those of other stakeholders, progress has been made toward common understanding of technical aspects of the Project and its impacts. And yet, the core and essence of what KFA has sought in this process has not been achieved.

What we have been looking for from PC is a clear and unambiguous acknowledgement of the major part the Klamath Hydroelectric Project has played and continues to play in the historic decline of the aquatic ecosystems of the Klamath River and of the Corporation's moral, social and legal obligations to adequately mitigate for this decline. We believe acceptance of corporate responsibility must take place and that it must encompass the range of ecological, resource, social and economic impacts which are associated with and have resulted from the Project.

The Klamath Hydroelectric Project does not exist in a vacuum. Rather the Project exists in time; there was a time when the Project did not exist and there may be a time in the future when it no longer exists. The Project is clearly not responsible for all of the ecological, resource, social and economic problems of the Klamath River and its natural and human communities. But the Project has played an important role in the generation of these problems and we believe it must play an important role in their solution. In the context of the Klamath Project, corporate responsibility dictates a key role for PacifiCorp/Scottish Power in the restoration of the Klamath River and the renewal of its human and natural communities.

G2-1(B)

To be precise, PC is responsible for adequately mitigating all impacts – or portions of impacts - to Klamath River aquatic and terrestrial ecosystems, fisheries and other resources, social systems and economies for which the Klamath Project is responsible. We want PC to accept this responsibility and to state that it does so up front in its application. We also want PC to consider a full range of options for addressing its responsibility for mitigating impacts and to work with all interested parties in a collaborative manner to find a solution that meets the Corporation's legal, moral and social obligations in a manner that all stakeholders can accept and that – based on the best available scientific, social, economic and technical information – satisfies the mitigation imperative.

Thus the main function of the application and the technical studies and reports done in conjunction with it are to tease out those impacts and portions of impacts which are associated with the Project over its entire history and which are ongoing today, and then to design, propose and implement mitigation that adequately addresses these impacts.

We believe it is abundantly clear and unambiguous that mitigations designed and implemented in the past have, for the most part, failed to mitigate for the Project's impacts. For example, each stage of Project development extirpated large portions of the largest and (culturally, religiously and economically) most important runs of anadromous fish in the Klamath River Basin – Spring Chinook Salmon. Iron Gate dam – the last project facility constructed – did not end this process, nor did it end with abandonment of attempts to raise Spring Chinook salmon at Iron Gate hatchery. Rather Spring Chinook have continued to decline. Since construction of Iron Gate Dam, the extirpation/extinction event has continued to extend through more and more of the Klamath River Basin. The last Spring Chinook – what settlers there called the "Silvers" - were seen in the Scott River in the 1970s. At that time robust runs of Spring Chinook could still be found in mid-Klamath tributaries. Now the only significant population is in the Salmon River and that population is at high risk of extinction according to the American Fisheries Society.

G2-1(C)

Is the Project entirely responsible for the ongoing Spring Chinook salmon extirpation/extinction event? Clearly not. Does the Project bear major responsibility for the extirpation-extinction event? The answer is clearly "Yes."

Similarly with other ecological, social and economic resources: the Project – and its owner operator PC – bear major but not sole responsibility.

While responsibility must be acknowledged and qualified through studies and estimations, the most important question is what should PC do about it? Here is where the art of collaboration can play the most important and perhaps decisive role. We hope PC will choose to use this tool as it moves forward toward not just a new license but a new Project – a Project which will play a critical role in restoration of the natural and human ecology of the Klamath River and its natural and human communities.

B) Relicensing Process

G2-1

The initial response to our review of the DLA recognizes how little newly collected, Project-specific information is presented in the document. This appears to be due to the amount of data that have yet to be either collected or fully analyzed. On the matter of submitting a complete Final License Application (FLA) to the F.E.R.C. before March 1, 2004, we urge PacifiCorp to complete any outstanding studies, analyze the data, and present it to relicensing stakeholders as

Response to Comment G2-1(C)

PacifiCorp maintains that a variety of factors have contributed to the decline of Spring Chinook in the Klamath Basin. Evidence to support the Project as the major contributor is lacking.

Response to Comment G2-1(B)

PacifiCorp's responsibility is to provide FERC with information needed for the regulating agency to adequately consider power and non-power values. The License Application contains PacifiCorp's proposed measures to enhance social and environmental resources while providing continued renewable hydroelectric power.

Response to Comment G2-1

PacifiCorp has made every effort to document all study results available at the time for FLA publication.

quickly and in as complete a form as you are able. Providing the results of these studies to stakeholders familiar with the resources in the basin and having discussed these results will provide PacifiCorp with the opportunity to present the most accurate assessment of Project impacts in the FLA. G2-1

Timing issues notwithstanding, we would like to recognize PacifiCorp for their willingness to build on their traditional relicensing approach during the development of study plans and preliminary impacts analysis by employing collaboration with the varied stakeholders engaged in the proceeding.

Once satisfactorily completed, the breadth of information collected and analyzed through these collaboratively designed studies will ensure for a more complete understanding of the Project's impacts to hydrology, water quality, fish, botanical, wildlife, recreational, cultural, aesthetic, and socioeconomic resources and allow for the development of a thorough and proposed protection, mitigation, and enhancement (PM&E) measures package to address identified impacts.

Along these lines, we urge PacifiCorp to continue using this collaborative approach during the identification of impacts and development of PM&E measures. Stakeholder involvement in these discussions will be important to gain broad support for the FLA due to F.E.R.C. before March 1, 2004. G2-2

C) Draft License Application Adequacy

The KFA must preface the following comments on the DLA by stating our understanding of the purpose of this document. We believe, per 18 CFR 16.8(c)(4)(i)(B) and 18 CFR 16.8(c)(4)(ii), that the DLA should provide the results of studies and a discussion of any applicant proposed PM&E measures. G2-3

As a "preview" of the FLA, we were expecting to review considerable information to support a discussion of Project impacts (per 18 CFR 4.51(f)), a necessary component to supporting applicant proposed PM&E measures. Presentation of this information is necessary prior to the development of the FLA to identify disagreements in data analysis, conclusion, implication, and proposed PM&E measures. Identifying these disagreements well in advance of the FLA allows all parties to satisfactorily address their concerns and potentially resolve differences. Further, as accomplished through the DLA, these issues become a substantial part of the F.E.R.C. proceeding record through the written comments as well as a joint meeting designed for the explicit purpose of attempting to reach agreement on proposed PM&E measures per 18 CFR 16.8(c)(8). We are disappointed that information pursuant to the above are not presented in the DLA, particularly as they related to water quality, fish, and socioeconomic resources. The lack of data and analyses to support Project impact and proposed PM&E measures falls short of the intent of 18 CFR 16.8 (c)(4), 18 CFR 16.8 (c)(5), and 18 CFR 16.8 (c)(6) and necessarily constrains the utility of our review and comment. G2-4 G2-5

The following comments do not constitute specific disagreement with items included in the DLA, but rather identifies broad issues that the KFA believes is necessary for the adequate characterization of impacts, development of PM&E measures, and facilitation of F.E.R.C.'s analysis of reasonable alternatives.

3

Response to Comment G2-2

PacifiCorp continued with the collaborative process, past the submission of the DLA, through the disclosure of impacts and development of PM&Es, and it will continue to share information from ongoing studies as the information becomes available.

Response to Comment G2-3

The draft license application (DLA) included a thorough description of the existing Project, its operation, and the Project's effect on the surrounding environment, to the extent it could be described based upon available study results. PacifiCorp and relicensing participants had agreed prior to development of the DLA that it would not be appropriate for PacifiCorp to draw conclusions in the application about the effects of the existing Project on the surrounding environment, unless those conclusions were based upon study results.

As a result of the Klamath Collaborative's extensive changes to the number and scope of studies, few studies were completed in time to inform the development of the DLA. Subsequently, PacifiCorp did not have sufficient information to justify proposing changes to the existing Project. Absent information to the contrary, existing facilities and operations were deemed appropriate.

Now that almost all studies have been completed and reviewed, changes to the Project and its operations have been proposed. This proposed Project, proposed Project operations, and the proposed Project's anticipated enhancement to the surrounding environment are thoroughly described in the final license application.

As per 18 CFR 16.8(c)(2) and (3), an application will not be rejected by FERC as deficient merely because late studies requested by agencies during the second consultation stage are not completed during the second stage.

Response to Comment G2-4

PacifiCorp provided available information up to the submission of the DLA. The omission of some study results and future PM&E measures was partially a result of parties not being able to agree on the scope of study plans. In some cases studies were not fully underway until study plans were approved by the Working Groups and the Plenary. Most study plans, following collaborate approval, also included additional work tasks that took longer to complete, or were seasonally driven. The final application includes the results of almost all studies identified through the collaborative pre-filing consultation process.

Response to Comment G2-5

See response to Klamath Forest Alliance comment #3, above.

G2-6 As PacifiCorp models, analyzes, and interprets data from ongoing or recently completed water quality studies, we request you include sufficient detail on the impacts of existing project facilities and operations and potential future facility and operational configurations on water quality in the Link, Lake Euwana, and Klamath River portions of the Project area (section E3.7) to allow F.E.R.C. to analyze a full range of alternatives in their NEPA process. Project impoundments, bypass reach flows, and operations at J.C. Boyle and possibly the Copco facilities contribute to daily and seasonal impacts to water quality parameters such as temperature, dissolved oxygen, chlorophyll a, pH, toxic substances, and possibly turbidity. A thorough understanding of the current contribution of the Project to impacts on these parameters as well as the possibilities for addressing any identified impacts through future facility configuration and operational options will need to be addressed in the FLA.

G2-7 As PacifiCorp collects, models, analyzes, and interprets ongoing or recently completed instream flow study (section E4.5.9), ramping study (E4.5.1), and resident trout movement in response to movement (E4.5.4), we request you include sufficient detail on the impacts of existing project operations, as well as on potential proposed operations, for instream flow levels and ramp rates in all Project-affected reaches. This information should not only address the quantities of flow projected for current and proposed operations at each facility, but also needs to address

G2-8 fluctuations in flow and the impacts those fluctuations would have on all affected life stages of fish living or likely to live in those reaches. This includes, for example, the analysis of fluctuating flows on incubating chinook salmon in the Klamath River immediately downstream of J.C. Boyle (allowing for the reintroduction of anadromous fish to this reach).

G2-9 Inherent in this request for instream flows and ramp rates to enhance habitat and protect anadromous fishes is the likelihood that the operational directives issued through Biological Opinions (B.O.) issued to the Bureau of Reclamations may not continue through the life of PacifiCorp's next license order and recognition of the importance of anadromous fish restoration beyond Iron Gate dam. In the absence of B.O. measures, flows and ramping rates at Iron Gate Dam will be subject to F.E.R.C. license order requirements. As such, PacifiCorp will need to

G2-10 present site-specific information to F.E.R.C. in the FLA regarding minimum flow requirements and appropriate ramping rates for the Iron Gate facility for the range of species existing in the Klamath River downstream of the dam during some part of the year. Similar information for both instream flow levels and ramping rates should be a prominent part of each facility that has the ability to control flows to free-flowing river reaches including Eastside and Westside, Keno, J.C. Boyle (bypass and "peaking" reaches) and Copco No. 2 bypass reach.

G2-11 The analyses and recommendations for Project facilities upstream of Iron Gate dam must include provisions for anadromous fishes whose access may be restored to these reaches. As a part of this analysis, PacifiCorp will need to present information on the capabilities of Project-associated reservoirs to store and release water for the purpose of providing appropriate flow regimes in each Project-affected reach under a full range of water availability projections. The California Energy Commission concludes that the value of the fisheries and water resources in the California portion of the Klamath River outweighs the value of the hydroelectric facilities.

G2-13 As PacifiCorp collects, models, analyzes, and interprets data from ongoing or recently completed fish passage related studies (sections E4.5.2, E4.5.3, E4.5.4, E4.5.6, E4.5.7, and E4.5.8), we request that you include sufficient detail on the impacts of existing project facilities on the migrations of anadromous and freshwater fishes as well as on the connectivity of populations or sub-populations of non-migratory aquatic species (including the fish species utilized by bivalve

4

Response to Comment G2-6

Substantial information has been added to the analysis of water quality in the FLA (Exhibit E, chapter E3) and Water Resources FTR, including water quality modeling of the Klamath River from Link dam to Turwar (near the river's mouth). Measures proposed for enhancement of water quality are described in Exhibit E, section E3.8. Water quality modeling includes analysis of scenarios for existing conditions, “steady flow operation”, and without-Project (all facilities removed) as described in section 4 of the Water Resources FTR. Stakeholders requested modeling of other potential Project removal alternatives (e.g., Iron Gate and Copco I and II removed, Iron Gate removed) to complete a System Landscape Options Matrix (SLOM) assessment. The results of model runs of these SLOM scenarios are not discussed in the FLA or FTR, because the SLOM scenarios are not a necessary component of PacifiCorp's evaluation for this license application. These SLOM runs are intended to assist stakeholders to complete an assessment of whether information will be available to FERC to examine potential Project removal alternatives. PacifiCorp plans to complete the SLOM scenarios and present them to stakeholders in early Spring 2004.

Response to Comment G2-7

Using information from Aquatic studies, the Exhibit E reviews impacts in light of proposed operations and proposed PM&E's.

Response to Comment G2-8

PacifiCorp is continuing to work with the Fish Passage Modeling subgroup and stakeholders to address these issues

and to evaluate the success of anadromous fish reintroduction above Iron Gate dam.

Response to Comment G2-9

Since 1997, PacifiCorp has operated the Iron Gate facility to meet the requirements of the Biological Opinion (BO)for coho salmon for both flow and ramp rates. The ramp rates dictated by the BO are very conservative (0.4 in/hr) and PacifiCorp is not planning on conducting a ramp rate study downstream of Iron Gate dam. In addition, a comprehensive instream flow study by Dr. Thomas Hardy for the Klamath River below Iron Gate Dam is near completion (expected completion is early 2004). Consequently, PacifiCorp is not planning on conducting an instream flow study below Iron Gate Dam. Please see the Exhibit E for a detailed discussion on the Project effects on fisheries resources and proposed mitigation.

Response to Comment G2-10

Please see the Fish Resources FTR and Exhibit E for a full analysis of the ramping studies that PacifiCorp conducted and the proposed mitigation.

Response to Comment G2-11

PacifiCorp has developed curves for anadromous fish for consideration above Iron Gate dam.

Response to Comment G2-12

Comments noted. PacifiCorp is continuing to work with the Instream Flow subgroup on PHABSIM analysis above Iron Gate Dam. Please see the Fish Resources FTR for a detailed report on the instream flow study.

Response to Comment G2-13

The license application (Section 4 of Exhibit E and Fish Resources FTR) describes fish passage issues for both anadromous and non-anadromous species.

mollusks during their parasitic life stage). Impacts to fish movements is an obvious Project impact, particularly as Iron Gate, Copco No. 1, and Copco No. 2 facilities employ no upstream or downstream fish passage facilities, Eastside and Westside facilities employ no downstream fish passage facilities, and the effectiveness of existing fish passage facilities at Keno and J.C. Boyle facilities is in question. All of these facilities block or limit population connectivity and block migratory fishes. Most, if not all, of these facilities potentially cause harm to species currently protected by the Endangered Species Act (Lost River sucker, shortnose sucker, and coho salmon). Iron Gate currently limits anadromous fishes from over 300 miles of habitat historically used by several stocks of salmon, steelhead, and Pacific lamprey. G2-13

The clear impact of PacifiCorp's Project to the migratory extent of ecologically, commercially, recreationally, and culturally important anadromous species necessitates sufficient information for F.E.R.C. to analyze a full range of potential PM&E measures including analysis for the decommissioning and removal of some or all of the Project facilities. While PacifiCorp has committed to collecting and presenting much of this information, we are troubled that some extant data relating to the entrainment of fishes at the J.C. Boyle facility were not presented in the DLA. These data are not so new as to be omitted from the document due to timing constraints and should have been presented to begin describing Project impacts to downstream fish passage at J.C. Boyle and the effectiveness of existing facilities to protect downstream migrating or resident fishes. G2-14

As PacifiCorp continues to evaluate socioeconomic impacts of their existing Project and the proposed Project, we request that the Phase 2 Socioeconomic Study (section E9.3.3) present sufficient information for F.E.R.C. to examine a full range of possible Project alternatives during their NEPA analysis. Information generated in this study and presented in the FLA should include the socioeconomic impacts of decommissioning and removing all of the Project-related facilities including the projected effects of these actions on anadromous fish production, river-based recreation, commercial fisheries, Tribal fisheries, and ocean-based recreational fishing (among a host of other social and economic resources). G2-15

D) Specific Draft License Application Comments

The following specific comments respond to definitive deficiencies or disagreements that we have with the DLA.

In section A8.1 and B11.4, PacifiCorp describes the existence and possible future inclusion of a small diversion facility on Spring Creek to provide up to 16.5 cfs of water to the Fall Creek powerhouse. In characterizing this facility, it would be most accurate to state that the Spring Creek diversion is not currently a part of the F.E.R.C. 2082 Project, allowing for the explicit possibility that this diversion could become an integral part of the Project in the future (pending adjudication). G2-16

The final license application should include brief descriptions of operational, dependable capacity, and average annual energy production impacts to the Fall Creek development with the addition of the Spring Creek diversion and its associated water right. Further, KFA asks the FLA include a detailing the process PacifiCorp will follow to amend a license order they might receive at the end of the current relicensing should you decide to add the Spring Creek facility to the Project. This language is best added to either section B11.4 or B13.0. This discussion G2-17

5

Response to Comment G2-14

Data pertinent to the J.C Boyle project will be included in the technical appendices of the FLA and in the FLA where appropriate.

Response to Comment G2-15

PacifiCorp has explained that it did not intend to conduct an alternatives analysis during the pre-filing consultation process for a traditional relicensing, but that the FERC will conduct an alternatives analysis through their EIS post-filing. Please see the Socioeconomic Issues paper for documentation of this outstanding issue.

Response to Comment G2-16

The FLA describes that Spring Creek is not part of the current Project, but is proposed for inclusion with the Fall Creek development.

Response to Comment G2-17

Rather than via an amendment, the Final License Application is the vehicle PacifiCorp has chosen to propose including the Spring Creek diversion facility as part of the Fall Creek Development. As stated in Section E1 of Exhibit E, PacifiCorp will collaborate with stakeholders in determining an appropriate scope of study for the included facility and associated FERC boundary.

should include assurances of extensive stakeholder input on the development of studies to establish the impacts to resources and the development of PM&E measures.

G2-18 The KFA notes that the DLA does not include any discussion of the species / stocks of anadromous fishes and their historical extent upstream of Iron Gate dam (section E4.1). With the lack of fish passage facilities at Copco No. 1 and Iron Gate dams precluding anadromous fish migrations upstream of these facilities since 1913, this constitutes one of the most concerning, if not the most concerning, impact of the continued operation of these projects. While important for all of the species and stocks of fishes that would have migrated past the California-Oregon border for the last 90 years, this discussion is most imperative for spring chinook salmon (section E4.1.3.6.2). These fish are reported to have been the most abundant anadromous fishes in the Upper Klamath Basin but now are relegated to the Salmon and Trinity sub-basins and are among the most at-risk fish populations in the entire Klamath system. Information from such a discussion is imperative to characterize the existing environment and set the context for the examination of Project impacts to water quality, geomorphology, fish resources, botanical and wildlife resources, recreation, and socioeconomics.

G2-19

G2-20 The KFA asks that PacifiCorp include a brief description of the impacts from blocking anadromous fish migration at Iron Gate dam on terrestrial animals found along the Klamath River, Lake Euwana, and the Link River (section E5.2.2). We are particularly interested in impacts to species such as black bear, raccoon, river otter, and mink. However, certainly some birds and other mammals, at a minimum, would use spent salmon carcasses as a primary source of nutrition during the late fall and winter months. This impact of the Project should be identified and characterized in the FLA.

G2-21 PacifiCorp goes to great length in several sections of the DLA (specifically hydrology, water quality, geomorphology, and riparian habitat) to identify and describe impacts from non-Project sources on resources also affected by the Project. While an understanding of these other sources of impact are necessary to a complete understanding of the affected area, PacifiCorp should focus on presenting clear information relating to their impacts (or non-impact) of their facilities on resources. Certainly other sources of impact should not be ignored, but they should only be addressed as a means of establishing a complete picture for the affected resource and not used to dismiss PacifiCorp's relative affect.

G2-22 Under no circumstance should a non-Project impact obviate the need for PacifiCorp to present information characterizing their own impact, regardless of any disparity in their respective magnitudes.

