

First Salmon:

**The Klamath Cultural Riverscape
and
The Klamath River Hydroelectric Project**



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for the
Klamath River Intertribal Fish and Water Commission
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First Salmon

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Abstract

This [report](#) is based on studies done by or on behalf of the Yurok, Karuk, and Shasta Tribes, together with documents provided by the Hupa Tribe, dealing with the cultural significance of the Klamath Riverscape – that is, the Klamath River and its surroundings. It addresses several questions that are fundamental to fulfilling the Federal Energy Regulatory Commission’s (FERC’s) responsibilities under Section 106 of the National Historic Preservation Act (NHPA), and under other cultural resource authorities, in considering relicensing of the PacifiCorp Klamath River Hydroelectric Project.

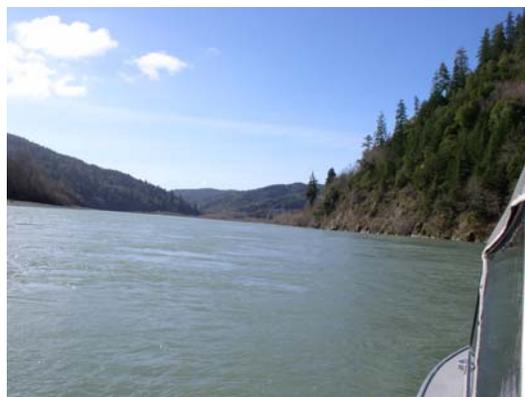
The report first asks whether there is a definable [“Klamath Riverscape”](#) that may be eligible for inclusion in the National Register of Historic Places. It concludes that there certainly is such a riverscape. It next outlines the [characteristics](#) that contribute to the riverscape’s cultural character, identifying such elements as the river itself, its anadromous and resident fish, its other wildlife and plants, and its cultural uses and perceptions of its value by the Yurok, Karuk, Shasta and Hupa Tribes.

The report then turns to whether the riverscape is in fact [eligible](#) for the National Register – that is, does it meet the National Register Criteria at 36 CFR 60.4. It concludes that it does meet these criteria, as a traditional cultural landscape.

Next, the report considers the [effects](#) of the Klamath Hydroelectric Project on the riverscape, concluding that there is a complex pattern of cumulative adverse effects, caused by multiple factors, to which the hydroelectric project contributes. Effects include obstructions to fish passage, alterations in water quality, quantity, temperature, and flow regime that affect fish, plant life, habitat, and human use of the river, and erosion of significant cultural sites

along the river. These effects damage tribal use of and relationships to the riverscape, and diminish its cultural integrity.

The discussion of effects includes reference to cultural resource [legal authorities other than NHPA](#), offering recommendations to FERC, PacifiCorp, and other parties about how to address the requirements of such authorities as the National Environmental Policy Act, the American Indian Religious Freedom Act, Executive Orders 12898 and 13007, and the California Environmental Quality Act.



The Klamath Riverscape:
typical view¹

The report [recommends](#) that FERC give serious consideration to not relicensing the Klamath Hydroelectric Project, or to relicensing it with conditions requiring the removal of the facilities that appear to contribute most to ongoing impacts. More comprehensive approaches to restoring the riverscape’s cultural integrity are recommended to the Bureau of Reclamation and other agencies.

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¹ Photo by the author

First Salmon: **The Klamath Cultural Riverscape And PacifiCorp’s Klamath Hydroelectric Project**

Introduction

Purpose and Scope

This report has been prepared at the request of the Klamath River Intertribal Fish and Water Commission (KRITFWC) in connection with PacifiCorp’s application to the Federal Energy Regulatory Commission (FERC) for relicense of its hydroelectric dams and reservoirs on the Klamath River, collectively known as the Klamath Hydroelectric Project (Project). The geographic locations of the Project and the Klamath River are shown in Figure One¹.

In considering whether to relicense the Project, FERC must consider the impacts of doing so on the environment, including its cultural aspects. A key law dealing with aspects of the cultural environment is the National Historic Preservation Act (NHPA), which at Section 106 requires agencies to take into account the effects of their actions on “historic properties” – defined as places that are included in or eligible for the National Register of Historic Places.

The KRITFWC and its member tribes have no question that the Klamath River is a deeply significant cultural resource whose health is critical to the cultural

lives of the tribes. But questions have arisen about whether the River meets the specific criteria of eligibility for the National Register of Historic Places, and is therefore entitled to the special consideration required by Section 106 of NHPA. The core purpose of this report is to help resolve these questions.

NHPA does not exist in a vacuum, however, so we will also consider how a range of other legal requirements may pertain to the river and the effects of the Project on it. As a further aid to FERC in its compliance with Section 106 and other legal requirements, this report will address the apparent impacts of the PacifiCorp Klamath River Projects on the cultural significance of the Klamath River.

Finally, we will offer recommendations to FERC, PacifiCorp, and others with jurisdiction in the area – such as the Bureau of Reclamation (BOR), Forest Service, and Bureau of Land Management – concerning actions that they might take with respect to the Klamath River and its cultural significance.



Iron Gate Dam²

This report is based largely upon data compiled for the KRITFWC by or on behalf of the Yurok, Karuk, Shasta, and

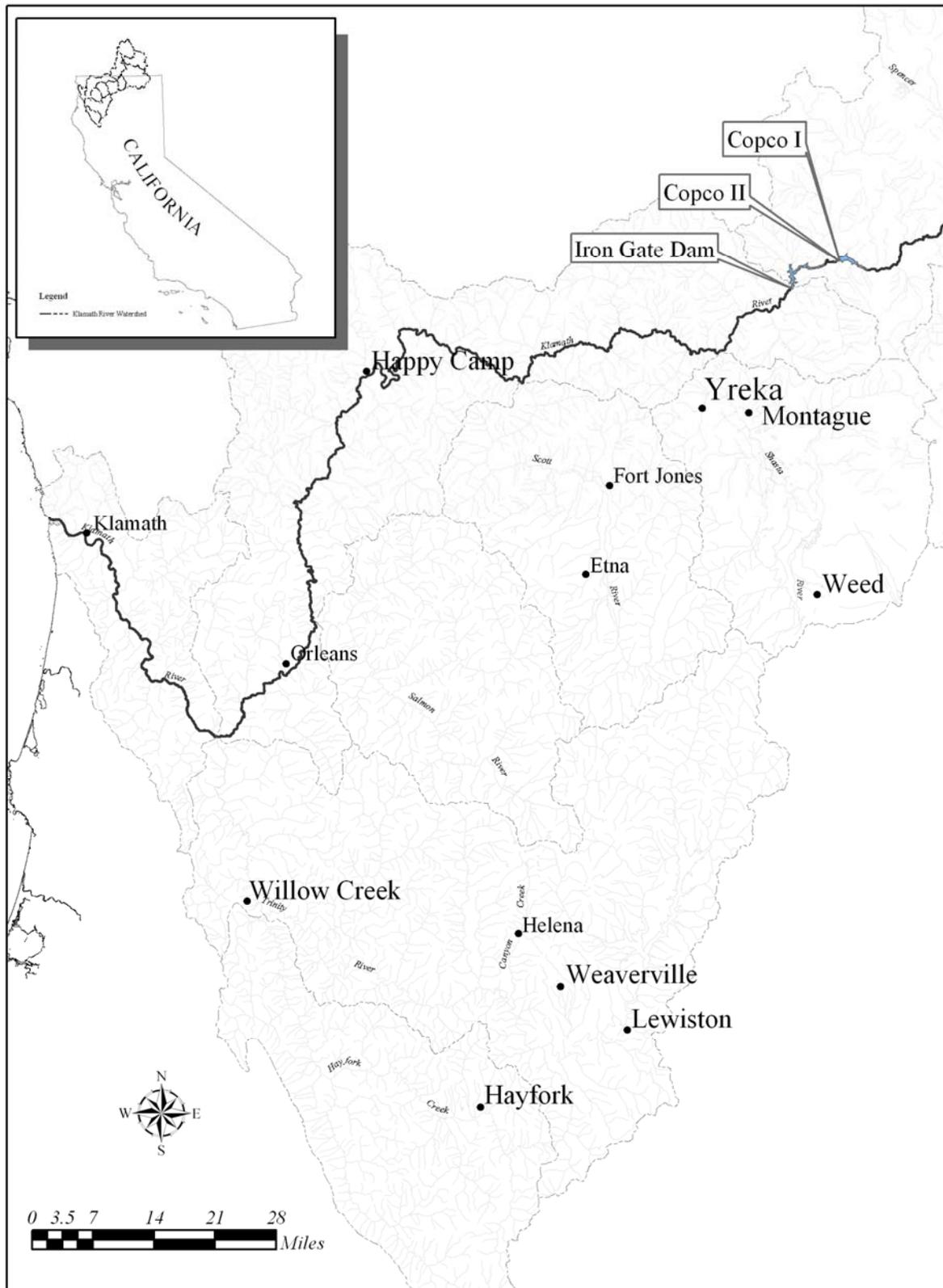


Figure One: The Klamath River from the PacifiCorp dams downstream

Hupa Tribes regarding the cultural qualities of the Klamath River, as detailed in the following reports:

- *Ethnographic Riverscape: Klamath River. Yurok Tribe Ethnographic Inventory.* Kate Sloan, M.A.I.S., Yurok Tribal Archeologist, Yurok Tribe Culture Department; draft November 2003 (hereinafter “the Yurok ethnographic report”).
- *White Paper on Behalf of the Karuk Tribe of California: A Context Statement Concerning the Effect of Iron Gate Dam on Traditional Resource Uses and Cultural Patterns of the Karuk People Within the Klamath River Corridor.* John F. Salter, Ph.D, Consulting Anthropologist, November 2003 (hereinafter “the Karuk ethnographic report”).
- *Preliminary Shasta TCP Study* (draft). Brian Isaac Daniels, November 2003 (hereinafter “the Shasta ethnographic report”).
- *The Trinity River Mainstem Fishery Restoration Environmental Impact Statement/Report*, U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, Hoopa Valley Tribe, and Trinity County, October 2000, especially Section 3.6, “Tribal Trust” (hereinafter, “the Trinity EIS”).
- *Ethnographic Riverscape: Regulatory Analysis.* Prepared by Yurok Heritage Preservation Office for PacifiCorp, November 2003, Contract #P13342 (hereinafter “Regulatory Analysis”).

No attempt is made here to summarize or recast the material set forth in the

above works, each of which stands very competently on its own. Rather, the data and analyses they present will be used to address the specific questions posed by the KRITFWC for consideration in this report, quoting extensively from them where appropriate.

This report pertains only to cultural values ascribed to the Klamath River and its environs by the Yurok, Karuk, Hupa, and Shasta Tribes – and indirectly by the Klamath Tribes, whose concerns are the subject of a separate report (Deur 2004). It may be that the river or specific stretches of it are culturally significant to others – for example, loggers, non-Indian residents, whitewater rafters, and hydroelectric project workers – but examining this kind of cultural value is beyond the scope of this report.

Legal Authorities

The central purpose of this report is to evaluate the eligibility of the Klamath River and its environs for inclusion in the National Register of Historic Places. It should be clearly understood that this report is not intended to serve as the basis for *nominating* the river or anything else to the Register. Rather, its purpose is to help FERC, the tribes and Tribal Historic Preservation Officers (THPOs), the KRITFWC, the California and Oregon State Historic Preservation Officers (SHPOs), PacifiCorp, and others consulting about the relicensing application to decide whether they should *regard* the river and its environs as *eligible* for the Register. If they decide to regard it as eligible, then further consultation about effects on it, and means of mitigating adverse effects, will be required under Section 106 of the

National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR 800); if they elect not to treat it as eligible, then further actions under Section 106 are not required.