E) Recommendations

G2-23 We strongly recommend that PC add two sections to the Executive Summary's Section ES1.0:

Section ES 1.2 should be labeled "Historical Description." It should chronicle the historic decline of the anadromous fisheries of the Klamath River within the context of the history of Project development as well as the decline of the Native American, coastal and river communities that depend on these fisheries. Anadromous fisheries should be the focus because they are a keystone species – perhaps the only species which can stand for and clearly indicate the decline of the Klamath River's Aquatic Ecosystems. Language has been developed within

6

Response to Comment G2-18

PacifiCorp is continuing to work with the fish passage subgroup on anadromous fish reintroduction.

Response to Comment G2-19

Comment noted.

Response to Comment G2-20

The updated Terrestrial FTR provides information on the availability of anadromous and other salmonid carcasses for terrestrial wildlife. Under current baseline conditions, anadromous fish are collected at the Iron Gate Hatchery and do not occur above Iron Gate dam. The blockage of fish passage was an original Project impact. Currently, species found in upstream reaches do not depend on this food source. Many species would likely take advantage of this resource if it were available in the future.

Response to Comment G2-21

The FLA has been written with the intent to focus on Project-related impacts.

Response to Comment G2-22

In assessing project impacts, it is often necessary to place the impact into a broader context so that a sense of magnitude and importance may be gleaned.

Response to Comment G2-23

The license application Executive Summary does not include the proposed "Historic Description". FERC considers the existing Project to be the baseline from which to compare future operations and enhancement measures. Historic information for fisheries and cultural resources is presented in relevant sections of the license application, however, not to the extent requested in the comment. (See Exhibit E, Sections 4 and 8).

G2-23 the Socio-economic Work Group which summarizes the human community aspect of the decline in brief and which would be appropriate for this section.

G2-24 Section ES 1.3 should be labeled "Mitigation History and Evaluation." It should describe mitigation scope and requirements for each stage of historic Project development and a summary evaluation of these mitigation efforts. This section should also summarize the mitigation responsibilities associated with the current relicensing effort. In other words, right up front PC should define and acknowledge its mitigation responsibilities.

G2-25 The Introduction of ES9.0 should undergo major revision. Specifically, the introduction should summarize the economic and social histories of Native American, coastal and river communities as these histories relate to water/river resources. Once again, the social and economic impact of the decline of anadromous fisheries can serve as an indicator for the impact of the overall decline of the Klamath River's aquatic ecosystems.

G2-26 PacifiCorp's DLA does not meet the regulations provided in 18 CFR 4.51 and 18 CFR 16.8. These deficiencies necessarily restrict the input PacifiCorp will receive from stakeholders on this DLA, particularly pursuant to alternate data analysis and interpretation and proposed PM&E measures. Lack of formal discussion on these two items leave the KFA ready for a FLA full of surprises. To rectify this situation, the provides two recommendations.

G2-27 First, PacifiCorp should complete ongoing studies and analyze and interpret resulting data as quickly as possible.

G2-28 Second, prioritizing by information needs that will be included in the FLA, PacifiCorp must present data, analysis, interpretation, and proposed PM&E measures to stakeholders prior to the filing of the FLA. Where possible, PacifiCorp should make the effort to collaborate with stakeholders on the identification of Project impacts and development of PM&E measures and document in the FLA all substantive disagreements with stakeholders on these items. These steps will provide a substitute in the written record for the joint meeting provided in 18 CFR 16.8(c)(8).

Thank you for your attention to this important matter, and please let us know if we can provide more information.

Sincerely,

Felice Pace

Felice Pace – Conservation Director

7

Response to Comment G2-24

The Executive Summary identifies resource impacts and proposes Project operational modifications and resource enhancements by resource area. Additional information on impacts and measures are provided in Exhibit E.

Response to Comment G2-25

This information is found in Exhibit E of the FLA and in FTRs for various resources. The Executive Summary is intended to summarize the current Project, future Project, Project impacts, and proposed PM&Es. A historic profile is not warranted in the summary report.

Response to Comment G2-26

Comment noted. See response to KFA comment #3, above.

Response to Comment G2-27

In response to stakeholder concerns the Collaborative Process shifted focus in late summer of 2003 to study results and data interpretation. In October and November of 2003 PacifiCorp shared preliminary Project operations and PM&Es for the proposed license. Because some key studies were not completed, the preliminary measures were not fully identified. Timing of process did not allow much PM&E discussion to occur prior to filing of the License Application

Response to Comment G2-28

During the interim between the DLA and FLA, PacifiCorp shared results on the impact analyses and discussed proposed PM&Es with the stakeholders (October and November, 2003). Substantive disagreements are presented in the consultation record section of the License Application.

Meyer, Carole

From: Felice Pace [fpace@yuroktribe.nsn.us]
Sent: Wednesday, September 24, 2003 2:35 PM
To: Olson, Todd; Toby Freeman
Cc: felicep@sisqtel.net
Subject: Dradft License Application

Dear Todd and Toby,

The comments below have been incorporated into a more extensive comment from KFA. However, I wanted to send this portion of our comments to you directly and personally in hopes that you would give them some thought.

Felice

Klamath Forest Alliance
Klamath Hydroelectric Project
Draft License Application
Selection from KFA's Comments

General:

The Klamath Forest Alliance (KFA) has participated in the license application since its inception. This has included participation in the collaborative process – including the Socio-economic work group, the Plenary and the TANGO. During countless hours of meetings, we have engaged with PacifCorp/Scottish Power (PC), its consultants and other collaborators on many issues. Through the hard work of the all collaborators good results have been achieved. While more remains to be done as detailed in our specific comments and those of other stakeholders, progress has been made toward common understanding of technical aspects of the Project and its impacts. And yet, the core and essence of what KFA has sought in this process has not been achieved.

What we have been looking for from PC is a clear and unambiguous acknowledgement of the major part the Klamath Hydroelectric Project has played and continues to play in the historic decline of the aquatic ecosystems of the Klamath River and of the Corporation's moral, social and legal obligations to adequately mitigate for this decline. We believe acceptance of corporate responsibility must take place and that it must encompass the range of ecological, resource, social and economic impacts which are associated with and have resulted from the Project.

The Klamath Hydroelectric Project does not exist in a vacuum. Rather the Project exists in time; there was a time when the Project did not exist and there may be a time in the future when it no longer exists. The Project is clearly not responsible for ecological, resource, social and economic problems of the Klamath River and its natural and human communities. But the Project has played an important role in the generation of these problems and we believe it must play an important role in their solution. In the context of the Klamath Project, corporate responsibility dictates a key role for PacifiCorp/Scottish Power in the restoration of the Klamath River and the renewal of its human and natural communities.

G3-1 To be precise, PC is responsible for adequately mitigating all impacts – or portions of impacts - to Klamath River aquatic and terrestrial ecosystems, fisheries and other resources, social systems and economies for which the Klamath Project is responsible. We want PC to accept this responsibility and to state that it does so up front in its application. We also want PC to consider a full range of options for

9/25/2003

Response to Comment G3-1

PacifiCorp's responsibility is to provide FERC with information needed for the regulating agency to adequately consider power and non-power values. The License Application contains PacifiCorp's proposed measures to enhance social and environmental resources while providing continued renewable hydroelectric power.

addressing its responsibility for mitigating impacts and to work with all interested parties in a collaborative manner to find a solution that meets the Corporation's legal, moral and social obligations in a manner that all stakeholders can accept and that – based on the best available scientific, social, economic and technical information – satisfies the mitigation imperative.

Thus the main function of the application and the technical studies and reports done in conjunction with it are to tease out those impacts and portions of impacts which are associated with the Project over its entire history and which are ongoing today, and then to design, propose and implement mitigation that adequately addresses these impacts.

G3-1

We believe it is abundantly clear and unambiguous that mitigations designed and implemented in the past have, for the most part, failed to mitigate for the Project's impacts. For example, each stage of Project development extirpated large portions of the largest and (culturally, religiously and economically) most important runs of anadromous fish in the Klamath River Basin – Spring Chinook Salmon. Iron Gate dam – the last project facility constructed – did not end this process, nor did it end with abandonment of attempts to raise Spring Chinook salmon at Iron Gate hatchery. Rather Spring Chinook have continued to decline. Since construction of Iron Gate Dam, the extirpation/extinction event has continued to extend through more and more of the Klamath River Basin. The last Spring Chinook – what settlers there called the "Silvers" - were seen in the Scott River in the 1970s. At that time robust runs of Spring Chinook could still be found in mid-Klamath tributaries. Now the only significant population is in the Salmon River and that population is at high risk of extinction according to the American Fisheries Society.

Is the Project entirely responsible for the ongoing Spring Chinook salmon extirpation/extinction event? Clearly not. Does the Project bear major responsibility for the extirpation-extinction event? The answer is clearly "Yes."

Similarly with other ecological, social and economic resources: the Project – and its owner operator PC – bear major but not sole responsibility.

G3-2

While responsibility must be acknowledged and qualified through studies and estimations, the most important question is what should PC do about it? Here is where the art of collaboration can play the most important and perhaps decisive role. We hope PC will choose to use this tool as it moves forward toward not just a new license but a new Project – a Project which will play a critical role in restoration of the natural and human ecology of the Klamath River and its natural and human communities.

<<<<<>>>>>

We strongly recommend that PC add two sections to the Executive Summary's Section ES1.0:

Section ES 1.2 should be labeled "Historical Description." It should chronicle the historic decline of the anadromous fisheries of the Klamath River within the context of the history of Project development as well as the decline of the Native American, coastal and river communities that depend on these fisheries. Anadromous fisheries should be the focus because they are a keystone species – perhaps the only species which can stand for and clearly indicate the decline of the Klamath River's Aquatic Ecosystems. Language has been developed within the Socio-economic Work Group which summarizes the human community aspect of the decline in brief and which would be appropriate for this section.

G3-3

G3-4

Section ES 1.3 should be labeled "Mitigation History and Evaluation." It should describe mitigation scope and requirements for each stage of historic Project development and a summary evaluation of these mitigation efforts. This section should also summarize the mitigation responsibilities associated

Response to Comment G3-2

PacifiCorp maintains that a variety of factors have contributed to the decline of Spring Chinook in the Klamath Basin.

Response to Comment G3-3

The license application Executive Summary does not include the proposed "Historic Description". FERC considers the existing Project to be the baseline from which to compare future operations and enhancement measures. Historic information for fisheries and cultural resources is presented in relevant sections of the license application, however, not to the extent requested in the comment. (See Exhibit E, Sections 4 and 8).

Response to Comment G3-4

The Executive Summary identifies resource impacts and proposes Project operational modifications and resource enhancements by resource area. Additional information on impacts and measures are provided in Exhibit E.

G3-4 with the current relicensing effort. In other words, right up front PC should define and acknowledge its mitigation responsibilities.

G3-5 The Introduction of ES9.0 should undergo major revision. Specifically, the introduction should summarize the economic and social histories of Native American, coastal and river communities as these histories relate to water/river resources. Once again, the social and economic impact of the decline of anadromous fisheries can serve as an indicator for the impact of the overall decline of the Klamath River's aquatic ecosystems.

9/25/2003

Response to Comment G3-5

This information is found in Exhibit E of the FLA and in FTRs for various resources. The Executive Summary is intended to summarize the current Project, future Project, Project impacts, and proposed PM&Es. A historic profile is not warranted in the summary report.

September 24, 2003

Mr. Todd Olson
PacifiCorp
825 NE Multnomah
Suite 1500
Portland, OR 97232

Re: Comments on PacifiCorp's Draft License Application
Klamath Hydroelectric Project, FERC No. 2082

American Whitewater herein provides comments on PacifiCorp's Draft License Application (DLA) for the Klamath Hydroelectric Project, FERC #2082 (the Project) on behalf of our membership. Our comments are organized into three sections: 1) a statement of American Whitewater's mission and goals in relation to whitewater recreation and conservation; 2) an overall appraisal of the DLA and core issues; and, 3) a discussion of Exhibit E – which represents the substance of the DLA.

Section 1) American Whitewater's Mission, Goals, and Objectives

American Whitewater is a national non-profit 501(c)3 river conservation and recreation organization founded in 1957. We have over 8,000 members and 160 canoe club affiliates, representing approximately 180,000 whitewater paddlers across the nation. American Whitewater's mission is to conserve and restore America's whitewater resources and to enhance opportunities to enjoy them safely. As a conservation oriented paddling organization, American Whitewater has a strong interest in the future of the Klamath River and, therefore, the relicensing of the Klamath Hydroelectric Project. A significant percentage of our membership resides in Oregon and California in proximity to the project. Federal actions that affect flow and access to the river may potentially adversely impact opportunities for American Whitewater members to utilize the river resource. American Whitewater's Conservation Director and several members have been actively engaged as stakeholders in this relicense proceeding. Therefore, American Whitewater has a direct interest in the Klamath relicensing proceeding on the Klamath River.

American Whitewater's objectives are to improve river access, obtain publicly accessible real-time flow information via the Internet and flow phone, and to establish a predictable

schedule of flows in respective reaches compatible with the physical and biotic integrity of those reaches.

The Klamath River meets the needs of multiple interests including but not limited to agriculture, recreation, power generation, fish and wildlife and municipal water supply. These competing interests warrant systematic evaluation of each facility to determine the proper balance of water allocation for respective uses.

It is within this context that American Whitewater has formed its comments regarding PacifiCorp's DLA.

Section 2) DLA Overview and Core Issues

American Whitewater has reviewed the DLA and unfortunately finds it inadequate in providing the necessary information, study results and analysis, discussions, recommendations, and evidentiary record in order for stakeholders to evaluate and comment on project impacts, protection, mitigation, and enhancement measures and recommend desired outcomes.

G4-1

American Whitewater concludes that the DLA does not meet the requirements or intent of the Traditional Licensing Process (TLP) or Tradition "Plus" Licensing Process (TLP+) and does not contain sufficient information or analysis to allow FERC to prepare an EA or EIS as required by the Federal Power Act and the National Environmental Policy Act. The DLA Executive Summary concisely states the general requirements of the TLP, specifically, the 'Second stage involves completing the studies agreed to during the first stage, deciding on appropriate protection, mitigation, and enhancement (PM&E) measures, and preparing and reviewing a draft application." Furthermore, 18 CFR 4.51(f) requires an Exhibit E, the detail of which is commensurate with the scope of the proposed Project, so that an adequate discussion of impacts can be developed, and 18 CFR 16.8(b) (1) (iv) requires identification of the affected environment, the presence of significant resources, and proposed environmental protection, mitigation, and enhancement measures. The TLP+ does not absolve PacifiCorp of these requirements in its DLA.

At this time not only do many critical studies remain unfinished, final study plans have not yet been even agreed upon for several of the most important studies. "With the approval of a study plan package, the Klamath Collaborative Process will focus on reviewing study results and determining potential Project impacts". While PacifiCorp is not legally required to complete all studies prior to submitting a DLA, this situation leads to a deficiency in determining project impacts which makes the formulation of PM&E measures problematic. PacifiCorp flatly states that "This Draft License Application does not identify any PM&E measures under consideration by PacifiCorp." The DLA consistently defers critical and required analysis to the Final License Application (FLA) resulting in a DLA that is severely deficient in substance. American Whitewater does not

Response to Comment G4-1

The draft license application (DLA) included a thorough description of the existing Project, its operation, and the Project's effect on the surrounding environment, to the extent it could be described based upon available study results. PacifiCorp and relicensing participants had agreed prior to development of the DLA that it would not be appropriate for PacifiCorp to draw conclusions in the application about the effects of the existing Project on the surrounding environment, unless those conclusions were based upon study results.

As a result of the Klamath Collaborative's extensive changes to the number and scope of studies, few studies were completed in time to inform the development of the DLA. Subsequently, PacifiCorp did not have sufficient information to justify proposing changes to the existing Project. Absent information to the contrary, existing facilities and operations were deemed appropriate.

Now that almost all studies have been completed and reviewed, changes to the Project and its operations have been proposed. This proposed Project, proposed Project operations, and the proposed Project's anticipated enhancement to the surrounding environment are thoroughly described in the final license application.

As per 18 CFR 16.8(c)(2) and (3), an application will not be rejected by FERC as deficient merely because late studies requested by agencies during the second consultation stage are not completed during the second stage.

accept PacifiCorp's claim that the collaborative process is the reason why studies have not been completed and the process is behind.

The time to determine potential project impacts and PM&E measures is BEFORE submittal of a DLA during the Second Stage Consultation, not when or after the Final License Application is submitted.

Due to initial impasses PacifiCorp has moved to a modified collaborative approach (TLP+), which American Whitewater supports as collaborative approaches in relicensing generally save time, money, and result in mutually agreeable outcomes. The interested Tribes, agencies, and non-governmental organizations have formed a collective known as TANGO which has consistently requested (as identified in the DLA) that PacifiCorp: 1) identify PM&E measures proposed or provisionally being considered, 2) complete an array of Project scenarios including fish passage with full and partial dam removal or decommissioning, and 3) identify PM&E measures that PacifiCorp is not considering and the reasons why. PacifiCorp has explicitly failed to deliver on these core issues. Given this and PacifiCorp's pattern established thus far through the 1st and 2nd stage Consultations, American Whitewater is concerned that the enormous amount of research and issue resolution left between now and PacifiCorp's goal of submitting the FLA in March 2004 will result in a FLA that will be inadequate and unacceptable to the TANGO, stressing the collaborative process, prompting AIRs, and ultimately delaying resolution of the FERC relicensing. G4-1

Other outstanding core values include insufficient Project boundaries, a pattern of subjective and unsubstantiated claims leading to an inadequate administrative record, and an inadequate consultation record. The DLA is rife with subjective and unsubstantiated claims. In response to this, American Whitewater defers to its First Stage Consultation Comments and recommends that PacifiCorp adhere to these guidelines: G4-2

"American Whitewater encourages PacifiCorp to evaluate a range of operational alternatives through objective field studies at each respective facility. The results of these field studies will form the basis for resource allocation decisions. This approach eliminates speculation and conjecture about impacts of alternative flow regimes on resources. In fact, the FERC requires that the future license application provide an evidentiary record to substantiate all of its conclusions (Bangor Hydro v. Federal Energy Regulatory Commission, 78 F.3d 659, LEXIS p. *13). The license application must document, by footnote or otherwise, each scientific or other analytical method used to interpret data to reach a conclusion (40 C.F.R. § 1502.24). Conclusions cannot be based on speculation or inference. Therefore, all mitigation including alternative flow regimes and project operations must be evaluated using scientific methods meeting peer review standards. The results of these evaluations must be included in the licensee's application for a new license."

American Whitewater is concerned that the consultation record is inadequate. Many comments are replied to with only "comment noted" and PacifiCorp has not adequately explained the why or why not and consistently defers to DLA sections that upon closer G4-3

Response to Comment G4-2

The FLA provides updated information on the proposed Project boundary, and provides information relative to impacts and new Project mitigation and enhancement measures. PacifiCorp maintains that the consultation record reporting meets FERC's needs.

Response to Comment G4-3

Tennant, ABF, and Richter methods refer to alternative ways of estimating minimum flow needs for aquatic species, which were not the focus of recreation flow analyses. While Tennant has offered one "desk-top" approach to estimating recreation flow needs (60% of mean annual flow), this general formula is not precise enough to be useful for the Klamath segments where more detailed studies were conducted.

inspection do not contain the information requested in the comment. For example, American Whitewater requested in the First Stage Consultation Comments that PacifiCorp conduct hydrologic analysis using the Tennant, ABF, and Richter methodologies for comparison with PHABSIM and IFIM. PacifiCorp declined this request without any explanation as to why. This pattern is consistent throughout the consultation record. G4-3

Section 3) Exhibit E

Exhibit E represents the substance of a DLA, however, PacifiCorp's DLA Exhibit E is lacking in enough information and analysis to warrant specific comments. As discussed already, the DLA almost complete lack of study results, project impacts or PM&Es hampers any meaningful comment or discussion of specific items at this juncture contrary to requirements of the TLP and 18 CFR. Only the Recreational Resources Section E7.0 contains enough information and study results to warrant specific comments which are as follows.

Recreation Resources E7.0

American Whitewater is pleased that PacifiCorp has completed important recreational studies such as the flow Recreation Flow Analysis, Recreation Visitor Surveys, Regional Recreation Analysis, and Recreation Needs Analysis developed in conjunction with the Recreation Work Group. The completion of these scientifically defensible studies are commendable and provide an example to follow for other resource areas. There are, however, critical deficiencies with the Recreation Resources section of the DLA that need to be addressed.