Other purposes of this report include considering how impacts on the cultural values of the river and its environs should be addressed under legal authorities *other than* Section 106 – including the National Environmental Policy Act (NEPA), the American Indian Religious Freedom Act (AIRFA), and Executive Orders 12898, 13007, and 13175, as well as with reference to the Federal Government’s trust responsibility toward Indian tribes. FERC is obligated to consider effects under these authorities *regardless of whether the river is regarded as eligible for the National Register*. Although FERC is not bound by its terms, the requirements of the California Environmental Quality Act (CEQA) will also be considered, because they are applicable to PacifiCorp and others whose activities may affect the river.

The Meaning of National Register Eligibility

It should be clearly understood that regarding an area as eligible for the National Register does not require that the area be managed in any particular way, does not confer any special protections on it, and does not in any way alter land ownership. It simply means that the historic or cultural value of the area must be considered in accordance with specific regulatory requirements³ by Federal agencies (in this case by FERC) in reaching decisions about taking or not taking an action (in

this case relicensing or not relicensing all or portions of the Project). It also may trigger the requirements of CEQA with respect to projects whose effects must be considered under that state law.

There is often a degree of confusion about the data needed to determine a property eligible for the National Register vis-a-vis the data needed to nominate it for formal inclusion in the Register. A nomination requires detailed documentation of the property’s characteristics, significance, and boundaries, because the property is being entered on maps as a formally designated historic place for purposes of commemoration, education, inspiration, and long-term management. Determining the eligibility of a property for purposes of Section 106 review requires only the data needed to judge the property’s historic or cultural significance and to consider how the contemplated federal action might affect that significance. Precisely what this means in any specific case depends on the nature of the action that is contemplated, the types of effects that may occur, and the types of properties that may be involved.

The discussion that follows attempts to organize the information needed to judge eligibility and potential effects, without becoming bogged down in information of marginal relevance to the potential effects of relicensing.

As noted, a separate report is being prepared dealing with possible historic properties of concern to the Klamath Tribes, which are concentrated in and upstream from the Project. Accordingly, this report focuses on the river and its environs within the aboriginal territories

of the Shasta, Karuk, and Yurok Tribes. Consideration is also given to the concerns of the Hupa Tribe, whose territory along the Trinity River, a tributary of the Klamath, is not within the watershed immediately affected by the PacifiCorp Project but which is concerned about the health of the Klamath Basin in general and about impacts on fisheries and its neighbor tribes along the Klamath.



Morning at the Mouth of the Klamath⁴

The Klamath “Riverscape”

In discussions among representatives of the tribes, FERC, and PacifiCorp, the Klamath River and its environs have come to be referred to as a “riverscape.” The riverscape concept is discussed in considerable detail in the “Regulatory Analysis” prepared for the KRITFWC and PacifiCorp by the Yurok Culture Department⁵. Riverscapes have not heretofore been explicitly considered with respect to their National Register eligibility, so a first task of this report is to address just what the Klamath Riverscape is, and whether it is possible for such a riverscape to be eligible for the Register.

What is a “Riverscape?”

Merriam-Webster’s 2001 dictionary provides no definition of the word “riverscape,” but a cursory search of the internet shows that it is widely used, in many ways. There is a Riverscape Metro Park in Dayton, Ohio and Riverscape Apartments in Odenton, Maryland. A book published in 2000 in England is entitled *London’s Riverscape Lost and Found*, and deals with the built environment of the Thames⁶. The Potomac Conservancy in Washington DC publishes a newsletter called *Riverscape*, dealing with conservation of the Potomac River. The term has been adopted by KRITFWC and others considering the potential effects of Project relicensing on the Klamath River’s cultural values as perceived by members of the Klamath, Shasta, Hupa, Karuk, and Yurok tribes, apparently to embrace the river itself and its floodplain, terraces, valley, and surrounding hill slopes.

“Riverscape” and “Landscape”

Discussion of the term in the Regulatory Analysis” indicates that “riverscape” was used as a way of adapting the better-known term “landscape” to the Klamath River situation. “Landscape” is defined by Merriam-Webster as “the landforms of a region in the aggregate” – a definition that virtually encompasses all the world’s land masses. There is obviously a “Klamath Riverscape” in the sense of the river’s land – and water -- forms in the aggregate.

“Cultural Landscape” and “Cultural Riverscape”

In the literature of the National Park Service (NPS) cited in the Regulatory Analysis, the word “landscape” is used

as part of the description of a particular kind of physical cultural resource – the “cultural landscape.” A cultural landscape, according to the *Secretary of the Interior’s Guidelines for the Treatment of Cultural Landscapes*, is:

*a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein) associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values*⁷.

A “cultural riverscape,” then, would be a river and its environs, including their natural and cultural resources, wildlife, and domestic animals, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values. Clearly there is such a riverscape along the Klamath River. There is a river and its environs, there are natural resources (plants, animals, minerals, etc.) and cultural resources⁸ (human cultural activities, beliefs ascribed to places along the river, ancient village sites, fishing sites, structures, etc.), there is wildlife (birds, fish, bears, deer) and there are domestic animals (cows, horses, pigs, chickens). The river and its environs are associated with a range of historic events and activities (notably for the purposes of this report, events in the lives of Indian tribal societies along the river, and events surrounding their treatment by Euroamerican society), and no doubt with notable persons. The river and its environs exhibit other cultural values – for example, the values ascribed to it by tribal practitioners of the first fish ceremonial cycle, the brush dance, and other rituals – and there are parts at least

of the river valley that have high aesthetic values.

The question that needs to be addressed, then, is not whether the Klamath River and its environs constitute a riverscape, but whether that riverscape may be eligible for the National Register of Historic Places.

Problems in Applying the “Landscape/Riverscape” Terminology

The Secretary of the Interior’s Guidelines for the Treatment of Cultural Landscapes say that:

*There are four general types of cultural landscapes, not mutually exclusive: historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes*⁹.