First and foremost, the development of PM&Es for recreational resource needs to be conducted in concert with larger overriding studies (such as in-stream flow analysis), PM&Es, and the full scope of project alternatives. For example the various fish passage options and their associated operational changes set the context for development of recreational PM&E and desired outcomes. The studies and analysis necessary for development of these overriding PM&Es and project alternatives are absent or incomplete at this point in time thus stakeholders and PacifiCorp are limited in developing specific PM&E's and desired outcomes. Moving forward with specific recreational desired outcomes and PM&E's is counterproductive until PacifiCorp addresses other issues and completes the adequate analysis of project alternatives. This problem is exemplified by the fact that PacifiCorp's guiding document for recreational PM&Es, the Recreation Resource Management Plan (RRMP), is not available at this time as required by 18 CFR 4.51. While American Whitewater is considering a suite of potential desired outcomes and recommendations none are specified at this point do to these obstacles. G4-4 G4-5

Other deficiencies in the Recreation Resources E.70 section of the DLA are listed below:

Response to Comment G4-4

Comment noted. The PM&Es are being developed based on the results of all of the relicensing studies. Proposed recreation PM&Es are included in the Draft RRMP.

Response to Comment G4-5

As stated in the DTR, the Draft RRMP was developed in the interim between the DTR and the FTR. Recreation Work Group participants reviewed and commented on sections of the Draft RRMP as they were written. This schedule is fairly typical for relicensing projects. The Draft RRMP is included in the FLA for Recreation Resources.

G4-6
- There is no discussion of whitewater boating access at the Keno reach put-in at Keno Dam which is important for determining Project impacts and possible mitigations or enhancement measures at that site.

G4-7
- The discussion of recreation needs and potential future recreation demand with regard to whitewater boating does not evaluate the need for improved access to put-ins and take-outs for the Keno, JC Boyle Bypass, and Hell's Corner reaches or the potential for increased recreational use if access was improved.

G4-8
- The description of existing recreational resources needs a more thorough discussion of the high quality whitewater opportunities on the JC Boyle bypass reach as determined by the whitewater flow study. Given the convenient location, excellent scenery, and outstanding whitewater this reach has a high level of potential recreation use if flows were provided.

G4-9
G4-10
- As stated by American Whitewater in the First Stage Consultation comments PacifiCorp must include a detailed discussion of the Project's impacts on ORVs of the Wild and Scenic Upper Klamath River, which is still lacking. PacifiCorp should also include a discussion of Projects effects on the ORVs of the Wild and Scenic Lower Klamath River. While this Wild and Scenic segment of the Klamath River is not located within PacifiCorp proposed Project boundaries, the Project does impact its ORV be negatively affecting water quality and anadromous fisheries. The studies necessary to determine these effects should be conducted.

G4-11

G4-12
- Whitewater boating is the recreation activity with the highest expected growth rate (+47%) nationally (Table E7) which is not reflected in the discussion of future recreation needs.
- Numerous statements allude to likely Project benefits for whitewater boating and fishing without scientific justification or references to back up these statements and without completion of hydrological studies. As previously discussed this is required as per the Bangor Decision.

G4-13
- According to the DLA, "If the Project did not exist, the Upper Klamath would probably provide only technical boating opportunities after midsummer (similar to other unregulated rivers in the general region such as the Scott, California Salmon, and Illinois)". If the negative affects on recreation associated with the no-Project alternative are going to be included then all affects should be discussed including the positive effects of the no-Project alternative such as reach connectivity and whitewater opportunities in bypass reaches and reservoirs. Also the unregulated rivers mentioned become generally unrunable after mid-summer where as the upper Klamath would remain boatable. This is an important discussion that needs to include results of hydrological studies and downstream minimum flow requirements.

Conclusion

American Whitewater is committed to working with PacifiCorp on the relicensing of the Klamath Hydropower Project. American Whitewater's objectives are to assess the need

Response to Comment G4-6

The road to the Keno Dam and informal boater put-in just downstream are currently adequate for the limited use they receive (mostly kayakers and a few rafters). However, the short road is in poor condition, parking is limited, and there is no ramp or turnaround that would allow trailer use. These are potential candidates for recreation improvements if flows for locational playboating, standard whitewater boating, or boat-based fishing are likely to be provided more often. Text in the Keno description of the flow analysis has been changed to accurately reflect the put-in situation.

PacifiCorp is not proposing PM&Es in this river reach because the Keno Development is believed to be non-FERC jurisdictional. The proposed FERC Project boundary in the license application begins at J.C. Boyle Reservoir. As a result, this river access site is outside of the proposed Project boundary and not considered Project-related.

Response to Comment G4-7

The FLA and the Draft Recreation Resource Management Plan address whitewater needs in the Project area, including boater take-outs. Whitewater needs were not discussed in detail in the DLA, as the studies associated with the Recreation Flow Analysis had not been completed. This study has now been completed and is included in the FLA for Recreation Resources. Boater put-in and take-outs are discussed in the Draft RRMP.

The East Side, West Side and Keno developments will not be included in the proposed FERC project or located within the

proposed FERC license boundary. The company's future activities at and above Keno Dam are under review. As a result, no PM&Es are being proposed for these areas above J.C. Boyle reservoir.

Response to Comment G4-8

PacifiCorp agrees with the commentor that the J.C. Boyle Bypass reach has good access, quality scenery, and outstanding whitewater. We believe that the flow-analysis section describing the reach, its boating opportunities, and flow requirements adequately describes its recreation potential and how the project might enhance or diminish that potential (by providing or withholding flows). A section in that analysis also provides considerations for crafting whitewater flow releases with a minimal impact on fishing opportunities or other recreation. Please note, the commentor was not reviewing the complete Recreation Flow Analysis, which has now been completed and included in the FTR for Recreation Resources.

Response to Comment G4-9

The discussion of Hell's Corner Reach in the FTR for Recreation Resources, includes "outstandingly remarkable values" (ORVs) of the Upper Klamath River, with a specific focus on the recreation ORV associated with whitewater boating and trout fishing. It then provides detailed information about how different flow regimes would affect those different activities. The analysis includes considerations for crafting flow regimes that consider the needs of both boaters and anglers, and clearly shows the trade-offs of different flow regimes. As discussed in the report, "…balancing boating and fishing opportunities on the Hell's Corner Reach is challenging. Providing flows for one will cause the loss of quantity or quality for the other." Information in the technical report allows the utility, agencies, and stakeholders to assess how current or possible future flow regimes provide a mix of opportunities that have been defined by Congress as "outstandingly remarkable."

In the FTR for Recreation Resources, the discussion of "Middle Klamath River" (Below Iron Gate) includes revisions describing ORVs for the Lower Klamath River, which include recreation. However, the flow analysis section in the FTR already provides descriptions of the recreation opportunities that comprise that ORV, their flow requirements, and how the upstream projects (both PacifiCorp's hydroelectric project and USBR's irrigation project) affect them. This includes discussion of water quality impacts and fishing for anadromous species, as requested by the commentor. As with the Upper Klamath ORV discussion, information in the technical report allows the utility, agencies, and stakeholders to assess how current and possible future flow regimes provide a mix of opportunities that have been defined by Congress as "outstandingly remarkable."

Response to Comment G4-10

Comment noted. Please see Exhibit E, Section 3, for a detailed discussion on the Project's impact on water quality and PacifiCorp's proposed mitigation measures.

Response to Comment G4-11

See response to Comment #10, above.

Response to Comment G4-12

The FLA and the Draft RRMP address whitewater needs in the Project area, including expected growth rate. Whitewater needs were not discussed in detail in the DLA, as the studies associated with the Recreation Flow Analysis had not been completed. This study has now been completed and is included in the FLA for Recreation Resources.

Response to Comment G4-13

This earlier comment has been removed from the FLA. Additionally, the Recreation Flow Analysis has now been completed and is included as Section 2.0 of the FTR for Recreation Resources, as well as the FLA. This newer discussion provides addition whitewater-related information.

for whitewater flows, flow information and access in the respective river reaches as well as restoration of riverine ecological processes in the Klamath River.

Unfortunately American Whitewater finds PacifiCorp's DLA inadequate in providing the necessary information, study results and analysis, discussions, recommendations, and evidentiary record in order for stakeholders to evaluate and comment on project impacts, protection, mitigation, and enhancement measures and recommend desired outcomes. American Whitewater recommends that PacifiCorp finish the critical study plans, studies, evaluated Project impacts, resolves outstanding core issues, and develop PM&E's in collaboration with the TANGO before submitting the FLA even if the March 2004 deadline is not met. This approach will result in a relicensing outcome that is quicker, less costly, and more mutually agreeable in the end than the current pattern dictates.

G4-14

Respectively submitted
September 24, 2003

John T. Gangemi, Conservation Director
American Whitewater
482 Electric Avenue
Bigfork, MT 59911

cc: Steve Rothert
Kelly Catlet
Steve Wald
Chuck Bonham
Curtis Knight

Response to Comment G4-14

PacifiCorp has made every effort to include study results available at the time of publishing this final license application. The PM&Es for recreation were shared with the Recreation Working Group prior to submission of the license application.

WWF

September 26, 2003

Mr. Todd Olson
PacifiCorp
825 NE Multnomah – Suite 1500
Portland, OR 97232

Re: Notice of resubmission for The Klamath Basin Coalition Comments on Draft License Application for New License, Klamath Hydroelectric Project, Klamath River, F.E.R.C. No. 2082

Dear Mr. Olson:

The comments filed on my behalf for members of The Klamath Basin Coalition (Coalition), partner organizations, and friends did not include one Coalition member group that wished to be signatory to that submittal. Per our conversation on the morning of September 26, 2003, I have made the following changes, and only the these changes, to the original submittal: (1) added Jim McCarthy, Policy Analyst, Oregon Natural Resources Council as a signatory to the last page of the new comment letter, which is enclosed; (2) reformatted signatory and cc: designations on pages 13 and 14; (3) added Oregon Natural Resources Council to the heading of the first page; and (3) dated the enclosed comment letter September 26, 2003 to readily track and acknowledge comment resubmission. Please remove our September 24, 2003 letter, as well as any electronic or hard copies of that letter, from your files and replace with the enclosed comment letter. As we discussed on the phone, the bodies of the two comment letters are identical in substance and will be considered by PacifiCorp in the same light as our original submission, even though they are dated and postmarked two days after PacifiCorp's deadline of September 24, 2003.

The Coalition, partner organizations, and friends appreciate PacifiCorp's willingness to accept these minor changes to our previous submission and we look forward to continuing to work with you on the Klamath Project relicensing effort.

Sincerely,

Brian R. Barr
Program Officer
World Wildlife Fund

World Wildlife Fund
116 Lithia Way, Suite 7 Ashland, OR 97520
Tel: (541) 482-4878 Fax: (541) 482-4895
Affiliated with World Wide Fund for Nature
www.worldwildlife.org

enc.

cc: Christine Ambrose – American Lands Alliance
Bill M. Baake – Native Fish Society
Diane Beck – North Group Redwood Chapter Sierra Club
Susan Bower – Citizens for Better Forestry
P. T. Brucker – Klamath Forest Alliance
Patty Clary – Californians for Alternatives to Toxics
Terry Colta – Northern California Indian Development Council
Romain Cooper – Siskiyou Regional Education Project
Cindy Deacon Williams – Headwaters
John DeVoe – WaterWatch of Oregon
Dan Doble – California Council Trout Unlimited
Jack Ellwanger – Pelican Network
Robert M. Freimark – The Wilderness Society
Kaitilin Gaffney – The Ocean Conservancy
Ryan Henson – California Wilderness Coalition
Paul Hughes – Forests Forever
Greg King – Siskiyou Land Conservancy
Alan Levine – Coast Action Group
Jim McCarthy – Oregon Natural Resources Council
Larry McCowan – World Stewardship Institute
Tim McKay – Northcoast Environmental Center
Nadananda – Friends of the Eel River
Pete Oringer – Friends of Humboldt County
Chris Peters – Seventh Generation Fund
Ben Riggan – Mid Klamath Watershed Council
Magalie Roman Salas – F.E.R.C. Secretary (9)
Glen Spain – Pacific Coast Federation of Fishermen's Associations and Institute for Fisheries Resources
Kent Stromsmoe – Forestry Monitoring Project
Joseph Vaile – Klamath-Siskiyou Wildlands Center
Eric Wesselman – Sierra Club-California-Nevada-Hawaii
John Woolley – Humboldt County Board of Supervisors

AMERICAN LANDS ALLIANCE * CALIFORNIA COUNCIL TROUT UNLIMITED * CALIFORNIA WILDERNESS COALITION * CALIFORNIANS FOR ALTERNATIVES TO TOXICS * CITIZENS FOR BETTER FORESTRY * COAST ACTION GROUP * FORESTRY MONITORING PROJECT * FORESTS FOREVER * FRIENDS OF THE EEL RIVER * FRIENDS OF HUMBOLDT COUNTY * HEADWATERS * HUMBOLDT COUNTY BOARD OF SUPERVISORS * INSTITUTE FOR FISHERIES RESOURCES * KLAMATH FOREST ALLIANCE * KLAMATH-SISKIYOU WILDLANDS CENTER * MID KLAMATH WATERSHED COUNCIL * NATIVE FISH SOCIETY * NORTH GROUP REDWOOD CHAPTER SIERRA CLUB * NORTHCOAST ENVIRONMENTAL CENTER * NORTHERN CALIFORNIA INDIAN DEVELOPMENT COUNCIL * THE OCEAN CONSERVANCY * OREGON NATURAL RESOURCES COUNCIL * PACIFIC COAST FEDERATION OF FISHERMEN'S ASSOCIATIONS * PELICAN NETWORK * SEVENTH GENERATION FUND * SIERRA CLUB-CALIFORNIA-NEVADA-HAWAII * SISKIYOU LAND CONSERVANCY * SISKIYOU REGIONAL EDUCATION PROJECT * WATERWATCH OF OREGON * THE WILDERNESS SOCIETY * WORLD STEWARDSHIP INSTITUTE * WORLD WILDLIFE FUND

Mr. Todd Olson
PacifiCorp
825 NE Multnomah – Suite 1500
Portland, Oregon 97232

September 26, 2003

Re: The Klamath Basin Coalition Comments on Draft License Application for New License, Klamath Hydroelectric Project, Klamath River, F.E.R.C. No. 2082

Dear Mr. Olson:

The undersigned groups are all members, partner organizations, or friends of The Klamath Basin Coalition, a group of fifteen commercial fishing and environmental organizations that collectively work on Klamath River basin issues. The undersigned groups have been active for many years in Klamath River issues, and many have been particularly focused on the plight of salmon and steelhead and their habitats throughout the basin. We thank PacifiCorp for the opportunity to comment as interested stakeholders on the Draft License Application (DLA) for new license for the Klamath Hydroelectric Project, Klamath River, F.E.R.C. No. 2082 (Project). Our comments to the DLA are organized around three themes: (A) relicensing process to date and moving forward; (B) adequacy of information, analysis, and proposed protection, mitigation, and enhancement (PM&E) measures the DLA; and (C) specific comments to DLA content.

A. Relicensing Process

G5-1

The initial response to our review of the DLA recognizes how little newly collected, Project-specific information is presented in the document. This appears to be due to the amount of data that have yet to be either collected or fully analyzed. On the matter of submitting a complete Final License Application (FLA) to the F.E.R.C. before March 1, 2004, we urge PacifiCorp to complete any outstanding studies, analyze the data, and present it to relicensing stakeholders as quickly and in as complete a form as you are able. Providing the results of these studies to stakeholders familiar with the resources in the basin and having discussed these results

Response to Comment G5-1

PacifiCorp has made every effort to document all study results available in time for publication of this FLA.

G5-1 will provide PacifiCorp with the opportunity to present the most accurate assessment of Project impacts in the FLA.

G5-2 We are disappointed that PacifiCorp has chosen not to analyze the decommissioning of some or all of the Project, despite the specific requests from several stakeholders to include such considerations. Without the inclusion of decommissioning options to mitigate the substantial Project impacts to water quality and fish populations in the Klamath River, PacifiCorp cannot will not have considered the full range of alternatives in this process.

G5-3 These issues aside, we would like to recognize PacifiCorp for their willingness to build on their traditional relicensing approach during the development of study plans and preliminary impacts analysis by employing collaboration with the varied stakeholders engaged in the proceeding. Once satisfactorily completed, the breadth of information collected and analyzed through these collaboratively designed studies will ensure for a more complete understanding of the Project's impacts to hydrology, water quality, fish, botanical, wildlife, recreational, cultural, aesthetic, and socioeconomic resources and allow for the development of a thorough PM&E package to address identified impacts. Along these lines, we urge PacifiCorp to continue using

G5-4 this collaborative approach during the identification of impacts and development of PM&E measures. Stakeholder involvement in these discussions will be important to gain broad support for the FLA due to F.E.R.C. before March 1, 2004.

B. Draft License Application Adequacy

We preface the following comments on the DLA by stating our understanding of this document's purpose. We believe, per 18 CFR 16.8(c)(4)(i)(B) and 18 CFR 16.8(c)(4)(ii), that the DLA should provide the results of studies and a discussion of any applicant proposed PM&E measures. As a "preview" of the FLA, we were expecting to review considerable information to support a discussion of Project impacts (per 18 CFR 4.51(f)), a necessary component to supporting applicant proposed PM&E measures. Presentation of this information is necessary prior to the development of the FLA to identify disagreements in data analysis, conclusion, implication, and proposed PM&E measures. Identifying these disagreements well in advance of

G5-5 the FLA allows all parties to satisfactorily address their concerns and potentially resolve differences. Further, as accomplished through the DLA, these issues become a substantial part of the F.E.R.C. proceeding record through the written comments as well as a joint meeting designed for the explicit purpose of attempting to reach agreement on proposed PM&E measures per 18 CFR 16.8(c)(8). We are disappointed that information pursuant to the above are not presented in the DLA, particularly as they related to water quality, fish, and socioeconomic resources. The lack of data and analyses to support Project impact and proposed PM&E measures falls short of the intent of 18 CFR 16.8 (c)(4), 18 CFR 16.8 (c)(5), and 18 CFR 16.8 (c)(6) and necessarily constrains the utility of our review and comment.

Response to Comment G5-2

A high-level "no dam" alternative has been evaluated. Such an analysis affords a reasonable review of fish passage and water quality benefits and constraints. PacifiCorp has addressed its position with stakeholders numerous times as to why it has not "elected" to evaluate decommissioning.

Response to Comment G5-3

Comment acknowledged.

Response to Comment G5-4

Unfortunately, due to the timing of the completion of studies and preparation of the license application there was little time available to discuss impacts and proposed PM&Es. However, this was the focus of the Joint Agency meeting conducted in November 2003.

Response to Comment G5-5

The draft license application (DLA) included a thorough description of the existing Project, its operation, and the Project's effect on the surrounding environment, to the extent it could be described based upon available study results. PacifiCorp and relicensing participants had agreed prior to development of the DLA that it would not be appropriate for PacifiCorp to draw conclusions in the application about the effects of the existing Project on the surrounding environment, unless those conclusions were based upon study results.

As a result of the Klamath Collaborative's extensive changes to the number and scope of studies, few studies were completed in time to inform the development of the DLA.

Subsequently, PacifiCorp did not have sufficient information to justify proposing changes to the existing Project. Absent information to the contrary, existing facilities and operations were deemed appropriate.

Now that almost all studies have been completed and reviewed, changes to the Project and its operations have been proposed. This proposed Project, proposed Project operations, and the proposed Project's anticipated enhancement to the surrounding environment are thoroughly described in the final license application.

As per 18 CFR 16.8(c)(2) and (3), an application will not be rejected by FERC as deficient merely because late studies requested by agencies during the second consultation stage are not completed during the second stage.

The following comments are not specific disagreements with items included in the DLA. Rather, they identify broad issues that we believe are necessary to adequately characterize impacts, develop PM&E measures, and facilitate F.E.R.C.'s analysis of reasonable alternatives.

G5-6 As PacifiCorp models, analyzes, and interprets data from ongoing or recently completed water quality studies, we request that you include sufficient detail on the impacts of existing project facilities and operations (as well as potential future facility and operational configurations) on water quality in the Link, Lake Euwana, and Klamath River portions of the Project area (section E3.7) to allow F.E.R.C. to analyze a full range of alternatives in their NEPA process. Project impoundments, bypass reach flows, and operations at J.C. Boyle and possibly the Copco facilities contribute to daily and seasonal impacts to water quality parameters such as temperature, dissolved oxygen, chlorophyll *a*, pH, toxic substances, and possibly turbidity. A thorough understanding of the current contribution of the Project to impacts on these parameters, as well as the possibilities for addressing any identified impacts through future facility configuration and operational options, will need to be addressed in the FLA.

G5-7 As PacifiCorp collects, models, analyzes, and interprets ongoing or recently completed instream flow study (section E4.5.9), ramping study (E4.5.1), and resident trout movement in response to ramping (E4.5.4), we request that you include sufficient detail on the impacts of existing project operations, as well as on potential proposed operations, for instream flow levels and ramp rates in all Project-affected reaches. This information should not only address the G5-8 quantities of flow projected for current and proposed operations at each facility, but also needs to address fluctuations in flow and the impacts those fluctuations would have on all affected life G5-9 stages of fish living or likely to live in those reaches. This includes, for example, the analysis of fluctuating flows on incubating chinook salmon in the Klamath River immediately downstream of J.C. Boyle (allowing for the reintroduction of anadromous fish to this reach).

G5-10 Inherent in this request for instream flows and ramp rates to enhance habitat and protect anadromous fishes is: (1) operational directives stipulated through the Biological Opinions issued to the Bureau of Reclamations may not continue through the life of PacifiCorp's next license order; and (2) anadromous fish restoration beyond Iron Gate dam is of the utmost importance. In the absence of Biological Opinions, flows and ramping rates at Iron Gate dam will be subject to F.E.R.C. license order requirements. As such, PacifiCorp will need to present site-specific information to F.E.R.C. in the FLA regarding minimum flow requirements and appropriate ramping rates at the Iron Gate facility for the species existing in the Klamath River downstream of the dam. Similar information for both instream flow levels and ramping rates G5-11 should be a prominent part of each facility that has the ability to control flows to free-flowing river reaches including Eastside and Westside, Keno, J.C. Boyle (bypass and "peaking" reaches) G5-12 and Copco No. 2 bypass reach. The analyses and recommendations for Project facilities upstream of Iron Gate dam must include provisions for anadromous fishes whose access may be restored to these reaches. As a part of this analysis, PacifiCorp will need to present information on the capabilities of Project-associated reservoirs to store and release water for the purpose of

Response to Comment G5-6

Please see Exhibit E for a detailed discussion on the Project's effect on water quality and PacifiCorp's proposed mitigation measures.

Response to Comment G5-7

Please see Exhibit E for a detailed discussion on Project effects to aquatic resources and proposed mitigation.

Response to Comment G5-8

Comment noted. Please see Exhibit E for an analysis of Project effects on fisheries resources and the proposed project mitigation.

Response to Comment G5-9

Comment noted.

Response to Comment G5-10

Since 1997, PacifiCorp has operated the Iron Gate facility to meet the requirements of the Biological Opinion (BO) for coho salmon for both flow and ramp rates. The ramp rates dictated by the BO are very conservative (0.4 in/hr) and PacifiCorp is not planning on conducting a ramp rate study downstream of Iron Gate dam. In addition, a comprehensive instream flow study by Dr. Thomas Hardy for the Klamath River below Iron Gate Dam is near completion (expected completion is early 2004). Consequently, PacifiCorp is not planning on conducting an instream flow study below Iron Gate dam. Please see the Exhibit E for a detailed discussion on

the Project effects on fisheries resources and proposed mitigation.

Response to Comment G5-11

Please see the Fish Resources FTR and Exhibit E for a full analysis of the ramping studies that PacifiCorp conducted and the proposed mitigation.

Response to Comment G5-12

PacifiCorp is continuing to work with the Fish Passage Modeling subgroup and stakeholders on evaluating the success of anadromous fish reintroduction above Iron Gate Dam.

G5-12 providing appropriate flow regimes in each Project-affected reach under a full range of water availability projections.

G5-13 As PacifiCorp collects, models, analyzes, and interprets data from ongoing or recently completed fish passage related studies (sections E4.5.2, E4.5.3, E4.5.4, E4.5.6, E4.5.7, and E4.5.8), we request that you include sufficient detail on the impacts of existing project facilities on the migrations of anadromous and freshwater fishes as well as on the connectivity of populations or sub-populations of non-migratory aquatic species (including the fish species utilized by bivalve mollusks during their parasitic life stage). Impacts to fish movements is an obvious Project impact, particularly as Iron Gate, Copco No. 1, and Copco No. 2 facilities employ no upstream or downstream fish passage facilities, Eastside and Westside facilities employ no downstream fish passage facilities, and the effectiveness of existing fish passage facilities at Keno and J.C. Boyle facilities is in question. All of these facilities block (or limit) population connectivity and block migratory fishes. Most, if not all, of these facilities potentially

G5-14 cause harm to species currently protected by the Endangered Species Act (Lost River sucker, shortnose sucker, and coho salmon). Iron Gate currently limits anadromous fishes from over 300 miles of habitat historically used by several stocks of salmon, steelhead, and Pacific lamprey.

G5-15 The clear impact of PacifiCorp's Project to the migratory extent of ecologically, commercially, recreationally, and culturally important anadromous species necessitates sufficient information for F.E.R.C. to analyze a full range of potential PM&E measures including analysis for the decommissioning and removal of some or all of the Project facilities. While PacifiCorp has committed to collecting and presenting much of this information, we are troubled that some

G5-16 extant data relating to the entrainment of fishes at the J.C. Boyle facility were not presented in the DLA. These data are not so new as to be omitted from the document due to timing constraints and should have been presented to begin describing Project impacts to downstream fish passage at J.C. Boyle and the effectiveness of existing facilities to protect downstream migrating or resident fishes.

G5-17 We are particularly concerned at the lack of assessment of Project impacts on the lower Klamath River coastal anadromous fisheries. The construction Iron Gate dam created a large pool of standing water behind it in its reservoir that acts as a giant solar energy 'heat sink.' Release of this warm water typically creates serious water temperature problems for Klamath River salmonids for as many as 60 miles below Iron Gate dam, and in some years adversely impacts water quality all the way to the estuary. Since the Iron Gate Hatchery (a mitigation hatchery intended to mitigate only for the lost habitat between Copco No. 2 and Iron Gate dams) also depends on the quality of these water releases for its operation, poor water quality and elevated temperatures resulting from Iron Gate Dam operations also impact hatchery releases by increasing in-stream mortalities, thus partially reducing the effectiveness of those required mitigations.

Response to Comment G5-13

The license application (Section 4 of Exhibit E and Fish Resources FTR) describes fish passage issues for both anadromous and non-anadromous species.

Response to Comment G5-14

PacifiCorp will be consulting with NOAA-Fisheries and USFWS on the proposed new license.

Response to Comment G5-15

A high-level "no dam" alternative has been evaluated. Such an analysis affords a reasonable review of fish passage and water quality benefits and constraints. PacifiCorp has addressed its position with stakeholders numerous times as to why it has not "elected" to evaluate decommissioning.

Response to Comment G5-16

Data pertinent to the J.C Boyle project has been included in the technical appendices of the FLA and in Exhibit E, Section 4, of the FLA.

Response to Comment G5-17

Comment noted. Iron Gate dams serve several purposes other than flow regulation. Although it has minor active storage, it does provide a small amount of short-term water supply and flood control. The physical size of the Iron Gate development was based on ability to moderate Copco No. 1 and No. 2 peaking flows and provide additional generation to the Project.

G5-17

Though it contains outlets designed to take a limited amount of water from 31 and 74 feet deep in the water column, Iron Gate dam contains no other mechanism for cooling any of the relatively hot reservoir water it passes through the system. However, since the primary purpose of Iron Gate dam is for flow regulation, there is no physical need to retain a reservoir as large and as long as the current Iron Gate reservoir to accomplish this purpose. At its current size, Iron Gate reservoir merely serves to unnecessarily absorb and retain solar heat. In addition, Iron Gate dam currently has no fish passage facilities.

G5-18

Average daily maximum water temperatures in the Klamath River below Iron Gate dam (1963-1979) show water temperatures well into the 'chronic threshold' (7-day mortality) (15° C. or 59° F.) established by the 1986 US EPA water temperature criteria from late May to mid-October, and are above the 'acute threshold' (1-day mortality) (20° C. or 68° F.) from early July through mid-August.[1] Since these are averages, this also means daily temperature fluctuations and 'spikes' are likely to be well above those mortality thresholds during periods of most days during this period, particularly in times of low river flow. More recent data from 1992 and 1994 show a similar pattern, with maximum water temperatures above the 1-day mortality threshold from mid-June to early September in the Klamath River immediately downstream of Iron Gate dam. The extent to which these elevated temperature problems are from natural causes or due to the cumulative effect of excessive water withdrawals by the Klamath Irrigation Project and upper basin irrigation withdrawals in addition to the impact of Project operations is unknown at present. However, there is little doubt that elevated water temperatures in the Klamath River, particularly just below Iron Gate dam, are now a major limiting factor for salmon survival, and that the warm water "sink" that is now Iron Gate reservoir is a contributor to those problems.[2]

G5-19

Elevated water temperatures at Iron Gate dam also contribute to reservoir algae blooms that take advantage of the elevated nutrient levels in the Klamath River to grow rapidly, die, and decay. These algae die-offs reduce natural dissolved oxygen available for downriver fisheries. There is also an inverse relationship between water temperature and oxygen saturation levels within water. These factors work synergistically to push dissolved oxygen levels near or below threshold levels for part of each year. Project operations almost certainly contribute to this problem.

G5-20

The Klamath River stretching below Iron Gate dam has long been listed as 'water quality limited' under the Clean Water Act's 303(d) List for failure to meet minimum requirements for temperature and dissolved oxygen. As described above, both impacts are directly traceable to

[1] See *Biological Opinion: Ongoing Klamath Project Operations (Coho Salmon)*, 6 April 2001. Figure 6 of that BiOp summarizes these temperature data and is attached as Attachment 1.

[2] See Bartholow, J.M. 1995. "Review and analysis of Klamath River Basin water temperatures as a factor in the decline of anadromous salmonids with recommendations for mitigation." U.S. Geologic Survey, Mid-Continent Ecological Science Center, Ft. Collins, CO. 52 p.

Response to Comment G5-18

Comment noted. Please see Water Resources FTR and Exhibit E for Water Quality modeling results. Analysis compares "with" and "without" project in place. More specific information on Iron Gate temperature impacts is also presented.

Response to Comment G5-19

Comment noted. Please see Exhibit E for a detailed discussion on the Project's effect on water quality and PacifiCorp's proposed enhancement measures.

Response to Comment G5-20

As described in section E3.4 of Exhibit E, PacifiCorp will request certification under Section 401 of the CWA for the Project no later than 60 days after FERC issues the notice that the relicensing application has been accepted and is ready for environmental analysis. PacifiCorp will consult with ODEQ and CSWRCB to prepare a detailed analysis and application for 401 certification to ensure that the Project complies with the applicable provisions of CWA, including applicable State water quality standards or objectives. Further consultation with ODEQ and CSWRCB is particularly important given the many sources and factors contributing to water quality conditions in the Project area, including many that are outside of PacifiCorp's control.

Mr. Todd Olson
September 26, 2003
Page 6

the configuration and operation of Iron Gate dam. *Thus, Iron Gate Dam is currently operated in violation of the Federal Clean Water Act*.

G5-20 Iron Gate dam not only contributes to Clean Water Act 303(d) listed water quality limitations in the Klamath River, but California state TMDL's will soon have to be created for the Klamath River in compliance with the 6 March 1997 Consent Order in the case *Pacific Coast Federation of Fishermen's Associations vs. Marcus* (US Dist. Ct. No. 95-4474 MHP). That Order requires the finalization of Klamath River TMDL's by no later than 31 December 2007. At present we see no information on how Iron Gate Dam could be reconfigured to meet current and likely future water quality requirements. In fact, it is unlikely to meet those standards without some major reconfiguration for which there are at present no provisions in your DLA.

G5-21 All these things considered, relocating and reconstructing Iron Gate dam further up in the river system, thus reducing the size of the reservoir (and therefore its ability to absorb and retain heat from sunlight and increasing its depth so that water remains cooler at greater depth), and reconstructing the dam with adequate fish passage should be seriously considered. So should dam decommissioning entirely.

G5-22 Iron Gate dam is only the downstream-most dam in the sequence, and the dams above also have an impact on the temperature of water reaching the Klamath River below Iron Gate. A water temperature reduction plan would have to consider the entire system of dams and diversions to comprehensively address a problem created by cumulative impacts from Project configuration and operations.

The physical location of Iron Gate Dam appears, in fact, to be somewhat arbitrary. The concept of Iron Gate Dam, primarily as a flow regulation dam but also to produce some power, dates back to the early 1920's and was originally proposed as the 'Canyon Project' in conjunction with the construction of the Copco Dams. Original construction was proposed in Oregon.

According to information in J.C. Boyle's *Fifty Years on the Klamath*, Iron Gate Dam was constructed where it sits today not so much for engineering reasons as for political and legal ones. The company decided eventually that it would be politically and legally (and therefore financially) easier to build Iron Gate Dam in California to avoid Oregon's tangled Klamath Basin water rights disputes, avoid jurisdiction of the Oregon Hydroelectric Commission and take advantage of California's then much laxer standards for approval of hydropower dams. Oregon's Constitution and statutory law also strictly required fish passage, a provision that was then also being enforced by the new Hydroelectric Commission, while at that time no similar requirements were being enforced in the State of California. This is why Iron Gate dam has no anadromous fish passage, even though some of the dams above it do.

Response to Comment G5-21

PacifiCorp plans to decommission the East Side and West Side projects as described in the FLA. No other decommissioning of Project facilities is proposed.

Response to Comment G5-22

Comment noted. Please see Exhibit E for a detailed discussion on the Project's effect on water quality and PacifiCorp's proposed mitigation measures.

The project was revived as a flow regulation mechanism in the late 1950's, largely in political response to the deaths of several lower river in-stream recreational fishermen who were inundated and drowned by sudden surges in river levels due to steep ramping of flows from the Copco developments as the powerhouse operated to meet daily fluctuations in power demand, and in settlement in 1959 of a long-standing nuisance lawsuit brought by the State of California in 1950 as a consequence of those deaths.[3] Largely because of public outcry over these safety hazards from recreational fishermen, considerable political pressure was brought to bear by the State of California to implement that settlement agreement by speedily granting the project the appropriate licenses with the barest minimum of review.

The California Department of Fish and Game Director rather optimistically stated that there would be no impact on water temperature from the construction of Iron Gate Dam.[4] Staff at CDFG debated this conclusion, and raised a number of concerns with potential elevated temperatures at the time, but it was thought that the reduction of ramping rates would provide substantial benefit that would offset any of these temperature problems.[5] At the time, nearly all the concern was for safety hazards created by high ramping rates, and very little attention was paid to potential water temperature impacts of dam construction in that location. The California process of evaluating these impacts, while less rigorous than the process in Oregon to begin with, was thus short-changed and truncated in an effort to settle this long-standing political and legal dispute. Thus Iron Gate Dam was constructed – without fish passage and with inadequate consideration of its impact on downriver water temperature, in 1962.

In summary, the present location and configuration of Iron Gate Dam, given its role primarily as a flow regulation mechanism, was driven primarily by political and legal considerations, and is not apparently based on engineering constraints *per se*. There appears, therefore, no engineering reason both the location and configuration of Iron Gate Dam should not be rethought. Indeed, in light of a long history of Clean Water Act non-compliance at the current location of Iron Gate Dam, there appears every reason to take whatever steps are necessary to correct these problems expeditiously permanently.

G5-23

[3] See Legal Agreement between the State of California and California/Oregon Power Company (Copco) regarding nuisance abatement and construction of Iron Gate Dam, dated 27 July 1959.

[4] See for instance a speech by then CDFG Director Walter Shannon, November 1961, in which he indicated "CDFG and the Secretary of Interior requested that the Federal Power Commission revise the articles of Copco's license relating to minimum flows to conform with the terms of the California Water Rights permit issued to the company." He also stated his belief that prevailing water temperatures in the Klamath River were not adversely affecting fish and that no changes in temperature regimes were expected from the construction of Iron Gate Dam (cited in *Klamath Hydroelectric Project Annotated Bibliography of Aquatics and Wildlife* (PacifiCorp, May 2000)).

[5] See Skinner, J.E. 1961. Memo to Walter Shannon, CDFG Director, from J.E. Skinner, CDFG, concerning issues surrounding Iron Gate Dam construction, level of outlet and productivity of Iron Gate Reservoir, dated July 21, 1961. CDFG, Sacramento, CA (cited in *Klamath Hydroelectric Project Annotated Bibliography of Aquatics and Wildlife* (PacifiCorp, May 2000)).

Response to Comment G5-23

Section E3.5 of Exhibit E provides a description of current water quality conditions in the proposed Project area, including Iron Gate, in the context of applicable water quality standards or objectives. Section E3.8 provides descriptions of measures proposed by PacifiCorp to enhance current water quality conditions. These include measures aimed specifically at water quality enhancements at Iron Gate, but does not include "relocation" or decommissioning of Iron Gate dam. PacifiCorp will consult with ODEQ and CSWRCB to prepare a detailed analysis and application for 401 certification to ensure that the Project complies with the applicable provisions of CWA, including applicable State water quality standards or objectives. Further consultation with ODEQ and CSWRCB is particularly important given the many sources and factors contributing to water quality conditions in the Project area, including many that are outside of PacifiCorp's control.

G5-24 G5-25

Recommended Iron Gate Dam Studies: (1) Feasibility study for how Iron Gate Dam and the dams and diversions above it might all be managed or re-engineered within their current configuration to meet Clean Water Act and California State Water Quality Standards; (2) Feasibility study of the relocation and either permanent decommissioning or reconstruction of Iron Gate Dam above its current location the installation of mechanisms to pass water from lower in the reservoir water column or otherwise cool water outflows to meet water quality standards, and for effective fish passage both upstream for adult salmonids and downstream for juvenile salmonids.

These studies would eventually inform PM&E measures for how Iron Gate Dam could meet State of California and Clean Water Act standards for both temperature and dissolved oxygen.

G5-26

The DLA fails to analyze Project-induced economic losses to lower Klamath River and coastal ocean salmon and steelhead fisheries-dependent communities. No mitigations have ever been done for lost salmonid spawning and rearing habitat above Copco No. 2. When the majority of the Project was constructed during the first quarter of the 20th Century, there was no legal requirement to mitigate impacts to fisheries. As a consequence of construction of that portion of the Project, access of anadromous fish to approximately 1/3 of the Klamath River Basin was lost. This likely impacted all anadromous species but the impact was most dramatic for spring chinook salmon. Prior to and in the early years of the 20th Century, spring chinook were the *largest run of salmon present in the Klamath River Basin*. Because of their life history, these fish are able to access habitat much higher in the basin's watersheds than fall chinook salmon. Spring chinook are particularly suited to the upper portions of the Basin, *the very area from which they were extirpated likely as a result of construction of the Project*.

When Iron Gate dam was built, fisheries mitigation was required for hydroelectric licenses. At that time a license was issued for the entire Project. However, mitigation was only required for the impacts of Iron Gate dam up to the Copco complex.

G5-27 G5-28

The primary mitigation for the construction of Iron Gate dam included in license conditions was the Iron Gate Hatchery (IGH). At that time, robust runs of spring and fall chinook salmon, coho salmon and steelhead existed in the stretch of river between Iron Gate and Copco dams. IGH attempted to raise spring chinook, fall chinook, coho, and steelhead to mitigate for loss of these runs. *However, the effort to raise spring chinook was a failure and was subsequently abandoned*. Subsequently, spring chinook have been extirpated from the upper Klamath Basin and from some areas downstream of Iron Gate dam. While there are a number of factors implicated in the decline of this run in the Klamath River Basin, it is certain that construction of the original Project and the subsequent construction of Iron Gate Dam *have contributed significantly* to this decline. The loss of fall chinook, coho and steelhead as a result of Iron Gate dam construction has been less dramatic. Nevertheless, license conditions intended to mitigate for anadromous fish losses including the IGH have not been effective in mitigating

Response to Comment G5-24

Substantial information has been added to the analysis of water quality in the FLA (Exhibit E, chapter E3) and Water Resources FTR, including water quality modeling of the Klamath River from Link dam to Turwar (near the river's mouth). Measures proposed for enhancement of water quality are described in Exhibit E, section E3.8. PacifiCorp will consult with ODEQ and CSWRCB to prepare a detailed analysis and application for 401 certification, including Project measures as needed, to ensure that the Project complies with the applicable provisions of CWA, including applicable State water quality standards or objectives.

Response to Comment G5-25

PacifiCorp has no plans to study decommissioning or facility relocations. Please see Sections 3 and 4 of Exhibit E for detailed discussions on the Project's effects on aquatic resources quality and PacifiCorp's proposed PM&Es.

Response to Comment G5-26

The objectives of the socioeconomic studies are to describe the existing socioeconomic condition and the anticipated changes in the socioeconomic condition due to the changes in the Proposed Project relative to continued Project operations.