The “Regulatory Analysis” suggests that all or a portion of the Klamath River and its environs may be eligible for the National Register as an “ethnographic landscape.” There are certain problems with this assumption.

First, the word “ethnographic” refers to a form of research – “the study and systematic recording of human cultures¹⁰.” Referring to something as “ethnographic” implies that the significance of the thing (“ethnographic object,” “ethnographic site,” “ethnographic riverscape”) lies in its usefulness to such research¹¹. This kind of significance may or may not have anything to do with the way the thing is valued by the people in whose culture it plays a role.

Calling a place or thing “ethnographic” suggests that it is the job of the ethnographer, not of the people themselves, to decide whether it is significant. This can be deeply misleading. The core cultural value of a riverscape (or anything else) lies in its relationship to the cultural life of a community or group, the way it is perceived by the group’s members. The significance ascribed to it by outside researchers may also be important, but for different reasons. Referring to the thing as “ethnographic” implies that we place the ethnographer’s views above those of the community.

This is not to say that ethnography and ethnographers are irrelevant; they are often necessary translators of a group’s cultural values and beliefs into the language of an outside world¹². But that is all they are; the ethnographic study of a thing’s significance articulates a community’s beliefs and values; it does not create them¹³.

Second, the various NPS guidelines for evaluating and treating “cultural landscapes” of all kinds were developed by landscape architects, and reflect a primary interest in designed landscapes – parks, parkways, and the like. Although the definition of “ethnographic landscape” given in the guidelines embraces wholly natural features of the environment¹⁴, virtually all of the examples the guidelines present are of designed landscapes, and most of the treatment measures prescribed are most relevant to such landscapes. “Vernacular landscapes” are given some consideration, but these too are landscapes that reflect human activity – agricultural valleys, mining areas. Reference to “ethnographic landscapes”

seems to have been included as something of an afterthought.

The Klamath Riverscape is not a “designed riverscape;” it was not designed and constructed by human beings. While it contains both designed and vernacular architecture and engineering (roads, sawmills, houses, towns, garden plots), these do not reflect the central cultural values ascribed to the area by the tribes. Reflections of tribal use of the area – village sites, fishing sites, petroglyphs – are virtually invisible to the untrained eye, and by their very nature do not dominate the visual character of the riverscape. The Klamath River and its environs comprise a *natural* riverscape, in which many of the obvious works of human beings – towns, sawmills, and the like – are visual intrusions.

While one could certainly say that a riverscape like that along the Klamath constitutes an “ethnographic riverscape,” trying to evaluate it as such would lead to a very contorted analysis, attempting to make the actual cultural significance of the natural landscape somehow relate to the language of guidelines developed with designed landscapes in mind, or reinterpreting the guidelines to make them relate more reasonably to the landscape.

This problem is compounded by the fact that there are no NPS guidelines for *evaluating* ethnographic landscapes as such. The closest such guidance (other than National Register Bulletin 38, discussed below) is National Register Bulletin 30, *Guidelines for Evaluating and Documenting Rural Historic Landscapes*¹⁵. A Rural Historic Landscapes is defined as “a geographical

area that historically has been used by people, or shaped or modified by human activity, occupancy, or intervention, and that possesses a significant concentration, linkage, or continuity of areas of land use, vegetation, buildings and structures, roads and waterways, and natural features.” The guidelines for evaluation focus primarily on documenting physical evidence of human influences on the natural environment. In essence, a rural historic landscape is about the same as the “historic vernacular landscape” defined in the *Secretary of the Interior’s Guidelines*¹⁶.

A Traditional Cultural Riverscape

The need to have a way of evaluating essentially natural places valued by indigenous and other traditional communities was one thing that drove the National Register of Historic Places in 1990 to issue National Register Bulletin 38, *Identification and Documentation of Traditional Cultural Properties*. A traditional cultural property is any place – a site, a structure, a district made up of multiple sites or structures, a landscape, and hence a riverscape – to which a living community ascribes cultural significance that is rooted in the group’s traditions and history¹⁷. Such places can be wholly natural, wholly designed and constructed, or any combination of the two. The important thing is how the place is viewed and valued by the community or communities with which it is associated. The definition of “ethnographic landscape” in the *Secretary of the Interior’s Guidelines* describes one type of traditional cultural property, but Bulletin 38 gives far more guidance in how such a landscape may

be evaluated than does any of the guidance dealing with “cultural landscapes” as NPS defines them.

It requires fewer conceptual and semantic contortions to evaluate the Klamath Riverscape as a traditional cultural riverscape, following National Register Bulletin 38, than it does to address it as an “ethnographic landscape” following the NPS cultural landscape guidelines. Accordingly, this report follows Bulletin 38 in evaluating the Klamath Riverscape’s eligibility for the National Register, though elements of the cultural landscape guidance will be referred to where they are useful.

May the Klamath Riverscape be Eligible for the National Register?

Under Bulletin 38 and all other National Register guidance, to be eligible for the National Register a place must have “integrity” and meet at least one of the National Register Criteria¹⁸ -- association with significant events or patterns of events, association with significant people, representation of a type, style, school of thought, or a distinguishable entity, and/or possible possession of information important in history or prehistory. Traditional cultural properties are most often found eligible under Criterion “A,” for association with significant patterns of events in the traditional history and culture of the group that ascribes value to them.

Clearly the Klamath Riverscape is associated with significant patterns of events in the traditional histories of the Yurok, Karuk, Hupa, Shasta, and Klamath tribes. These tribes to lesser or greater degrees (mostly greater)

depended and continue to depend on the river and its resources, especially salmon, steelhead, and other fish, for their existence. Their cultural lives were and are substantially built around the river and its fish, plants, wildlife and water. Hence it is safe to say that the Klamath Riverscape, or perhaps several riverscapes associated with the various tribes, *may* be eligible for the National Register. The core purpose of this report, of course, is to organize the data needed to make a judgment about whether the riverscape in fact *is* eligible.