At the time the developments were constructed Oregon law required fish passage at all obstructions to native game and anadromous fish. It's apparent that agencies with regulatory review responsibilities at that time interpreted that law differently given that the developments were authorized.

Response to Comment G5-27

Data presented in Snyder (1931?) show that even in the early 1900's fish runs in the Klamath River were severely depleted. While fall Chinook runs were still prevalent, spring Chinook in the Klamath River were virtually non-existent. Thus, impacts to anadromous fish were well underway even before the construction of current Project facilities. PacifiCorp continues to fund IGH hatchery production of coho, steelhead and fall Chinook. Spring Chinook production has never been very successful due to a variety of reasons. PacifiCorp proposes to fund hatchery operations in the FLA.

Response to Comment G5-28

Please see Sections 3 and 4 of Exhibit E for detailed discussions on Project effects to aquatic resources and proposed PM&Es.

G5-28

for losses to spring chinook, fall chinook, coho and steelhead resulting from construction of Iron Gate dam. Mitigation for ***all*** the impacts should be required as part of the new license.

The economic and social impact of the decline and near elimination of the full range of salmon species from the Klamath River Basin have been profound to each of the cultures dependent on anadromous fish.[6]

G5-29

The Yurok, Karuk and Klamath Tribes relied heavily on spring chinook - among all salmon, spring chinook were and are their preferred food source. Ceremonies which regulated the salmon fisheries and which constitute a profound aspect of Klamath River Native American religion focus on spring chinook. The loss of the vast majority of this run has materially and culturally impoverished the Yurok, Karuk, and Klamath Tribes peoples. This socioeconomic impact needs to be analyzed.

Ocean salmon fisheries are all managed on a principle called "weak stock management." This means that the weakest stock, when it intermingles with otherwise strong stocks, acts as the limiting factor on all ocean harvests. Klamath-origin stocks have, in fact, been so weakened over the past several decades, largely as a result of Project operations and loss of spawning and rearing habitat due to lack of fish passage, that they are the indicator species upon which most of the Pacific salmon fisheries offshore California, Oregon and Washington are now managed. This means that even otherwise abundant salmon runs (such as the California Central Valley hatchery runs) become "off limits" to fishing whenever they migrate through areas inhabited by Klamath-origin weak stocks. This principle is fundamental to good conservation biology and is required under both state and federal fishery management laws and regulations.

Prior to their decline, spring chinook were a substantial portion of commercial salmon landings in the Klamath Management Zone (KMZ) of the Pacific Ocean. Near complete loss of the SC Klamath runs and declines of other salmon species related to loss of spawning and rearing habitat and lack of fish passage have had a ***substantial economic and social impact on ocean commercial salmon fishermen and on the communities which depend on this industry*** throughout the KMZ, a coastal region extending from just north of Fort Bragg, CA to just south of Coos Bay, OR, roughly 225 miles of coastline including several major ports. Furthermore, the economic constraints placed on other ocean salmon fisheries as a result of Klamath-driven "weak

[6] Spring run chinook salmon are of particular concern because they are so close to extinction in the river system and were particularly impacted by the construction of Iron Gate dam. Not surprisingly, however, today fall chinook is the most important species for commercial fisheries, but with spring chinook and coho salmon acting as "weak stock management" constraints on all other (otherwise abundant) fisheries at sea and in-river.

Response to Comment G5-29

The socioeconomic study does report on the current socioeconomic condition of American Indians in the study area. The revised FTR and FLA contain additional detail. The socioeconomic studies do not attempt to describe the cultures of the Tribes residing in the study area. Such studies are beyond the scope of the socioeconomic analysis. PacifiCorp has requested information from the Tribes related to subsistence and commercial fishing and other Klamath River resource-dependent activities that contribute to their material well-being. The Tribes would be the most likely source for such information. Thus far, they have not provided such information. PacifiCorp has also commissioned an ethnographic study. This study can be found in the Cultural Resources FTR.

stock management" constraints placed on those fisheries by spring chinook and ESA-listed coho from the Klamath can extend to significant coastal areas outside of the KMZ boundaries as well.[7]

Prior to their near elimination, spring chinook were a substantial ocean and in river sport fishing target species. Near elimination of spring chinook in the Klamath River Basin by Project construction and operations, and declines of other salmon species for similar reasons, have substantially impacted sport fishing and the river and coastal communities which depend on sport fishing as a major draw for tourism and thus a major source of economic wealth. Loss of this stock in particular has led to closed or shorter fishing seasons and (recently) seasonal closures of sport fishing in substantial portions of the Lower Basin.

Likewise, declines in fall chinook and coho salmon act as major constraints on all salmon harvests within the region these fish would usually have inhabited. Klamath-origin fall chinook runs, for instance, are at only about 8 percent of historic run sizes, and Klamath-origin coho salmon are now at about 2 percent or less of historic run size. In recent years, once flourishing salmon ports within this KMZ have been forced to shut down almost entirely as a conservation measure to protect these extremely weakened Klamath-origin stocks. Once outside the waters of California, only fishermen with Oregon licenses could catch them, and then only north of the Oregon side of the KMZ. Those Oregon ports such as Brookings, Charleston, Coos Bay, Gold Beach and Bandon also suffered similar loss of access to through-migrating Central Valley-origin salmon because of weak stock management constraints placed on those fisheries to protect Klamath stocks.

G5-30 While it is difficult to separate the impact of the Project on the social and economic losses of Native Americans, commercial and sport fishing, coastal and river communities from other factors impacting these declines, it is indisputable that the Project are significant causal factors in the declines of lower river and KMZ coast salmon fisheries and related negative social and economic impacts that multiply far up and down the coast. These impacts are most obviously associated with the loss of spring chinook but they are also related to declines of fall chinook, coho salmon, steelhead, lamprey and possibly sturgeon. These losses should be acknowledged and could be quantified with additional study. It should also be acknowledged that conditions included in the last license that were intended to mitigate for fisheries losses have not been as effective as anticipated. ***In particular, the attempt to mitigate for the loss of the spring chinook run has been a complete failure***.

G5-31 The Klamath River was once the third most productive salmon river in the United States. The socioeconomic impacts of the near total loss of these commercially important Klamath

[7] Nevertheless, the vast majority of these impacts would be within the KMZ ports between and including Fort Bragg, CA and up to nearly Florence, OR, i.e., the Project Study Area. These salmon ports were once among the most productive on the west coast, but which have now lost between 95 and 99+ percent of their salmon landings in order to protect extremely weak Klamath-origin stocks, including ESA-listed coho salmon which were once both abundant and a major driver of the west coast salmon fishing industry.

Response to Comment G5-30

The FTR and FLA include recent trends in the value of the ocean commercial and tribal fisheries and tribal in-river fisheries as tabulated by the PFMC and analyzed within the fisheries economic effects model (FEEM). This includes the coastal communities and Tribes mentioned in your comment. However, no attempt is made to analyze the influence of current project operations on those values. Rather the FLA and the FTR will attempt to describe how these values would be expected to be affected by the proposed project and PM&Es measured relative to a continuation of the existing project.

Response to Comment G5-31

It is beyond the scope of the socioeconomic studies to analyze the historical influence of the Project on fish populations and the resultant effects on the socioeconomic condition. The FERC baseline is the current Project continuing to operate in the current environment. Proposed alternatives are measured relative to that baseline.

River fisheries to downriver and coastal fishing-dependent communities have never been adequately addressed or mitigated, but the socioeconomic impact can be determined and should be assessed as part of your Socioeconomics Study Plan. True quantification would include measurement of anticipatory stress that is a major component of communities that have little control over how they are managed; increases in social services in the community due to loss of jobs; impacts on homes and family stability; the increase in police staff and jail facilities resulting from community destabilization and a host of other direct and indirect social and community costs which commonly occur in communities deprived of a major portions of their livelihoods. G5-31

C. Specific Draft License Application Comments

The following specific comments respond to definitive deficiencies or disagreements that we have with the DLA.

In section A8.1 and B11.4, PacifiCorp describes the existence and possible future inclusion of a small diversion facility on Spring Creek to provide up to 16.5 cfs of water to the Fall Creek powerhouse. In characterizing this facility, it would be most accurate to state that the Spring Creek diversion is not currently a part of the F.E.R.C. 2082 Project, allowing for the explicit possibility that this diversion could become an integral part of the Project in the future (pending adjudication). The final license application should include brief descriptions of operational, dependable capacity, and average annual energy production impacts to the Fall Creek development with the addition of the Spring Creek diversion and its associated water right. Further, we ask that the FLA include an in-depth outline of the process PacifiCorp will follow to add the Spring Creek facility to the Project through amendment. This language is best added to either section B11.4 or B13.0. We recommend this amendment process include stakeholder collaboration on the development of studies to establish the impacts to resources and the development of PM&E measures. G5-32 G5-33

We note that the DLA does not include any discussion of the species / stocks of anadromous fishes and their historical extent upstream of Iron Gate dam (section E4.1). With the lack of fish passage facilities at Copco No. 1 and Iron Gate dams precluding anadromous fish migrations upstream of these facilities since 1913, this constitutes one of the most concerning, if not the most concerning, impact of the continued operation of these projects. While important for all of the species and stocks of fishes that would have migrated past the California-Oregon border for the last 90 years, this discussion is most imperative for spring chinook salmon (section E4.1.3.6.2). These fish are reported to have been the most abundant anadromous fishes in the Upper Klamath Basin but now are relegated to the Salmon and Trinity sub-basins and are among the most at-risk fish populations in the entire Klamath system. Information from such a discussion is imperative to characterize the existing environment and set the context for the examination of Project impacts to water quality, geomorphology, fish resources, botanical and wildlife resources, recreation, and socioeconomics. G5-34 G5-35

Response to Comment G5-32

PacifiCorp has elected to include the Spring Creek diversion as part of the new FERC license. Operational and facility resource information is included in appropriate sections of the License Application.

Response to Comment G5-33

Rather than via an amendment, the Final License Application is the vehicle PacifiCorp has chosen to propose including the Spring Creek diversion facility as part of the Fall Creek Development. As stated in Section E1 of Exhibit E, PacifiCorp will collaborate with stakeholders in determining an appropriate scope of study for the included facility and associated FERC boundary.

Response to Comment G5-34

Information regarding the historical distribution of anadromous species is being developed in association with the Fish Passage Work Group.

Response to Comment G5-35

Comment noted. PacifiCorp does not intend to use historic fisheries data in the analyses for water quality, botanical, wildlife, recreation, or socioeconomic resources.

G5-36 We ask that PacifiCorp include a description of the impacts from blocking anadromous fish migration at Iron Gate dam on terrestrial animals found along the Klamath River, Lake Euwana, and the Link River (section E5.2.2). We are particularly interested in impacts to species such as bald eagle, osprey, black bear, raccoon, river otter, and mink. However, certainly other birds and other mammals, at a minimum, would use spent salmon carcasses as a primary source of nutrition during the late fall and winter months and the loss of this massive nutritional input into the ecosystem as a whole should not be ignored. These impacts of the Project should be identified and characterized in the FLA.

G5-37 PacifiCorp goes to great length in several sections of the DLA (specifically hydrology, water quality, geomorphology, and riparian habitat) to identify and describe impacts from non-Project sources on resources also affected by the Project. While an understanding of these other sources of impact are necessary to a complete understanding of the affected area, PacfiiCorp should focus on presenting clear information relating to their impacts (or non-impact) of their facilities on resources. Certainly other sources of impact should not be ignored, but they should only be addressed as a means of establishing a complete picture for the affected resource and not used to dismiss PacifiCorp's relative affect. Under no circumstance should a non-Project impact obviate the need for PacifiCorp to present information characterizing their own impact, regardless of any disparity in their respective magnitudes.

D. Recommendations

G5-38 Based on the deficiencies noted in section B above, PacifiCorp's DLA does not meet the regulations provided in 18 CFR 4.51 and 18 CFR 16.8. These deficiencies necessarily restrict the input PacifiCorp will receive from stakeholders on this DLA, particularly pursuant to alternate data analysis and interpretation and proposed PM&E measures. Lack of formal discussion on these two items leave us ready for a FLA full of surprises. To rectify this situation, we provide two recommendations.

G5-39 First, PacifiCorp should complete ongoing studies and analyze and interpret resulting data as quickly as possible.

G5-40 Second, prioritizing by information needs that will be included in the FLA, PacifiCorp must present data, analysis, interpretation, and proposed PM&E measures to stakeholders prior to the filing of the FLA. Where possible, PacifiCorp should make the effort to collaborate with stakeholders on the identification of Project impacts and development of PM&E measures and document in the FLA all substantive disagreements with stakeholders on these items. These steps will provide a substitute in the written record for the joint meeting provided in 18 CFR 16.8(c)(8).

Response to Comment G5-36

Comment noted. The updated Terrestrial FLA provides information on the availability of anadromous and other salmonid carcasses for terrestrial wildlife. Under current baseline conditions, anadromous fish are collected at the Iron Gate Hatchery and do not occur above Iron Gate dam. The blockage of fish passage was an original Project impact. Currently, species found in upstream reaches do not depend on this food source. Many species would likely take advantage of this resource if it were available in the future.

Response to Comment G5-37

Although many other non-Project impacts occur on resources within the Project area, the focus of the License Application is on characterizing Project impacts.

Response to Comment G5-38

Comment noted.

Response to Comment G5-39

PacifiCorp has made every effort to complete studies and document them in the FLA and Final Technical Reports.

Response to Comment G5-40

In October and November of 2003 PacifiCorp shared preliminary Project operations and PM&Es for the proposed license. Because some key studies were not completed, the preliminary measures were not fully identified. Timing of the process did not permit PM&E negotiations prior to submission

of the License Application. Substantive disagreements are presented in Appendix E1-A, the consultation record section, of the License Application.

Thank you for your attention to this important matter, and please let us know if we can provide more information.

Sincerely,

Brian R. Barr
For World Wildlife Fund *and on behalf of*

Christine Ambrose California Organizer American Lands Alliance	Bill M. Bakke Director Native Fish Society	Diane Beck Conservation Chair North Group Redwood Chapter Sierra Club
Susan Bower Director Citizens for Better Forestry	P. T. Brucker Coalition Representative Klamath Forest Alliance	Patty Clary Executive Director Californians for Alternatives to Toxics
Terry Coltra Executive Director Northern California Indian Development Council	Romain Cooper Conservation Coordinator Siskiyou Regional Education Project	Cindy Deacon Williams Conservation Director Headwaters
John DeVoe Executive Director WaterWatch of Oregon	Dan Doble Director California Council Trout Unlimited	Jack Ellwanger Director Pelican Network
Robert M. Freimark Director, Northwest Region The Wilderness Society	Kaitilin Gaffney Program Manager The Ocean Conservancy	Ryan Henson Policy Director California Wilderness Coalition
Paul Hughes Executive Director Forests Forever	Greg King Director Siskiyou Land Conservancy	Alan Levine Director Coast Action Group

Jim McCarthy Policy Analyst Oregon Natural Resources Council	Larry McCowan Executive Director World Stewardship Institute	Tim McKay Executive Director Northcoast Environmental Center
Nadananda Executive Director Friends of the Eel River	Pete Oringer Director Friends of Humboldt County	Chris Peters Executive Director Seventh Generation Fund
Ben Riggan Program Coordinator Mid Klamath Watershed Council	Glen Spain Northwest Regional Director Pacific Coast Federation of Fishermen's Associations and Institute for Fisheries Resources	Kent Stromsmoe Forestry Monitoring Project
Joseph Vaile Campaign Coordinator Klamath-Siskiyou Wildlands Center	Eric Wesselman Regional Representative Sierra Club-California-Nevada-Hawaii	John Woolley Supervisor District 3 Humboldt County Board of Supervisors

cc: Magalie Roman Salas, F.E.R.C. Secretary

Forest Community Research

September 24th, 2003

Todd Olson
PacifiCorp
825 NE Multnomah
Suite 1500
Portland, Oregon
97232
Todd.Olson@PacifiCorp.com
(503-813-6657)

Re: Comments on the Klamath Hydroelectric Project FERC No. 2082
Draft Socio-economics Studies

Dear Mr. Olson :

Thank you for the opportunity to comment. Forest Community Research is a small, non-profit research and policy development organization with offices in Arcata and Taylorsville, California. We appreciate that PacifiCorp incorporated some of Forest Community Research's Klamath Basin assessment work into the Draft technical Report dated June, 2003 (DTR-44 and 45). Forest Community Research continues to be involved in understanding and improving the socio-economic and community well being of workers and residents in the region.

Our work and publications provide insights on the dynamics of change for communities facing burdens associated with federal forest (and increasingly water) policies. Its is change and the capacity to manage change for improving community well being in small, isolated, impoverished, and often minority sub-populations that frequently challenges social scientists' capabilities to assess these conditions. The development of effective strategies for lessening undue burdens that are associated with natural resource decisions is plagued with methodological and theoretical difficulties. Therefore, our comments focus on the smallest and most impoverished populations in the study area and how the proposed studies and the development of PM&Es might address their needs most directly.

Introduction
First, the socio-economic work group members and PacifiCorp are to be commended for making a good faith effort to reach and understand the

P.O. Box 11 Taylorsville, California 95983 Phone 530.284.1022 Telefax 530.284.1023 Info@FCResearch.org

populations that may be most affected by the next 50 years of hydroelectric operations of the FERC No. 2082 Klamath Project (Project). The team has embraced the reality that the socioeconomic impact area may be larger than the project boundary. The differentiation between the five -mile and fifty-mile (from river) study corridors is important for further honing the actual impact area for the project in terms of marginalized sub-populations. The acknowledgement of the differences between census tract and smaller -than -census-tract populations recognizes that the smallest communities may be more affected by the project and have fewer options for responding favorably to change without assistance. Finally, the direct investigation of the socio-economic status of Native Americans and largely hispanic farm worker populations is crucial to a credible socio-economic assessment and also necessary for the development of effective PM&Es.

The Final Working Draft for Phase 3 of the Socioeconomic Study, *"Analysis of Difference Between the Proposed Project and the Current Project on the Socioeconomic Environment,"* begins to develop a methodology for addressing question number 5 of the Phase 2 ("High level of Socioeconomic Analysis of the Landscape Options")

Question #5 asks, *"How would the potential benefits and costs be distributed within and across regions in the study area (i.e which societal groups would bear the burdens and who would reap the benefits)?"*

In response to question #5 and the issues of "potential incremental project effects" and using diverse information sources to evaluate PM&E measures where tight scheduling may inadvertently foreclose important analyses and effective PM&E responses to undue burdens by sub-populations from the continued operation of FERC No. 2082, Forest Community Research recommends that the following concepts be incorporated into further socioeconomic assessment. Forest Community Research is willing to assist the workgroup with theoretical and methodological approaches for grappling with these concepts and for developing PM&E recommendations for addressing them.

Concepts needing further development in the Proposed Phase 3 Socioeconomic Analysis

G6-1 Forest Community Research suggests that the following issues be explored in greater detail by the socioeconomic work group as options for potentially addressing the distributive/equity issues associated with effects of both the changed and the status quo operations of FERC No. 2082 with a particular focus on poor and minority populations in the Project area. Working on these concepts does not have to wait for the specific PM&E proposals to be finalized about key issues such as lake levels, riverine flows, fish passage around dams or water quality loads and allocations. These conceptual approaches provide

Response to Comment G6-1

The phase 3 study will attempt to examine the distributional implications of the changes in operations of the Project and PM&Es due to the proposed Project, especially as they may relate to poor and minority subpopulations.

"pathways from biological and environmental changes to socioeconomic endpoints" with attention to specific PM&E measures that could help to make the relationship between changes and the community impact positive rather than negative for poor and minority (EJ) populations in the project area.
(1) Managing for uncertainty and empowering "disproportionately affected" communities to engage in adaptive management for achieving incremental positive change over the next 50 years of the new license.

The Klamath Basin is characterized by uncertainty and conflict. Numerous federal agencies, in coordination with the FERC or independently, must, sort out and resolve the tangle of problems and damages that result from overallocated water supplies and conflicting water uses. These problems will outlast this relicensing process. Problems may persist well into the next 50 year licensing period for Project No. 2082. In this context, the socioeconomic working group can be seen as an entity that may play a longer term role in evaluating PM&E measures and in facilitating the accountability and feedback that would accompany flexibility in achieving resource goals and conditions in the final license. In the face of considerable uncertainty, incremental milestones and triggers could be put in place to respond to unforeseen positive and negative outcomes from PM&Es –especially those PM&Es that address undue burdens by subpopulations in the project area. An adaptive management approach could be used to deal with uncertainty and achieve incremental positive change over the next (potentially chaotic) few decades of the new license. Other especially difficult licensing processes such as FERC No. 1962 on the Feather River, the second longest licensing process in the history of FERC in California, were resolved through adaptive management license conditions. For affected populations, a commitment to participatory research directly involving evaluation by and with those communities, would be an important policy consideration in designing adaptive management for addressing undue burdens and distributive effects into the new license.