Conclusion

Based on all the above, it is clear that there is a definable Klamath Riverscape that *may* be eligible for the National Register¹⁹.

The Riverscape's Character

Having established that the Klamath River and its environs can legitimately be thought of as a riverscape that may be eligible for the National Register, our next task is to define the Riverscape's general character, with particular reference to the features that contribute to its significance – referred to in National Register guidance as “contributing elements.” Although not particularly relevant to consideration of PacifiCorp Project impacts, it is also necessary to discuss what might be defined as the boundaries of the Klamath Riverscape – where does it begin and end.

General Character

It seems self-evident that a riverscape must comprise the landscape surrounding and including a river.

Accordingly, the geography of the Klamath Riverscape logically comprises the Klamath River valley, including the river itself, its surrounding lowlands, and the slopes that bound it.

Contributing Elements

It is beyond the scope of this report to identify specific contributing and non-contributing elements of the Klamath Riverscape (“This bend in the river contributes; that one does not,”). Data are not available to make such discriminations, and they are not necessary for the purposes of addressing the impacts of relicensing. At this point, let us simply identify the general elements of the riverscape that make it what it is, and hence contribute to its character.

The river:

We can begin in simplest terms by specifying that the river itself is a critical, indeed defining, element of the riverscape's character²⁰. Without the river, there would obviously be no riverscape.

The river, of course, is a dynamic feature of the environment; it does not hold still. It shrinks, floods, deposits sediment and washes it away. Any understanding of the river as a riverscape component must take this dynamism into account.

For the purposes of this report, the Klamath River is understood to be the stream of water flowing through the valley and its immediately associated landforms, including the floodplain, sandbars, rapids, islands, and terraces bordering the stream.

The cultural importance of the river is emphasized in all the ethnographic reports, and is reflected in tribal traditional history. For example:

The traditional Yurok belief at the time of European Contact was that the world is a flat extent surrounded by ocean and bisected by the River. The role of the River to Yurok culture was not limited to transportation, but was an integral part of the social network both within Yurok and between their neighbors. Extensive visiting between villages, families and outside villages occurred via the river. Travelers would come from up and down river to participate or attend various ceremonies and gatherings so much that the primary Yurok ceremonial sites include houses for visitors from Hupa and Karok communities. Likewise the Karok and Hupa have houses for visiting Yurok for similar ceremonies. Although each group had its own unique aspects of ritual, language and material culture, the river provided a common cultural framework that was integrated in socioeconomic and spiritual life for all three groups (Waterman 1920:186).

Waterman reported that the Yurok had no name for the River because in Yurok terms, it is the only river. Streams and creeks are often named descriptively, after a character, story or nearby village, or not at all (Waterman 1920:196). (Note: Waterman's conclusion that there was no Yurok name for River is not accurate. The Yurok word for the River is HeL kik a wroi or

"watercourse coming from way back in the mountains.")²¹.

Water:

It should go without saying, but may not, that the water making up the river is a fundamental part of the river and hence of the riverscape. A river without water is not a river²²; it is a riverbed, a canyon, a stream cut, an arroyo. Certainly an active river like the Klamath would not be itself if it were not full of flowing water. The importance of water quality is stressed over and over by consultants interviewed for the Karuk ethnographic report, for instance:

You dip in the falls and pull out your net all covered with this green stuff. It's not right. It never was there before. It is all because of the reservoirs they have up there holding the water back, not letting it go. Then when they have to let it go and that crap is what washes out. If it was flowing freely we wouldn't have the buildup no matter what they did to it up there. Most of it would come down and drain out of there so when we got a high water, it would flush it clean. It doesn't flush out and eventually it's going to kill the river²³.

Fish, wildlife, and plants:

Although a river can be deprived of fish, wildlife, and plants and technically still be a river (a stream of water), it would obviously be very different from the river it was when inhabited by living creatures. Hence the living population of the river – its fish, the plants that grow on its banks and in its wetlands, and the terrestrial animals and birds that

live along, drink from, hunt in, and land on it are obviously character-defining elements of the riverscape²⁴. The importance of salmon, steelhead, Pacific lamprey, and other fish species is well known and will be discussed further below, but virtually all other native species in the riverscape contribute to its cultural significance in some way. The Trinity EIS identifies willow, cottonwood, wild grape, bulrush, hazel, tules, spearmint and blackberries among the plant types that had and have cultural and spiritual significance to Hupa people (Trinity 3-212). The Pacific giant salamander is a good example of an animal that is less charismatic than the salmon, but nevertheless carries considerable cultural significance for the people of the riverscape:

In Karuk mythology the Pacific giant salamander (pu'f-puuf in the Karuk language) assumes the responsibility of purifying water, being placed here by the Creator and delegated the specific function of water purifier. The evidence lies in both legend and the empirical observation that where in the past pu'f-puuf and pure water were both present, the absence of the salamander in these same streams and springs is an unfailing indicator that something is wrong with the water. That in turn is a sure sign that something is not right in the watershed.

Norman Goodwin, a contemporary Karuk ceremonial leader descended from medicine people on both the maternal and paternal sides of his family, considers the role of pu'f-puuf in the following statement:

"This salamander brings luck to you. When it comes to visit your home, that's a good omen, good luck. I remember when I was a kid, my grandfather used to have Karuk tobacco which he gave to pu'f-puuf. He would put him in a basket and take him down to a spring. He used to say in Karuk, 'I'm going to help you. You are not in a good place. There are children around and somebody might step on you.' You see them in springs. They don't stay there [in one spring] all the time. I guess they just do their thing [purifying the water] and go on to the next one [spring]. They don't live in a certain spring. You don't see them traveling around like other salamanders. They are a very spiritual and sacred animal. Lots of people are scared of them. They won't harm you. They have respect for you, and you must respect them. They're sacred, you know. They're here for a good purpose"²⁵.