G6-2

(1) Social, cultural, human, financial, physical and natural capital assessment and conservation at the community scale.

Capital assessment is a set of measurements and strategies that have been piloted by Forest Community Research and linked to conservation by the Sierra Business Council and others in California, and elsewhere. In both chronic and crisis situations involving political conflict, environmental degradation and poverty, we've learned that interventions aimed exclusively at the personal income of individuals or at the population of adults of a particular plant or animal species, have usually failed in the longer term. In the long run, such as a 50 year hydrolicense time frame, it is the basic resiliency of environmental, social and economic systems at multiple scales, that most matters. As important as tracking trends in socioeconomic indicators, so is developing measures of resiliency,

Response to Comment G6-2

PacifiCorp has incorporated adaptive management into the proposed Project and is actively considering the role that continuing socioeconomic analyses may play over the life of the new license.

capacity and responsiveness to change. At the community scale, capacity measures are needed to identify the capabilities of communities to respond to change. At regional scales "capitals" measures are needed to aid the evaluation of relevant options. Standard socioeconomic methodologies typically focus on one scale- regional or national or local. Because socioeconomic analysis does not easily "scale up" or "scale down," distributional equity issues often fall through the scientific cracks and are usually left to politics. In the Klamath Basin, where the term "combat science" was coined, it may be important to look not only at local measures and regional measures but at what the linkage between the two reveals as one looks across scale and across jurisdictions. The capitals framework may provide a wider lens for understanding proposed 2082 operational changes on the social, economic and institutional environment, especially for minority and low income sub-populations.

G6-3

(2) Cultural disruption for Karuk, Yurok and Hupa peoples.

Cultural disruption is a term used to describe impacts to the cultural survival of Native Americans. All too often, Native American health and well being is not captured by standard economic measures such as income, employment, and property ownership. These measures miss much that is important, but that is not to say that they are unimportant. They regularly capture important dimensions of socioeconomic distress, which contributes to chronic impoverishment. The Phase One socioeconomic analysis notes that Native Americans in the project area have incomes that average half of income levels enjoyed by non-Indians. Additionally, *"communities within the 5-mile buffer area are characterized by pockets of American Indians with incomes below the poverty level."(DTR2-31)*
As a result of the creation of the first hydroelectric project, in the 1917 along with other settlements and ownerships by non-Indians of Indian lands, the integrity of the aboriginal land base was fragmented, the tribal social fabric was ripped, and cultural disruption ensued. Tribal territories were divided into individual parcels and homesteaded by non-Indians or became part of the public domain. Treaty rights to land and subsistence resources were reduced or terminated. Private property was a foreign concept codified in a language that was also completely foreign to Indian people in the early 1900s. The Native Americans have a cultural system that is tied to the stewardship of the landscape and its ecosystem and which, until the late 1890s and early 1900s, was expressed in an aboriginal land tenure system that recognized perpetual communal stewardship of common ancestral lands. The material, spiritual, philosophical, and social culture of the Yurok, Karuk and Hupa remains tied to the larger aboriginal landscape, although land tenure and land stewardship ties have been mostly severed outside of reservation lands. It is important to evaluate ongoing cultural disruption in understanding how future operations of 2082 will affect the

G6-4

Response to Comment G6-3

Thank you for the suggestion. We will consider it in light of the proposed Project and PM&Es and potential effects on subpopulations.

Response to Comment G6-4

We agree that the community well-being of American Indians is tied to their ability to practice their culture. The socioeconomic measures that are typically collected to describe current conditions and changing conditions in the socioeconomic environment of populations and sub-populations only partially capture changes in community well-being. Nonetheless, the socioeconomic studies are attempting to obtain such information on each of the affected American Indian subpopulations. In addition, separate studies are attempting to examine the interrelationships between American Indian cultural practices and community well-being.

G6-4

cultural survival and community well being of Native Americans in the project area.

(3) Impacts associated with the contract renewal terms of the Link River Agreement between the US Bureau of Reclamation and PacifiCorp.

G6-5

It is our understanding that the current agreement between PacifiCorp and the Bureau of Reclamation (BOR) will expire in 2006. If the current energy subsidies in the Link River Agreement are renewed, there is an opportunity to recognize tribal water rights and to extend similar benefits to tribes where feasible. If the current energy subsidies are not continued in the new contract between the BOR and PacifcCorp, there may be significant economic impacts in the farming communities of the Klamath Basin, especially in the Tulelake area. The economic hardships that would fall on farm workers from farming bankruptcies or widespread fallowing of farmlands as a result of the new contract, needs to be assessed before 2006. Especially at risk, are workers employed in alfalfa, wheat and barley operations, along with onion and potato farming operations that could also be severely affected by higher energy prices.

G6-6

This concludes our comments at this time.
Please add Forest Community Research to the Klamath Project No. 2082 Socioeconomic Work Group mailing and meeting notification list. If you have further questions, please do not hesitate to contact us.

Sincerely,

Jonathan Kusel, Director

Leah Wills, Research Associate

Forest Community Research
P.O. Box 11
Taylorsville, California
95983
530-284-1022 (phone)
530-284-1023 (fax)
Kusel@FCResearch.org
Wills@FCResearch.org

Response to Comment G6-5

PacifiCorp believes that the contract with BOR is outside of the FERC license and that the end result of the expiration of this contract is highly uncertain.

Response to Comment G6-6

Forest Community Research was added to the Socioeconomic Work Group correspondence list.

SALMON RIVER RESTORATION COUNCIL
PO BOX 1089
SAWYERS BAR, CA 96027

Mr. Todd Olson
PacifiCorp
825 NE Multnomah - Suite 1500
Portland, Oregon 97232

Re: The Salmon River Restoration Councils Comments on Draft License Application for New License, Klamath Hydroelectric Project, Klamath River, F.E.R.C. No. 2082

9/23/03

Dear Mr. Olson:

Thank you for providing the Salmon River Restoration Council (Council) with the opportunity to provide our comments and recommendations to PacifiCorp on the Draft License Application (DLA) that it submitted to the Federal Energy Regulatory Commission (FERC) to relicense its Hydroelectric Facilities (Klamath Project). The Council has participated in meetings held by PacifiCorp and provided oral and written input in the DLA process. The Council would like to submit these additional comments to PacifiCorp and FERC for the DLA related to the Klamath Project. We request that the following comments be used in the development of the Final License Application. These Comments have been identified by us as being significant issues and are as follows:

I) GENERAL COMMENTS

1) SALMON RIVER RESTORATION COUNCIL

The Salmon River Restoration Council, a 501(c) (3) tax-exempt nonprofit corporation, believes that education and empowering the riverine communities to become effective stewards of the ecosystem should be a centerpiece in recovering our watersheds, particularly the declining fisheries resource. As recognized and supported by the Klamath Basin Fisheries Restoration Task Force since 1993, the SRRC has taken a lead role in enlisting stakeholder cooperation for coordinating watershed/ fisheries restoration throughout the Salmon River Subbasin. The SRRC's mission is to assess, protect, restore, and maintain the Salmon River ecosystems, focusing on the restoration of the anadromous fisheries resources. This is being accomplished through diversification of the local economic base, highlighting restoration and by improving communication and cooperation between the local community, academia, managing agencies, Native American tribes, resource users, the general public, and others.

The SRRC has planned, implemented, and monitored an annual series of cooperative Ecosystem Awareness Workshops, Volunteer Training Workdays, and related

Investigative Field Trips. Community members, staff, resource users, technical assistants, and others have contributed over 7,390 volunteer days associated with planning, implementation and monitoring of more than 436 SRRC sponsored Workshops, Workdays and Field Trips. These activities have helped to increase coordination and cooperation between all of the stakeholders. SRRC focuses on ways to identify and reduce negative impacts, connected to various resource uses that are being identified and utilized in areas such as: fishing, mining, forest management, grazing, recreation, road management, and residential use. These planned activities have served as a springboard as well as provided invaluable support for the stakeholders in their development of prioritized projects and the SRRC Program areas.

G7-1 Approximately two years ago, the Council initiated and currently coordinates and facilitates the Salmon River Spring Chinook Voluntary Recovery Work Group. This multiple Stakeholder Work Group has met several times to promote coordination for existing recovery and assessment activities, to work on completing a Limiting Factors Analysis, and to identify causative factors and Remedial Actions needed to recover Spring run Chinook Salmon in the Salmon River and elsewhere in the Klamath Basin. We request that PacifiCorp participate in this effort as it will increase their ability to offer more effective mitigation measures for insuring that they meet their obligation for the Spring run Chinook.

G7-2 We request that PacifiCorp incorporate a map of the historic range and estimated run size for Klamath River Spring run Chinook throughout the Upper Basin above Iron Gate dam. The Application should identify what the Project's impacts are for the Salmon River Spring run Chinook and other Spring run Chinook currently and historically existing in the Klamath Basin.

2) SALMON RIVER SUBBASIN OVERVIEW

The headwaters of this riverine system flow predominantly from the Marble Mountain, the Trinity Alps, and the Russian Wilderness area. The Salmon River has long been known for its exceptionally high quality waters and fisheries. It is recognized as one of the cleanest rivers in the state. The Salmon River is designated as a federal wild and scenic river due to its "outstanding anadromous fisheries values".The Salmon River subbasin supports a coldwater resident and anadromous fishery which include: Spring and Fall run Chinook Salmon (Oncorhynchus tshawytscha), summer and winter run steelhead (O. mykiss), Coho salmon (O. kisutch), sea run Pacific lamprey (Lampreta tridentata), and green sturgeon. Non-anadromous species include Klamath speckled dace (Rhinichthys osculus Klamathensis), Klamath small scale sucker (Catostomus rimiculus), and marbled sculpins (Cottus klamathensis). Threespine sticklebacks (Gasterosteus aculeatus) may be present in the habitat, but their use of the habitat is unconfirmed. Resident trout are located throughout the subbasin. Introduced fish stocks include American shad, brown trout, and brook trout. Anadromous salmonid habitat is extensive in the subbasin, distributed among tributaries of the Main Stem, Wooley Creek, North Fork and South Fork Salmon River. The Klamath National Forest (KNF) identifies the Salmon River as the watershed with the best anadromous fisheries habitat in the Klamath National Forest (KNF Land and Resource Management Plan, 1994). The Salmon River Subbasin provides habitat for the largest wild run of Spring Chinook Salmon in the entire

Response to Comment G7-1

Although PacifiCorp agrees that additional Spring Chinook recovery efforts are needed, the proposed enhancement measures in the License Application follow the general FERC guidelines of being focused within the Project area.

Response to Comment G7-2

PacifiCorp is continuing to work with stakeholders on the historic distribution and run size of anadromous fish that were above Iron Gate dam through the fish passage modeling subgroup.

Klamath River system; it is one of the largest remaining wild Spring Chinook run left in California [West, 1991]. Klamath River Spring Chinook are currently listed by the Forest Service as a "sensitive" species due to their imperiled condition. Many believe Salmon River subbasin to be one of the major refugia for Spring Chinook Salmon (Moyle 1995).

As indicated, the Salmon River Subbasin may support the last viable native Spring Chinook salmon population in the Klamath Basin. Total number of adult Spring Chinook counted in snorkel surveys in the Salmon River range from approximately 180 to 1,300. Hardy and Addley (2001) stated that there are no significant constraints on anadromous fish production in the Salmon River Subbasin, which is one of the most pristine watersheds in the Klamath River Basin. Hardy and Addley (2001) also reported that fall chinook salmon populations in the Salmon River Subbasin have experienced declines over time, but these declines are associated with factors external to the Salmon River.

G7-3 PacifiCorp needs to identify how their management of the Project directly, indirectly, and cumulatively affects the anadromous fisheries of the Salmon River Subbasin. For example: PacifiCorp should assess how the Project specifically contributes to the impacts that are caused to Salmon River spring run that are held up or stranded in the Mainstem Klamath River due to high water temperature barriers that occur in various years, particularly during the late spring and summer months. PacifiCorp should also assess what impacts the Project is having and will have on Type I, Type II and possibly Type III Spring run Chinook that we have found in our monitoring to migrate year round out of the Salmon River and into the Mainstem of the Klamath River.

3) KLAMATH BASIN OVERVIEW

a) OVERVIEW OF EXISTING RESTORATION IN THE LOWER KLAMATH

The Klamath River Basin Fisheries Task Force (Task Force) was established by the Klamath River Basin Fishery Resources Restoration Act of 1986 (Public Law 99-552 or the Klamath Act) to provide recommendations to the Secretary of the Interior on the formulation, establishment, and implementation of a program to restore the anadromous fisheries of the Klamath River Basin Conservation Area. All actions taken by the Task Force are done by consensus only.

The Klamath Act was adopted by the Congress on October 27, 1986 for the purpose of authorizing a 20-year-long multi-stakeholder cooperative including federal, state, county, tribal, and non-tribal fishing representation for rebuilding the Klamath River Basin's anadromous fish resources. Congress observed that "floods, **the construction and operation of dams, diversions and hydroelectric projects**, past mining, timber harvest practices, and road-building have all contributed to the sedimentation, reduced flows, and degraded water quality which has significantly reduced the anadromous fish habitat in the Klamath-Trinity River system". (Klamath Basin Restoration Plan – 1991)

b) THE KLAMATH HYDROELECTRIC PROJECT

The Project consists of six mainstem hydroelectric developments on the upper Klamath River and one tributary hydroelectric development. PacifiCorp owns and operates the Project under a single license issued in 1956 by the Federal Energy Regulatory

3

Response to Comment G7-3

To address Project impacts (if any) on the Klamath River as far downstream as the Salmon River confluence, PacifiCorp has modeled Project effects on water quality (including water temperature) in the Klamath River downstream to Turwar (river mile 4.0). See the Water Quality FTR for the results of this modeling effort.

Commission (FERC). The 50-year license (FERC Project No. 2082) expires on March 1, 2006. The Project consists of six generating developments along the Mainstem of the Upper Klamath River, between river mile (RM) 190 and RM 254, a re-regulation dam with no generation facilities, and one generating development on Fall Creek, a tributary to the Klamath River at about RM 196. These dams prevent anadromous fish passage in the Klamath River, which have curtailed hundreds of miles of historical anadromous fisheries habitat. Currently there are no upstream fish passage facilities for anadromous fish past Iron Gate dam (PacifiCorp 2000, 2002).

The Project features and facilities (including dams, hydro-electric facilities , reservoirs, canals, bi-passes, pumping plant/stations, hatcheries, etc.) have contributed to the decline to the Klamath River Basin native anadromous fisheries (anadromous fisheries) by eliminating access to spawning habitat above the Project related dams and other barriers, and by negatively affecting water quality in and below the Project.

By contributing to the decline of these fisheries, the Project has affected the economies of the Tribal and non-tribal communities in the Salmon River and in the adjacent communities along the Klamath River and several hundred miles of Pacific Coast. Therefore, the Council is strongly interested in the operations of the Klamath Project. The Council would like to coordinate with PacifiCorp at the highest level possible of involvement throughout DLA and subsequent procedures for re-licensing the Klamath Project.

G7-4

e) KLAMATH BASIN ANADROMOUS FISHERIES HISTORICAL AND CURRENT CONDITIONS

Anadromous fish species historical use of the Klamath Basin extended from the mouth of the Klamath River upstream past Upper Klamath Lake/Agency Lake to the Sprague and Williamson Rivers. Historical use of the upper Klamath Basin by anadromous species also included other Klamath River tributaries, such as Spencer, Fall and Jenny Creeks that are upstream of Iron Gate dam and presently inaccessible to anadromous species (Hardy and Addley 2001, Fortune et al. 1966). The City of Klamath Falls (1986), citing studies by Fortune et al. (1966), reported that the primary anadromous species historically using the Upper Klamath Basin were Chinook salmon (spring-run and fall-run fish) and steelhead (summer-run and winter-run fish or perhaps large rainbow trout) that appeared in the fall and again in the spring. Chinook salmon and steelhead spawning and rearing in the upper Klamath basin occurred primarily in the Sprague, Williamson, and Wood Rivers and in Spencer Creek (City of Klamath Falls 1986). Hardy and Addley (2001) added that Coho salmon also may have historically occurred in the Upper Klamath Basin, although there are no conclusive records. Pacific lamprey historically were afforded access throughout the Klamath River, extending to Upper Klamath Lake. Upstream migrations by anadromous species into the upper Klamath Basin were blocked by the completion of Copco No. 1 dam in 1917 and Iron Gate dam in 1962.

Historical and current distributions of anadromous species in the lower Klamath River system include the Mainstem Klamath River Subbasin, with major tributaries being the Shasta, Scott, Salmon, and Trinity Rivers, and many smaller tributaries located in the

Response to Comment G7-4

PacifiCorp appreciates the involvement of the Council in the relicensing process. The company will continue to include the Council in any future relicensing collaborative efforts.

Middle and Lower Klamath Subbasins. Anadromous salmonids historically and currently using the lower Klamath Basin downstream of Iron Gate dam include: spring/summer-, fall-, and winter-run steelhead, spring- and summer/fall-run chinook salmon, and coho salmon. Hardy and Addley (2001) also reported that chum and pink salmon historically occurred and are still captured infrequently in the lower Klamath. There are runs of white and green sturgeon, Pacific lamprey, coastal cutthroat trout, and eulachon (candlefish).

Steelhead runs in the Klamath basin prior to the 1900s probably exceeded several million fish (Hardy and Addley 2001). Subsequent steelhead runs in the Klamath and Trinity River systems declined steadily to an estimated 135,000 fish in 1977.

Fall Chinook numbers have declined drastically over the last century and Spring Chinook, which were considered to be more abundant than summer/fall-run fish prior to 1900, today consist of only remnant numbers (Hardy and Addley 2001). The total estimated catch and escapement of chinook salmon in the Klamath River between 1915 and 1928 averaged between 300,000 and 400,000 fish annually. Between 1978 and 1995, the average annual escapement of wild and hatchery-produced fall chinook had declined to 58,820 adults, with an annual low of 18,133 adults.

As indicated previously the Klamath River Spring-run Chinook (Oncorhynchus tshawvtscha)was designated a sensitive species by the USDA -Forest Service (fall, 1990) due to significant declines in adult escapement. Nehlsen, et al (1991) places this stock in the category "at high risk of extinction". Habitat loss and degradation, fish harvest, and other natural and human influenced factors have contributed to dramatic declines in the number of adult Spring-run Chinook remaining in the Basin today.

Coho salmon populations in the Klamath River Basin today are substantially smaller and at much greater risk than historically (Hardy and Addley 2001). Hardy and Addley (2001) reported that annual coho salmon spawning escapement, including hatchery stocks, to the Klamath River system in 1983 was estimated to vary between 15,400 and 20,000 adults. These estimates represent more than a 90 percent decline in Coho salmon abundance since the 1940s and at least a 70 percent decline in abundance since the 1960s.

Pacific lamprey is a federal species of concern downstream of Iron Gate dam (PacifiCorp 2000), and NOAA Fisheries is reviewing the status of both Pacific lamprey and green sturgeon to determine whether federal listing is warranted.

G7-5 PacifiCorp should identify what the Projects contribution to these species declines are. PacifiCorp should consider and adopt an approach to Project management that adequately mitigates for these impacts and addresses the needs of the various species of anadromous fish, including those identified above, that are presently and were historically present throughout the Klamath. Basin.

5

Response to Comment G7-5

Please see Section 4 of Exhibit E for a detailed discussion on Project impacts to fish resources and proposed PM&Es.

II) SPECIFIC COMMENTS

4) SCOPE OF ASSESSMENT AND CUMULATIVE IMPACTS

G7-6 We believe that a component of the fish passage analysis should include an assessment of anadromous salmonid habitat available above Iron Gate Dam, as well as an accounting of the potential contribution of the many projects and actions being conducted or proposed related to water management, aquatic and riparian habitat restoration throughout the Klamath Basin. Many of the effects caused by the Project are indistinguishably intertwined with the management of the Klamath Irrigation Project and associated effects on the anadromous fisheries in the Klamath Basin, including the Lower Klamath Basin and its five Subbasins. PacifiCorp needs to better assess the cumulative impacts to anadromous fisheries throughout the Klamath Basin that are caused specifically by the PacifiCorp Project, BOR Klamath Irrigation Project, other BOR Projects in the Klamath Basin and other actions. The Application should display what effects the Project specifically causes in relationship to all of the other non-Project activities and their impacts.

5) USE OF EXISTING COMPREHENSIVE RESTORATION PLANS

G7-7 The Task Force requests that PacifiCorp in the relicensing process incorporate information and direction that is provided in several comprehensive plans for restoring anadromous fisheries either completed or underway in the Klamath Basin. In 1991 the Task Force completed the "The Long Range Plan for the Klamath River Basin Conservation Area Fishery Restoration Program" (Basin Plan). The Basin Plan utilizes a coarse analysis of the Lower Klamath Basin to develop a regional or coarse overview of conditions and recommendations needed for the restoration of anadromous fisheries habitat in the Lower Klamath Basin. To incorporate planning at a local or finer scale the Basin Plan identifies six Subbasins which include: 1) Mainstem Klamath Subbasin (from below Klamath Lake to the Pacific Ocean); 2) Shasta Subbasin; 3) Scott Subbasin; 4) Salmon Subbasin; 5) Middle Klamath Subbasin (Tributaries to the Mainstem from Iron Gate to Weitchpec); and, 6) the Lower Klamath Subbasin (Tributaries of the Mainstem from Weicthpec to the Pacific Ocean).

The Basin Plan has fostered the creation of multi-stakeholder coordination groups to develop restoration plans for the anadromous fisheries species in each of the six Subbasin. To date there are completed subbasin restoration plans for the Lower Klamath Subbasin (May 2001 – Yurok Tribe/Simpson Timber Company) and the Salmon River Subbasin (June 2002- US Forest Service/Salmon River Restoration Council). These comprehensive plans assembled detailed assessments to developed schedules of prioritized restoration actions throughout their respective subbasins. The Middle Klamath (Karuk Tribe), Shasta (Shasta Resource Conservation District/Coordinated Resource Management Planning Group and Scott (Scott River Watershed Council/Siskiyou Resource Conservation District) Subbasins are in the process of completing similar type of comprehensive restoration strategies. Please note that the Task Force identifies the segment of the Klamath River which starts at the Link River Dam and flows to the Pacific Ocean, as being the "Mainstem Klamath Subbasin". All of the other five Subbasins in the Lower Klamath Basin are tributaries to the Mainstem

6

Response to Comment G7-6

While PacifiCorp is addressing Project impacts from its operations in the Klamath River, it has no responsibility to perform a detailed analysis of the actions of others. However, FERC in consideration of a new Project license will complete a cumulative effects analysis that describes possible impacts of actions taken by others in the Klamath basin.

Response to Comment G7-7

Comment noted. The comprehensive plans of others have been evaluated and incorporated in the analyses for the FLA. Please see the Fish Resources FTR.

G7-8 Klamath Subbasin. PacifiCorp needs to identify what the Project affects have been, are presently and are anticipated for the anadromous fisheries in each of the above mentioned Subbasins in the Lower Klamath Basin and how the Project affects the Trinity River Basin.

6) MAINSTEM KLAMATH SUBBASIN COORDINATION

G7-9 The Application should analyze the effects of the Projects on the entire Mainstem Klamath Subbasin (Mainstem), from Upper Klamath Lake to the Pacific Ocean. The conditions of the Maintem have a direct, indirect and cumulative effect on the anadromous fisheries of the Middle Klamath, Lower Klamath, Scott River, Shasta River, and in particular the Salmon River Subbasins. The anadromous fisheries from these five Subbasins spend a significant part of their life in the Mainstem, including time in the Estuary.

Fish and water assessment and monitoring activities in the Mainstem Klamath Subbasin have been accomplished primarily by the US Fish and Wildlife Service's (Service) Klamath Flow Study Work Group, which includes the Technical Work Group of the Klamath Task Force of which the Council is a participant, Lower Klamath Subbasin Coordinators, and others. Other assessment and monitoring work is being accomplished by various agencies, tribes, subbasin groups, universities and others. Several of these entities are responding to a number of currently proposed or existing water and fish management actions. It is well recognized by entities such as the Task Force that there is a significant need for increased coordination of these cumulative actions.

As indicated above, there are numerous monitoring and assessment activities that are either completed, taking place, or proposed in the Mainstem Klamath Subbasin. Various studies and analyses are associated with the myriad of actions. The Task Force in cooperation with the TWG have identified that there is a need to improve coordination of

G7-10 these activities in the Mainstem Klamath Subbasin. We recommend that PacifiCorp join the Council and others in developing a process for promoting a coordinated strategy for these actions. We would like to explore this activity with the PacifiCorp, Bureau of Reclamation (BOR), and other stakeholders related to the Mainstem Klamath Subbasin

7) WATER QUALITY

Ayres Associates (1999) concluded that water quality in the Klamath River likely limits all runs of anadromous fish at some point in their life cycle, especially during summer and early fall (PacifiCorp 2000). Hardy and Addley (2001) reported that in the Mid-Klamath Subbasin area, which the Klamath River Basin Fisheries Task Force (KRBFTF 1991) defined as extending from Iron Gate dam downriver approximately 150 miles to Weitchpec, the Mainstem Klamath River can be impacted by water quality from

G7-11 upstream releases at Iron Gate dam during low-flow periods. The Council and others are concerned about the poor water quality of the Klamath River and the related fish kills that have occurred downstream of Iron Gate Dam during recent years. The Mainstem of the Klamath River is listed as an impaired waterway under Section 303(d) of the Clean Water Act in both Oregon and California. We believe that water quality problems are severe throughout the length of the river and are aggravated by operating the Project. The direct,

7

Response to Comment G7-8

Although effective to the identified subbasins are not included, Sections 3 and 4 of Exhibit E have discussions on Project impacts to aquatic resources and proposed PM&Es.

Response to Comment G7-9

See Sections 3 and 4 of Exhibit E and the Water Quality and Fish Resources FTRs for detailed discussions on Project effects and PM&Es.

Response to Comment G7-10

PacifiCorp agrees that a larger coordinated strategy is needed for the Klamath River Mainstem.

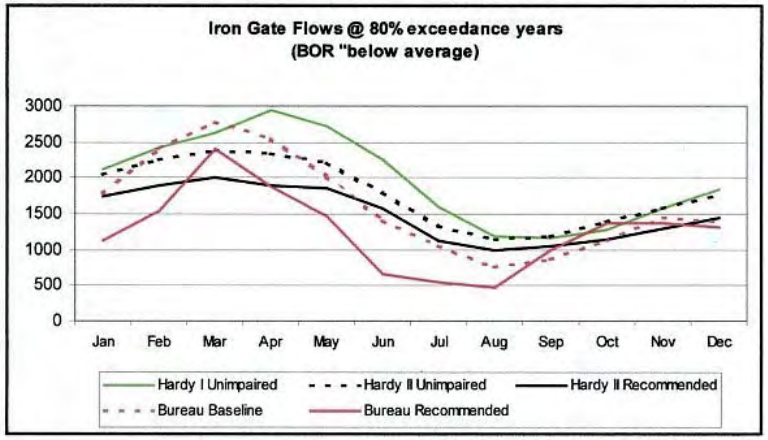
Response to Comment G7-11

Comment noted. Please see Section 3 of Exhibit E for a detailed discussion on the Project's impact on water quality and PacifiCorp's proposed PM&Es.

G7-11 indirect, and cumulative effect that this poor water quality poses for anadromous fisheries in relationship to the Project is a significant issue that should receive more detailed and adequate analysis and discussion in the Application.

8) WATER QUANTITY/FLOW

Hardy and Addley (2001) also reported that water releases at Iron Gate dam due to BOR's Klamath Irrigation Project operations, together with water allocation practices in the Shasta and Scott River basins, have generally resulted in increased winter flows and reduced summer flows in the Mainstem Klamath within the Mid-Klamath subbasin compared with historical conditions. This is evidenced by the following graph which identifies PacifiCorps and the BOR's contribution to flows from Iron Gate Dam.



The "Bureau Baseline" are flows without Klamath Project diversions but with other depletions occurring (i.e. above UKL); Hardy II "Unimpaired" are with no depletions by Project or otherwise. All flows are representative of an 80% exceedance year with projected inflow into UKL of 318,500 acre feet (Classified as BOR "Below Average" minimum and Hardy "Dry" 80% exceedance. (Hardy I "Unimpaired" are estimated pre-project flows with 1905 - 1912 depletions above UKL.

G7-12 PacifiCorp should utilize the best available scientific information, including the Draft Report of Hardy II, and should seek the help from experts and practitioners throughout the Klamath Basin in formulating "Baseline" flows (flows without project) and to develop the recommended schedule for deliveries both for agriculture, fisheries, and wildlife in each of the various water years. Adequate flows downstream of Iron Gate Dam are needed all year round in order to provide for various anadromous species which

G7-13 inhabit the Mainstem Klamath Subbasin during various life stages. We recommends that PacifiCorp involve, as much as possible, the Task Force and the TWG in the development and use of the water that is being purchased and/or stored in the Upper

8

Response to Comment G7-12

Substantial information has been added to the analysis of hydrology in Section 5 of the Water Resources FTR to describe relevant past studies (including Hardy) and available data. PacifiCorp has included a "without-Project" scenario in water quality modeling that includes simulations of flows (assuming 2000 and 2001 boundary conditions). PacifiCorp does not intend to formulate pre-Project (or unimpaired) "baseline" flow conditions. Treating pre-Project (or unimpaired) flow conditions as "baseline" conditions in a FERC license application is not appropriate since FERC considers "baseline" to be the existing project-related environment.

The current and proposed instream flow releases at Iron Gate dam are based on the Klamath Project 2003 Operations Plan. This plan was developed by USBR in consultation with the U.S. Fish and Wildlife Service and NOAA-Fisheries based on detailed instream flow studies in the river downstream of Iron Gate dam.

Response to Comment G7-13

USBR (not PacifiCorp) directs the water bank program and its use as described in the USBR's Klamath Project 2003 Operations Plan. This instream flow schedule included in the Plan was developed by USBR in consultation with the U.S. Fish and Wildlife Service and NOAA-Fisheries to be protective of ESA-listed species.

G7-13 Basin as part of the BOR's water bank program. PacifiCorp needs to identify how a strategic use of the water bank will take place in order to best reduce negative impacts to the juvenile and adult anadromous fisheries species.

9) PATHOGENS

In general, results from both past and current water quality sampling efforts indicate that water quality conditions in the upper Klamath River are often degraded with respect to several parameters. The principal factors that influence regional water quality conditions include climate, run-off, and irrigation return from surrounding agricultural, range, and marsh lands, and the effects of impoundment by existing lakes and reservoirs (i.e., Upper Klamath Lake, Keno, J.C. Boyle, Copco, and Iron Gate reservoirs)(City of Klamath Falls, 1990; Kann and Walker, 1999; Campbell, 1999; Deas, 2000). Such factors affect water temperature, DO, dissolved solids, sediments, turbidity, nutrients (primarily nitrogen and phosphorous), and bacteria.

The cause of death for adult Chinook and Coho salmon and Steelhead during the September 2002 epizooic was disease from the ciliated protozoan Ichthyopyhirius multifilis (ICH) and the bacterial pathogen Flavobacter columnare (columnaris). Fish entering the Klamath River in mid-September of 2002 experienced high water temperatures (69 degrees F or 20.5 degrees C or greater) and low flows. These conditions favor the amplification (rapid development) of ICH. ICH can be found on fish at any temperature, but typically only cause disease and mortality in salmonid species at water temperatures above 58 degrees F or 14.4 degrees C and in crowded conditions such as those experienced by the low flow in the Lower Klamath River in 2002. The success of ICH spreading to a new host is aided by low flows combined with high water temperatures and high fish density.

Columnaris is common world wide and present at all times in the aquatic environment. Columnaris disease in coldwater fishes is generally seen in water temperatures above 15 degrees C or 59 degrees F and the disease can become explosive at 18 degrees C or 64 degrees F.

ODFW believes that stocked rainbow trout died before reaching maturity because of their high susceptibility to *Ceratomyxa shast*a, (C Shasta) a protozoan pathogen to which the native Klamath River stock of redband trout is generally resistant (ODFW 1997). Our assessments in the Lower Klamath Basin indicate that C Shasta is prevalent in salmonids The incidence of C Shasta is known to increase with the poor water conditions. Researchers have found that C Shasta is fatal to juveniles Chinook and other salmonids.

G7-14 PacifiCorp should assess how operating the Project, hatchery mitigations, and the Klamath Irrigation Project affect the distribution and concentration of these pathogens in the Klamath Basin and the relationship and risk of an epizooics occurring as a result of the proposed actions.. Is the distribution and concentration of these pathogens increasing in the Mainstem Klamath Subbasin and its tributaries? The Application needs to describe and assess the relationship of PacifiCorp's Klamath Project to these pathogens in the Upper and Lower Klamath Basin

9

Response to Comment G7-14

PacifiCorp and the Aquatic Work Group developed a study plan to investigate *Ceratomyxa shasta*, which is considered the pathogen of greatest concern in the basin. The study, conducted jointly by Oregon State University and the USFWS, was undertaken in 2002, and the findings are included in the License Application. While it was not possible to draw firm conclusions regarding the influence of the water developments on *C. shasta*, some useful general observations were made that advanced our knowledge of this species in the Klamath basin.

10) PREVENTING EPIZOOIC EVENTS

a) ADULT MIGRATION

One causative factor generally accepted by many experts involved in studying the causes of the September 2002 epizooic that took place in the Lower Klamath Basin was that the migrating adults salmonids were overcrowded.in their holding habitat. This crowded condition is believed to be why the fatal disease ICH was able to spread within a matter of a few days to a level that caused the death of over 30,000 Fall Chinook Salmon and smaller numbers of Coho salmon, other anadromous species. The DLA and subsequent documents should develop adaptive water release management actions that include run predictions and hydorologic water year predictions to recommend a flow schedule to alleviate potential crowding that occurs in the Lower Basin. Run size predictions are available from the Klamath Fisheries Management Council's harvest predictions. PacifiCorp, in its license application process, should work with the BOR, Task Force and others to develop a schedule of water releases to alleviate the adult crowding or adult stranding leading up to an epizooic.

G7-15

b) JUVENILE MIGRATION

Large numbers of smolting Chinook salmon have died in various years. In June of 2000 it is estimated that several hundred thousand smolting Chinook salmon died in the Mainstem Klamath Subbasin. Poor water quality conditions are thought to increase mortality in juvenile salmonids in the Mainstem Klamath Subbasin. Low flows can lead to poor water quality conditions in the late spring and early summer months in the Mainstem Klamath Subbasin. These conditions appear to be a key cause for juvenile mortality during these times. PacifiCorp, in the application process, should work with the BOR and others to develop adaptive water release management actions that include adequate water management schedules and remedial measures to better prevent large scale mortality of juveniles in the Mainstem Klamath Subbasin.

G7-16

11) MITIGATION

PacifiCorp must evaluate whether it is meeting its obligation to mitigate for the loss of fisheries resources resulting from Project operations. It is important to consider that Iron Gate Hatchery (IGH) presently only mitigates for habitat that was lost between Iron Gate Dam (IGD) and Copco 2 Dam, and only for Fall Chinook, Steelhead, and Coho. IGH does not mitigate for habitat loss above Copco, including tributaries of the Williamson and Sprague rivers, which are known to have once supported healthy populations of Spring-run Chinook and steelhead. We believe it is imperative that PacifiCorp and the BOR with the help of others fully evaluate IGH mitigation production goals in the relicensing application process within the context of providing anadromous fish passage to the Upper Basin.

G7-17

Marking and monitoring of hatchery fish stocks is a fundamental component of hatchery operations and their effect on endangered and sensitive species in the Klamath Basin. The application process should include an evaluation of past hatchery performance in meeting mitigation goals for all species, including spring-run Chinook and steelhead. and the effects of hatchery stocks on natural populations. PacifiCorp with the BOR , the Council,

G7-18

10

Response to Comment G7-15

Flows below Iron Gate dam are determined by BOR and are dictated by the Biological Opinion (BO) for coho. Any changes contrary to the BO would need to be authorized by BOR and NOAA Fisheries. A comprehensive instream flow study by Dr. Thomas Hardy for the Klamath River below Iron Gate Dam is near completion (expected completion is early 2004). Findings from this study may or may not influence changes to the instream flow regime required by the BO.

Response to Comment G7-16

Comment noted. Please see response to Comment #15, above.

Response to Comment G7-17

See the Fish Resources FTR for an evaluation of the Iron Gate Hatchery.

Response to Comment G7-18

See the Fish Resources FTR for a detailed discussion on the Iron Gate hatchery and Section 4 of Exhibit E for the Project's proposed PM&Es.

Task Force, tribes should develop mitigation measure to address impacts caused by Project management to anadromous fisheries in the Lower Klamath Basin, including all of the related Subbasins. G7-18

The inability of some fish populations to gain access to suitable upstream habitat may be resulting in population levels that are lower than what is desirable for certain management objectives. Currently, there is no upstream or downstream fish passage provided over or around Iron Gate dam and Copco Nos. 1 and 2 dams. Successful upstream passage could potentially open, expand, or reestablish the use of spawning and rearing habitat for many species, especially anadromous fish that historically occurred above Iron Gate dam. PacifiCorp should consider and provide a detailed discussion of mitigations for fish passage in the Application. G7-19

12) TASK FORCE AND TECHNICAL WORK GROUP INVOLVEMENT

The Task Force's Technical Work Group is comprised of technical experts in the fields of fish biology, watershed management, habitat restoration, or related fields. Each Task Force member appoints one member to the Technical Work Group. These members are personally involved in research, monitoring, and habitat restoration activities in the Lower Klamath Basin. Tasks that the group performs for the Task Force include: assisting in technical aspects of program planning, suggesting technical/biological program objectives, reviewing work proposals for funding, evaluating ongoing restoration work for effectiveness, improving the technical quality of the restoration program, responding to technical questions and assignments from the Task Force, and providing members for technical review panels in contractor selection. This group has a large amount of experience in the Klamath Basin working on anadromous fish issues. The Council strongly recommends that PacifiCorp with the BOR take advantage of their expertise and contact them for any technical assistance needed. G7-20

CONCLUSION

In conclusion our review of the DLA recognizes how little newly collected, Project-specific information is presented in the document. This appears to be due to the amount of data that have yet to be either collected or fully analyzed. On the matter of submitting a complete Final License Application (FLA) to the F.E.R.C. before March 1, 2004, we urge PacifiCorp to complete any outstanding studies, analyze the data, and present it to relicensing stakeholders as quickly and in as complete a form as you are able. Providing the results of these studies to stakeholders familiar with the resources in the basin and having discussing these results will provide PacifiCorp with the opportunity to present the most accurate assessment of Project impacts in the FLA. G7-21

Timing issues notwithstanding, we would like to recognize PacifiCorp for their willingness to build on their traditional relicensing approach during the development of study plans and preliminary impacts analysis by employing collaboration with the varied stakeholders engaged in the proceeding. G7-22

Once satisfactorily completed, the breadth of information collected and analyzed through these collaboratively designed studies will ensure for a more complete understanding of

11

Response to Comment G7-19

See Section 4.3 of Exhibit E for a discussion of fish passage considerations.

Response to Comment G7-20

Contact with agency researchers such as those with USBR were made on an as needed basis.

Response to Comment G7-21

PacifiCorp has made every effort to document all study results available in time for publication of this FLA. Information on Project impacts and proposed PM&Es was shared with stakeholders during a 2-day joint meeting.

Response to Comment G7-22

Comment noted. Likewise, PacifiCorp appreciates the participation of Mr. Brucker in the Klamath relicensing process.

the Project's impacts to hydrology, water quality, fish, botanical, wildlife, recreational, cultural, aesthetic, and socioeconomic resources and allow for the development of a thorough and proposed protection, mitigation, and enhancement (PM&E) measures package to address identified impacts.

Finally, PacifiCorp's DLA does not meet the regulations provided in 18 CFR 4.51 and 18 CFR 16.8. These deficiencies necessarily restrict the input PacifiCorp will receive from stakeholders on this DLA, particularly pursuant to alternate data analysis and interpretation and proposed protection, mitigation, and enhancement (PM&E) measures. Lack of formal discussion on these two items leave the Council ready for a FLA full of surprises. To rectify this situation, the Council provides two recommendations.

G7-23 First, PacifiCorp should complete ongoing studies and analyze and interpret resulting data as quickly as possible and prior.

Second, prioritizing by information needs that will be included in the Final License Application (FLA), PacifiCorp must present data, analysis, interpretation, and proposed PM&E measures to stakeholders prior to the filing of the FLA. Where possible, PacifiCorp should make the effort to collaborate with stakeholders on the identification of Project impacts and development of PM&E measures and document in the FLA all substantive disagreements with stakeholders on these items. These steps will provide a substitute in the written record for the joint meeting provided in 18 CFR 16.8(c)(8).