Valley floor and terraces:

The floor and terraces of the Klamath River valley are the product of the river, and constitute the immediate landscape through which the river flows. This naturally makes them parts of the riverscape. Their plants and animals contribute to their visual and ecological character, and accordingly are themselves contributing elements of the riverscape.

Surrounding hill slopes and ridges:

The Secretary of the Interior's Guidelines for the Treatment of Cultural Landscapes²⁶ identifies "topography" as a character-defining feature of a

landscape – as it obviously is; a landscape would not be a landscape without topography, even if the topography is flat. The dramatic topographic change from the valley floor up to the surrounding hilltops and ridge lines clearly helps define the character of the Klamath Riverscape; it would be a very different riverscape if the valley were bordered by low knolls with gentle slopes. The slopes that surround the valley, from their bases to their crests, with their plant cover and wildlife, must be understood to be parts of the riverscape, and to contribute to its definition. The wildlife of the uplands – bear, deer, coyote – like those of the valley floor and the river itself, play critical roles in tribal perceptions of the riverscape and indeed the world, and of the place of people in the world:

*"Talking about those old stories grandpa used to tell us when we were kids... 'You know we were all animals' - animal people, I guess you'd call them. 'Put yourself in that context.' Used to tell us these old stories, 'just lay there on the floor, put yourself in the position of that animal going through the steps... That's me, going through the steps - how this came about, how this came about"*²⁷

The hill crests and ridges are where trails run that are used not only in subsistence pursuits but for ritual purposes. World Renewal priests climb ridges to perform ceremonial functions and travel from site to site. Salmon callers stationed on ridges alerted towns up and down the river of the coming of salmon runs.

Cultural uses and perceptions.

It is the traditional use of the riverscape by Yurok, Karuk, Hupa, Shasta and Klamath people that makes the riverscape a “cultural” one.

Accordingly, the cultural uses to which the tribes put the riverscape and its component parts, contribute critically to its character. Similarly, the ways in which the riverscape and its component parts are perceived by tribal people contribute to its character. The way the



Cooking salmon²⁸

river provides spatial orientation to people living along it, and the spiritual and other cultural values ascribed to the river, its fish, other animals, and plants, and to specific places within and along the river are elements of the riverscape’s character.

Specific cultural locations.

Within the riverscape, a large number of specific locations are associated with cultural beliefs or activities, and/or exhibit evidence of use by tribal ancestors. One hundred thirty-seven Shasta village sites are noted in the ethnographic report prepared for the Shasta, twenty-eight of which lie within the boundaries of the Klamath Hydroelectric Project itself²⁹.

Some 23 “prehistoric sites,” presumably representing the villages and camps of ancestral Hupa and perhaps other tribes,

were identified along the Trinity River in the Trinity River EIS, but this number is misleading for at least two reasons. First it represents only sites recorded by past archeological surveys, rather than contemporary survey work. Past surveys almost certainly did not meet modern standards, and the EIS provides no data on how thoroughly they covered the banks of the river. Second, the number of sites listed did not count sites inundated by Trinity Reservoir; the EIS alludes to 53 “archeological sites” that are known to be thus inundated, but it is not clear how many of these represent tribal as opposed to historic Euroamerican activities³⁰.

Many of the tribal consultants interviewed for the Karuk ethnographic report mention ancestral sites that are washing into the river as a result of erosion that they associate with the effects of the dams. Several such sites were shown to the author on February 6th by Karuk Vice-Chairman Leaf Hillman and his colleagues. Examples include:

- *Katamin*, the central place in one of the Karuk World Renewal Ceremonies. This site has been heavily eroded. Where the land is described as sloping gently to the river’s edge about 40 years ago, there is now a nearly sheer bank; acres of the site have apparently been lost.
- *Amekiarum*, a dance village and site of the First Salmon Ceremony, where a sheer bank bisects the housepit that represents a priestly sweatlodge used for generations and as recently as the early 20th century. It has been necessary to rebuild

the sweatlodge some distance away, which is regarded as culturally inappropriate though unavoidable.

- *Paniminik*, at Orleans, where erosion is cutting close to the priestly sweatlodge used in World Renewal rituals.



Looking from the eroded bank at *Katamin* toward *A’uich*, the Karuk center of the world³¹

These sites are contributing parts of districts determined eligible for the National Register in the 1980s and 90s in connection with Section 106 review of Forest Service projects³².

The Yurok ethnographic report notes that:

Various ethnographic sources show a wide diversity and abundance of cultural sites located along the River. For example in 1909 the anthropologist Thomas Waterman documented 82 various cultural places, 41 rocks of cultural significance, 97 fishing spots, and 44 villages all located in the river channel, river flood-plane or just above the high water mark. The 82 places are places significant to Yurok history (both historic and legendary), ceremony, gathering,

and hunting. In addition to these 264 sites, the Yurok Tribe Heritage Preservation Office has documented approximately 100 additional sites that were either missed by Waterman or have been established since his early century visit to the territories of the Yurok people³³.

Many of these specific locations may be individually eligible for the National Register, as traditional cultural properties, as archeological sites, or for other reasons. In the context of the riverscape, however, it is not necessary or useful to evaluate their individual significance. Together with the river, the fish, the plants, the topography, and the cultural uses of and beliefs about the area by the tribes, they are contributing elements to the overall Klamath Riverscape.

Non-contributing Elements

Data are not available to permit a detailed listing of elements of the riverscape that do *not* contribute to its Register eligibility, and there is little or no reason to identify such elements for the purposes of this report. Generally, modern residential areas like Orleans, Happy Camp, and Somes Bar probably do not contribute to the riverscape's traditional cultural character, and areas severely impacted by mining, logging, and road building (e.g., the Richardson Bedrock Mine) probably also do not contribute. However, one has to be careful about such generalizations. Orleans, for example, is the site of the Karuk town *Paniminik*, one of the three centers of the World Renewal Ceremony and actively used as such by Karuk today. Not far away is *Amekiarum*, another important Karuk dance, ritual,

and residential site, on either side of which are riverbanks devastated by hydraulic mining.

Boundaries

National Register Bulletin 38 warns that “defining the boundaries of a traditional cultural property can present considerable problems³⁴.” It goes on to discuss the example of the Helkau Historic District, a place whose eligibility for the National Register is based on its cultural significance to Karuk, Yurok, Hupa, and other tribes of the area:

In the case of the Helkau Historic District in northern California, for example, much of the significance of the property in the eyes of its traditional users is related to the fact that it is quiet, and that it presents extensive views of natural landscape without modern intrusions. These factors are crucial to the medicine making done by traditional religious practitioners in the district. If the boundaries of the district were defined on the basis of these factors, however, the district would take in a substantial portion of California's North coast Range. Practically speaking, the boundaries of a property like the Helkau District must be defined more narrowly, even though this may involve making some rather arbitrary decisions. In the case of the Helkau District, the boundary was finally drawn along topographic lines that included all the locations at which traditional practitioners carry out medicine-making and similar activities, the travel routes between such locations, and the immediate viewshed

surround this complex of locations and routes.

Bulletin 38 recommends that boundaries be established to enclose those areas actually used for cultural purposes. Bulletin 30, similarly, says that “boundaries for rural historic landscapes must encompass the area having historic significance, rather than just scenic values, and contain contributing resources that express the characteristics of the historic landscape³⁵.”

As this author has discussed in some detail elsewhere³⁶, there is no actual regulatory requirement that a historic property’s boundaries be established when considering a federal action’s impacts on it. The insistence by many cultural resource authorities that this be done is a misapplication of standards designed for use in formally nominating properties for inclusion in the National Register. The *Secretary of the Interior’s Standards for Identification* direct that identification of historic properties be “undertaken to the degree required to make decisions;³⁷” since description of a historic property is part of its identification, this principle clearly applies to the definition of boundaries as well as to all other aspects of identification. As a result, the author has concluded that:

The basic question to ask about boundaries is: Do we need to define them in order to consider impacts? If we don’t, there’s no earthly reason to get involved in the complex, usually arbitrary, exercise of defining them³⁸.

In the case of the Klamath Riverscape, the obvious potential impacts of

relicensing – like the impacts of the dams today – will be on the river itself, its immediate environs, and the fish and other life forms that inhabit it. Water quantity, water quality, water temperature, the speed of currents, and things like erosion and deposition are the variables affected by the presence (or absence) and operation of the dams. While changes in these variables may have effects on the riverscape beyond the riverbanks (for example, by facilitating or discouraging development on the valley floor), these effects are far less direct than those on the river itself. Both direct effects on the river and indirect effects elsewhere can be considered without firmly defining the boundaries of the riverscape. As long as the river and its immediate environs are included – as they obviously must be – then there will be effects on the riverscape and it should be possible to consider means of mitigating them. As for the less direct effects of actions like land development on the valley floor or surrounding slopes – one could analyze every parcel of potentially affected land and conclude, perhaps, that Parcel A is inside the boundaries and Parcel B is outside, but it would not follow that development of the latter would not have effects on the former, or on some other part of the Riverscape. In other words, possible effects will have to be considered, regardless of whether their sources are within or outside the boundaries.

Arguably, then, there is no reason to define the boundaries of the Klamath Riverscape, other than to place the riverscape on a map for discussion purposes. There is certainly no need to define them with great exactness, or to

argue about precisely which parcel is in and which is out.

The obvious downstream boundary of the riverscape is the mouth of the river, though a reasonable argument can be made for setting it some distance farther west, where the influence of the river is felt at sea. For purposes of this report, the distinction between these boundaries is of no importance.

The logical upstream boundary would be the upper reaches of the Klamath River watershed, but for purposes of this report we need not consider such an expansive area. Subject to modification based on the results of the study performed for the Klamath Tribes, the upstream boundary of the riverscape considered in this report is the upstream boundary of Shasta territory.

With regard to lateral boundaries, one could plausibly define the riverscape to include all the territory occupied by all the tribes, or at least – as discussed above – to include all lands within the river valley and its surrounding slopes. Neither boundary would serve any particular purpose, however, and either definition would unnecessarily alarm landowners and local governments.

Considering the inevitably arbitrary nature of boundary selection in a case like this one, and the general irrelevance of boundaries to determining the effects of relicensing, it is suggested that *if it is necessary to define boundaries, for the purposes of FERC's impact analysis* they be set at the limits of the 500-year floodplain³⁹, with adjustments to include residential, sweatlodge, and ritual areas above the floodplain⁴⁰. Figure Two⁴¹ shows an example of the areas that

would be included along a selected stretch of the river. Thus bounding the riverscape would obviously leave out the culturally important hill slopes and ridges. In suggesting that they be excluded there is no intention to denigrate their importance or their cultural relevance to the riverscape. In another planning context they certainly should be considered part of the riverscape, but for purposes of reviewing the effects of PacifiCorp's Project, there is no need to include them.

Again, it should be stressed that the whole boundary-setting exercise is essentially irrelevant to the consideration of PacifiCorp Project impacts. We worry about the question of boundaries because National Register guidance makes much of them, but for purposes of project review in a case like this one they make little or no difference. However one decides to bound the Klamath Riverscape, the important thing is that the river, in its entirety, including its water, plants, and animals, is a part of it. It is these aspects of the riverscape, together with the river's banks and terraces, that are subject to effect by the changes to water quantity, quality, flow characteristics, temporal availability and temperature that may be caused in whole or in part by PacifiCorp Project management.