G7-24 PacifiCorp needs to develop an Application for the Project that promotes relatively healthy stocks of anadromous fisheries throughout the Klamath Basin. The Council looks forward to continuing to work with PacifiCorp, FERC, BOR, and others in this DLA and subsequent applications to FERC. We will provide additional comments subsequently. We will also monitor and comment on Project management. Please do not hesitate to contact us if you have any questions or other needs at (530) 462 4665 or e-mail me at pbrucker@srrc.org.

Sincerely,

Petey Brucker – Program Coordinator
Salmon River Restoration Council

ATTACHMENTS:
Spring Chinook Population Estimates in the Klamath Basin 1980 –2003
Salmon River Subbasin Restoration Strategy (SRRC/USFS 2002)

12

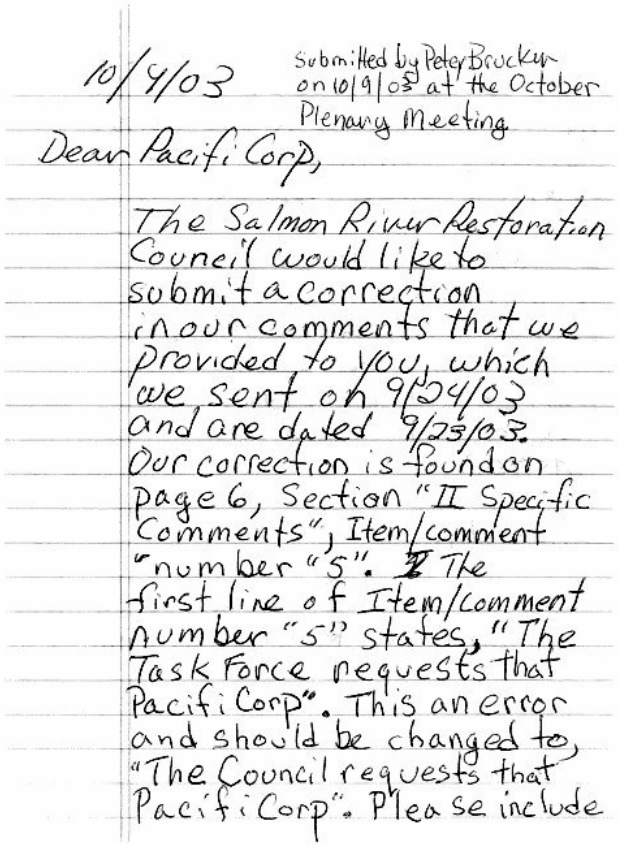
Response to Comment G7-23

Comment noted. PacifiCorp has made every effort to complete studies and document them in the FLA and Final Technical Reports. Within the interim between publication of the DLA and FLA, PacifiCorp continued to hold monthly workgroup meetings and hosted a joint meeting, whereby information, including new study results, proposed Project, and proposed PM&Es was exchanged with stakeholders. The consultation report, Appendix E1-A to Exhibit E, documents substantive disagreements between PacifiCorp and stakeholders.

Response to Comment G7-24

PacifiCorp has submitted a final license application that addresses proposed Project modifications and that identifies protection, mitigation, and enhancement measures (PM&Es) designed to protect anadromous fish within the Project area.

G7-25



10/9/03 Submitted by Peter Brucker on 10/9/03 at the October Plenary Meeting

Dear PacifiCorp,

The Salmon River Restoration Council would like to submit a correction in our comments that we provided to you, which we sent on 9/24/03 and are dated 9/25/03. Our correction is found on page 6, Section "II Specific Comments", Item/comment number "5". The first line of Item/comment number "5" states, "The Task Force requests that PacifiCorp". This an error and should be changed to, "The Council requests that PacifiCorp". Please include

Response to Comment G7-25

Comment noted.

G7-25

this change/correction into the Salmon River Restoration Council's comments for the Draft License Application.

If there is any problem with this change/correction, please let us know ASAP, at 530-462-4665 and at pbrucker@srrc.org. Thank you for your help in this matter.

Sincerely,

Petey Brucker - Program Coordinator
Salmon River Restoration Council

FEDERATION OF FLY FISHERS™
Conserving • Restoring • Educating Through Fly Fishing
Northern California Council

September 22, 2003

Mr. Todd Olson
Hydro Licensing Project Manager
PacifiCorp
825 NE Multnomah - Suite 1500
Portland, OR 97232

Subject: Klamath Hydroelectric Project (FERC Project No. 2082)

Dear Mr. Olson:

G8-1 This is to respectfully request that PacifiCorp modify its Draft License Application for "major project-existing dam for the Klamath Hydroelectric project" to include a **"no dam nor hydro facilities alternative."** Further, we request that PacifiCorp environmental studies include those which indicate
G8-2 the frequency and amounts of flushing flows necessary down river from Irongate Dam, and each project facility up to and including Keno Dam, to break up "cementing" of spawning gravel necessary for optimum propogation of salmon and steelhead.

G8-3 We ask that the following facilities and their appurtenances be considered for removal as part of the "no dam no hydro facilities" alternative:

1. Irongate Dam and Powerhouse
2. Copgate Dam Nos. 1,2 and their respective powerhouses
3. Fall Creek Dam and Powerhouse
4. J.C. Boyle Dam and Powerhouse

G8-4 We note that yesterday, on September 22, 2003, poor operations and maintenance procedures at the Fall Creek powerhouse caused the death of approximately 70,000 hatchery salmon and steelhead. They were to be surviving replacements for the loss of 30,000 adults salmonoids during the summer and fall of 2002. These steelhead and salmon's existence depended on water passing through PacifiCorp facilities. When the water was diverted the fish died. Although below targeted numbers, they were supposed to mitigate for the loss of upstream habitat lost to due to the PacifiCorp hydro project. This failed responsibility strengthens the case for hydro-power facilities removal because if PacifiCorps Hydro Project did not block the Klamath vulnerable hatcheries would not be required.

G8-5 We understand that "cementing," a condition which takes place when normal high river flows are not available to break up accreted sand within spawning gravel, adversely affects the Klamath below Irongate. If this is correct it is necessary to understand what measures would restore optimum spawning and rearing conditions below such facilities as might be retained, should any listed facilities be permitted to be continue operation. Areas below each facility from the Keno Dam down river should be made a part of such studies because "cementing" may affect river areas below other PacifiCorp project facilites other than those at Irongate.

Response to Comment G8-1

At the request of relicensing participants and in the interest of collaboration, PacifiCorp conducted intensive fish passage and water quality modeling of at least five variations on dam removal, volitional fish passage and run-of-river operations. In addition, PacifiCorp worked with relicensing participants in a side effort to try and identify all of the implications of implementing numerous facility and operations scenarios through an exercise entitled System Landscape Options Analysis.

Response to Comment G8-2

PacifiCorp has addressed the topics of bedload movement and sedimentation for the area downstream of Iron Gate dam in Exhibit E of the FLA.

Response to Comment G8-3

See response to comment #1.

Response to Comment G8-4

PacifiCorp regrets the incident and has since taken measures to ensure that a similar incident does not occur in the future. This was an isolated incident that had never occurred previously at the Fall Creek hatchery.

Response to Comment G8-5

See response to Federation of Fly Fishers comment #2, above.

The Northern California - Nevada Council of the Federation of Fly Fishers is composed of 28 member fly fishing clubs in northern California and north western Nevada. The size of these clubs ranges from fewer than 30 to over 250 members. While we pursue our sport literally all over the globe, most of us fish the waters of northern California, southern Oregon and north western Nevada. Among these is the Klamath River, in which we have a particular interest. Those of us who are natives to this area remember when the Klamath teemed with salmon and steelhead. We have marked the decline in that fishery and understand that its causes result from a multitude of factors, including logging, off-shore fishing and agriculture, as well as hydro-power generation. We believe PacifiCorp can take constructive steps to correct the rivers decline by removing its dams and power generation facilities at Irongate, Copco, Fall Creek and J. C. Boyle dams.

Thank you for your consideration of our requests. Please keep me advised of your program and future publications and meeting dates.

Sincerely,

Charles P. Bucaria, Sr.
Director, NCNCFFF

7441 Center Parkway
Sacramento, CA 95823

LIVING WATERS RECREATION
P.O. Box 1192/706 Carmen Ave.
Mt. Shasta, CA 96067-1192
1-530-926-5446
www.livingwatersrec.com

September 25, 2003

PACIFICORP
Attn. Mr. Russ Howison
825 N.E. Multnomah, Suite 1500
Portland, OR 97232

RE: PP&L draft for the Upper Klamath/J.C. Boyle Powerhouse FERC re-licensing plan.

Dear Mr. Howison,

Living Waters Recreation is a licensed outfitter on the Upper Klamath River with the Bureau of Land Management, (BLM). After reviewing the proposed operating plan it is my concern that raft able flows be maintained at or above 1,400 cubic feet per second (CFS). This is necessary for our company and other licensed outfitters as well as private boaters to run a trip safely down river. Because of the extremely sharp and abrasive rocks in the river along with a steep gradient of approximately 75 feet per mile through the gorge section, running a rafting trip below 1,400 CFS becomes extremely dangerous and life threatening to our guests as well as very damaging to our equipment. Since the Upper Klamath has been designated a Wild and Scenic River System by both the State of Oregon and the Federal Government it is vitally important that whitewater rafting opportunities be available to the general public to use at a safe and run able level of 1,400 CFS or greater. To have less than safe run able levels would put the public's safety in jeopardy. G9-1

Another concern is the use of river access points and camping in the Upper Klamath River canyon, namely Stateline River access and Frain ranch. I can honestly say not only for our company but for the other commercial river rafting outfitters that we have in the past and will continue to keep the river canyon clean by packing out our refuse and the refuse of others namely private boaters, fisherman, and campers who use the river canyon as well. As far as Stateline River Access is concerned it is vital for us to have this river access point available to use on those days when raft able flows are later in the day and taking out at access 1 would be out of the question due to safety concerns with the lack of day light available late in the day. As for camping at Frain Ranch, we along with a handful of other commercial rafting companies who use Frain Ranch have the utmost respect for the area as far as keeping the area clean and respecting the cultural and historical values of this unique river canyon. While using the Frain Ranch area we have and will continue to practice a minimum impact attitude on the area. G9-2

Whitewater boating for the past 25 plus years has offered thousands of people the opportunity to raft this unique one of a kind river. The Upper Klamath River canyon is unique with its scenic beauty as a wilderness run and with its superb class IV rapids placing it in the world-class category. To diminish the flows to anything less than current flows would be a travesty and disservice to the local economy and the public as a whole. In the eight seasons we have been whitewater boating the Upper Klamath we have had people from throughout the United States and from abroad, such as Ireland, Britain, Scotland, France, Germany, and Italy who have visited and continue to visit Siskiyou County and Southern Oregon just to raft this excellent class IV stretch of river. Furthermore, when people visit Northern California and Southern Oregon, they are bringing in much needed revenue to our region which we all desperately need for our economy and survival. If whitewater boating opportunities cease to exist on the Upper Klamath G9-3

Response to Comment G9-1

Comment noted. Please see results of the whitewater study in the Recreation FTR.

Response to Comment G9-2

Comments noted. The FLA and Draft Recreation Resource Management Plan address the need for continued boater access at the State Line Take-out. Frain Ranch is not within the current or proposed FERC Project boundary. Management of PacifiCorp lands outside of the proposed Project boundary should take place separate from the FERC licensing process.

Response to Comment G9-3

Comment noted. Effects of the proposed Project on whitewater boating opportunities are discussed in Section E7.6 of the FLA.

LIVING WATERS RECREATION
P.O. Box 1192/706 Carmen Ave.
Mt. Shasta, CA 96067-1192
1-530-926-5446
www.livingwatersrec.com

G9-3 River, Siskiyou County and Southern Oregon will suffer great loss in revenue something we all just cannot afford to lose.

Thank you for your time and consideration in this manor.

Sincerely,

Thomas D. Harris
Owner/Director, Living Waters Recreation
www.livingwatersrec.com
Email: raft@livingwatersrec.com

LIVING WATERS RECREATION
P.O. Box 1192
Mt. Shasta, CA 96067-1192
1-530-926-5446
www.livingwatersrec.com

COPY FOR YOUR INFORMATION

August 4, 2003

Pg 1/4

Supervisor, LaVada Erickson, District 2
P.O. Box 1179
Mt. Shasta, CA 96067

Dear Supervisor, LaVada Erickson,

I have for your information attached a copy of my letter to the Bureau of Land Management regarding their Draft Upper Klamath River Management Plan with my endorsement of Alternative 2.

I am sure you and the other supervisors have also been looking at this draft plan. I urge you and the other supervisor to take a hard look at what BLM is proposing with Alternative 3 their preferred plan.

After looking intently into all 4 Alternatives, Alternative 3, if adopted would be disastrous to say the least for Siskiyou County. Wouldn't you agree we need all the tourism revenue we can get into Siskiyou County? We along with other rafting outfitters in Siskiyou County draw many to this area to enjoy and experience the excellent rivers in Siskiyou County and Southern Oregon. While here they bring in thousands of dollars to our economy, i.e. lodging, restaurants, and etc.

Like many of the rafting outfitters in Siskiyou County, Living Waters Recreation is a small family owned sole proprietorship business. For the past few years we have earned nearly half of our income from the Upper Klamath River and this is increasing each year. If we lose this viable source of income from the Upper Klamath it will devastate our business. Please strongly support and back Alternative 2.

Thank you for your time and consideration.

Sincerely,

Thomas D. Harris
Owner, Living waters Recreation
Email, raft@livingwatersrec.com

Encl
as

LIVING WATERS RECREATION
PO Box 1192
Mt. Shasta, CA 96067-1192
1-530-926-5446
www.livingwatersrec.com

COPY FOR YOUR INFORMATION

August 4, 2003

Pg. 2/4

Larry Frazier
Project Team Leader
Bureau of Land Management
2795 Anderson Ave., Bldg. 25
Klamath Falls, OR 97603-7891

Dear Sir,

My reason for writing is in regard to the Draft Upper Klamath River Management Plan, Alternatives 1 through 4.

After much study of your draft plan it is my very strong opinion that out of the four alternatives, alternative 2 best suits the Upper Klamath River Management plan. Alternative 2 appears to me to be a fair and equitable alternative that would not only just maintain the Upper Klamath River area but would also enhance the area's outstanding remarkable values, such as the historical, cultural, recreational, and socio-economical benefits to not only the local area but to the rest of the nation as a whole. The Upper Klamath is a unique river system that has proven to be a strong and viable resource not only to fisheries, whitewater boating opportunities, and other recreational opportunities, but also to the economy of Northern California, particularly Siskiyou County and Southern Oregon.

Fisheries for instance have proven to thrive and flourish over the past 50 plus years. Regardless of what some bias biologists have stated, the Upper Klamath is a strong and very healthy fishery. In the past seven seasons since I have been boating the Upper Klamath below J.C. Boyle Powerhouse, I have **not** witnessed any large scale or for that matter even a small-scale fish kill due to the fluctuation in flows from J.C. Boyle Powerhouse. To the contrary I have only witnessed on occasion a dead fish now and then. I would guess that in the past seven seasons I have witnessed no more than four dead fish. For your information in the past seven seasons we have had numerous over night trips where avid fly fishermen have rafted the river with us during peak flows and have wet a fly in the evening and early morning to be at awe of the amount and size of the fish they have caught. One fisherman who did an overnighter with us in June 2000 stated and I quote "I had so much fun catching these big Upper Klamath beauties that I didn't want to stop for dinner last night or have breakfast the next morning. This is truly a fisherman's dream." Kim G. Mattson of Mt. Shasta, CA.

Whitewater Boating for the past 25 plus years has offered thousands of people the opportunity to raft this unique one of a kind river. The Upper Klamath River is unique with its scenic beauty as a wilderness run and with its superb class IV rapids, placing it in the world-class category. To diminish the flows to anything less than current flows would be a travesty and disservice to the local economy and the public as a whole. In the seven seasons we have been whitewater boating the Upper Klamath we have had people from through out the United States and from abroad, such as Ireland, Britain, France, Germany, and Italy who have visited and continue to visit Siskiyou County and southern Oregon just to raft this excellent class IV stretch of river. Furthermore when these people visit Northern California, particularly Siskiyou County and Southern Oregon,

LIVING WATERS RECREATION
PO Box 1192
Mt. Shasta, CA 96067-1192
1-530-926-5446
www.livingwatersrec.com

B-3/4

they are bringing in much needed revenue to our region which we all desperately need for our economy and survival. If whitewater boating opportunities cease to exist on the Upper Klamath River, Siskiyou County and Southern Oregon will suffer much loss in revenue, something we just cannot afford to lose.

The history of the Upper Klamath canyon is also of utmost importance because of its value to present day and future visitors. The Upper Klamath is rich in history of a bygone era. Not only of the early pioneers but most importantly the Native Americans who have lived in this unique river canyon. With respect to the area the history of this unique river canyon should be shared with visitors from all over the globe. It is truly a shame that historical places like Martin Frains' cabins, the Topsy Stage stop, and the old school house have fallen to vandalism and disrepair. BLM should make a concerted effort to save and restore these priceless reminders of our history.

Alternative 3,BLM's preferred alternative is to radical in that it does not support recreational activities that the public has a right to enjoy. It favors a fisheries plan that has no scientific basis, other than a bias opinion that promotes its own selfish agenda. This agenda denies the public access to enjoy public lands, which we the people have a right to cherish and enjoy. BLM has an obligation to vigorously uphold to the recreational ORV as they have in past years. Furthermore, this alternative would force Pacific Power and Light, PP&L to spend millions of dollars in retrofitting the turbines at J.C. Boyle Powerhouse in order to produce power from what little water they would receive. Millions of dollars, which would ultimately be passed on to the consumer. Alternative 3 hurts all of us in Siskiyou County and Southern Oregon.

To re-affirm, I favor Alternative 2.

Sincerely,

Thomas D. Harris
Owner, Living Waters Recreation
Email: raft@livingwatersrec.com

cc:
District 2, Siskiyou County Supervisor LaVada Erickson

America Outdoors
P.O. Box 10847
Knoxville, TN 37939
865-558-3595

COPY FOR YOUR INFORMATION

Pg. 4/4

Comments for the record
Submitted electronically to (lfrazier@or.blm.gov)

Mr. Larry Frazier
Project Team Leader
Bureau of Land Management
2795 Anderson Ave., Bldg. 25
Klamath Falls, OR 97603-7891

RE: Draft EIS, Upper Klamath River Management Plan

Dear Mr. Frazier:

America Outdoors is a national association of outfitters with several member companies operating on the Upper Klamath River. After reviewing the proposed management plan alternatives, America Outdoors strongly urges adoption of Alternative 2 - "Improvement of Resources and Opportunities", as outlined in the Draft Upper Klamath River Management Plan/ Environmental Impact Statement (DEIS) dated April 2003. We believe this alternative offers improved resource conditions through a modified run-of-river release pattern that also preserves the values that led to the river's designation as a Wild and Scenic River.

It is alarming that BLM is threatening to eliminate most reliable whitewater recreation opportunities by preferring the single purpose Alternative 3 – Natural Resource Enhancement/Restoration. Page S-35 of the DEIS states: "**no releases would be made to support whitewater recreation.**" Adoption of this alternative would virtually eliminate reliable whitewater recreation opportunities throughout much of the prime whitewater season and preclude most bookings by the public for whitewater raft trips. The statement that "recreation use would remain near present levels" indicates a lack of understanding of the needs of the outfitted public and the whitewater rafting industry or it reflects a biased interpretation of the data to enable preferment of Alternative 3.

Has BLM developed an internal set of single purpose values for management of this resource that are out of step with the multiple purpose doctrine for management of public lands and for the recreational values that were an important factor in the Wild and Scenic River designation? It is disturbing that the BLM preferred Alternative 3 in light of the high unemployment rate in the area as described in the DEIS that exceeds 9% in one neighboring county. Alternative 3 would have a significant negative impact on the socioeconomic values of the resource and the region by devastating the whitewater rafting industry.

Alternative 2 is more balanced and to quote "would be not to just maintain, but to enhance where possible the area's outstandingly remarkable values" (DEIS, pg. 23). Alternative 2 would provide greater beneficial effects to aquatic habitats than Alternatives 1 and 4, according to the DEIS, while recreational use would remain the same or increase slightly.

Please accept Alternative 2 as the "Preferred Alternative". Thank you for your consideration.

Sincerely,
David Brown
Executive Director