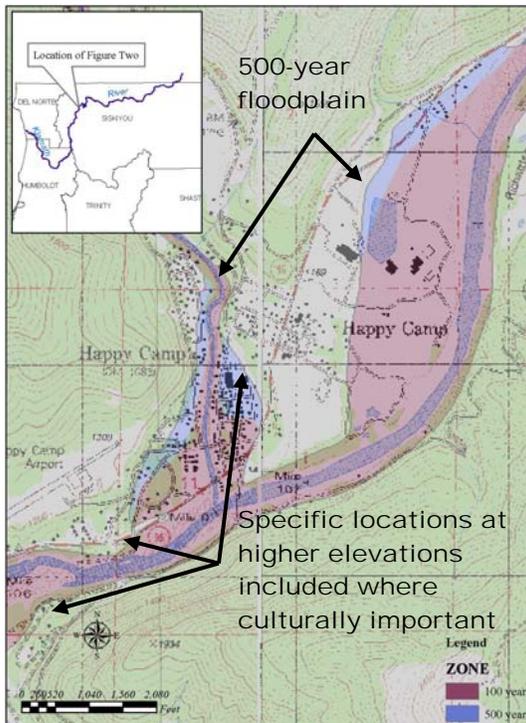


Figure Two: Example of areas within hypothetical lateral boundaries

Does the Riverscape Meet the National Register Criteria for Eligibility?

Having established that the Klamath River and its environs comprise a logically definable riverscape with identifiable physical and cultural elements, we can address the core question of the riverscape’s eligibility for the National Register. National Register Bulletin 38 sets forth a four-step process for determining the eligibility of traditional cultural properties; this process will be followed here.

Step One: “Ensure that the entity under consideration is a property.”

Since the National Register is the National Register of Historic *Places*, an entity cannot be eligible for the Register unless it is a “place.” Because the National Historic Preservation Act⁴² uses the term “historic property” for places that are eligible for the Register, Bulletin 38 uses the word “property” to mean the same thing as “place”⁴³. So the first step in determining the eligibility of something as a traditional cultural property is to determine whether it is a property – a place – as opposed to, say, a belief, a dance, a song, or an animal. This is not to say that beliefs, dances, songs and animals may not be parts of, or contribute to, traditional cultural properties, nor is it to say that such entities need not be considered under laws other than the National Historic Preservation Act. It is simply to say that a non-property – a non-place – cannot itself be eligible for the National Register of Historic Places, however much it may contribute to the significance of something that *is* a property, and however much it may have to be considered on its own merits under other legal authorities.

The Klamath Riverscape is obviously a property. It is a physical piece of space, a place, a piece of real property.

Bulletin 38 specifies that a traditional cultural property, like any other kind of historic property, can be a “district, site, building, structure, or object.” Landscapes are usually identified as districts, and this is probably the category to which the Klamath Riverscape would be most comfortably assigned. However, there is no utility in debating precisely how the riverscape should be categorized. Whatever one calls it, the riverscape is a piece of real

property, and hence meets the first test of eligibility.

Step Two: “Consider the property’s integrity”

To be eligible for the National Register, a property must have what the regulations refer to as “integrity.” National Register Bulletin 38 directs that with respect to traditional cultural properties there are two integrity issues to be considered: “integrity of relationship,” and “integrity of condition.”

Integrity of relationship exists if a place “has an integral relationship to traditional cultural practices or beliefs.”

Integrity of condition is present if “the condition of the property (is) such that the relevant relationships survive⁴⁴.”

Integrity of relationship:

The strong relationship of the Yurok, Karuk, Shasta and Klamath with the Klamath River, and of the Hupa with its tributary the Trinity, has been remarked on many times by tribal members and outside observers alike. This relationship has been formally and forcefully asserted by the Yurok Tribe in the preamble to its constitution:

Our people have always lived on this sacred and wondrous land along the Pacific Coast and inland on the Klamath River, since the Spirit People, Wo’ge’ made things ready for us and the Creator, Ko-won-no-ekc-on Ne ka-nup-ceo, placed us here. From the beginning, we have followed all the laws of the Creator, which became the whole fabric of

our tribal sovereignty. In times past and now Yurok people bless the deep river, the tall redwood trees, the rocks, the mounds, and the trails⁴⁵.

The analyses presented in the ethnographic reports underscore this association.

It is from the rivers in their aboriginal wildness, that the core cultures of northwestern California, those of the Yurok, Hupa and Karuk, developed their elaborate and specialized expressions⁴⁶.

The River, being so basic that it has no specific Yurok word designation, is euphemistically referred to in its lower stretch as the “Yurok highway”. At the mouth of the River, Yurok also refer to the Klamath River as HeL kik a wroi or “watercourse coming from way back in the mountains.” It is not surprising that Yurok culture reflects a strong connection to the riverine environment. In contemporary times the Klamath River is referred to as “the main vein” emphasizing its comparison to a blood vessel that provides the main flow of sustenance.

The Yurok people are named and live in relation to the rivers and the sustenance that those quality flows provide. Residency, natural and cultural resource sites, ceremonial practices, oral history, transportation route, economic and sociological dependence, indeed the Yurok identity, are all intricately woven into the ecosystems of the Trinity and Klamath Rivers⁴⁷.

Documentary sources cited in the ethnographic reports, emphasize the relationships between the river and the tribes.

Kroeber and Barrett discuss the Karuk as one of a number of “core tribes” dependent upon fish within a social system of enforced rights:

The best fishing places along the rivers were privately owned, sometimes by single individuals, sometimes jointly by several. In the latter case, a fishing place could be used by each owner in rotation, according to the proportionate share of his ownership. An owner might give someone else permission to fish there on the day or days when his turn would normally come. But no one was permitted to fish or to establish a new fishing place immediately downstream from a recognized fishing place...most inferior fishing places, and a few excellent ones were not privately owned but were open or public...(Kroeber and Barrett 1960 p. 3)⁴⁸.

The anthropologist Alfred Kroeber traveled throughout the Yurok territory in the early 1900’s interviewing various Yurok people and documenting a Yurok way of life. In Yurok Myths (Kroeber, 1978), it is obvious that the River was as important to the people from that era as it is to Yurok people now. Out of the 169 stories in Yurok Myths, there are 77 that make direct reference to the River. Yurok words that name

places, plants, animals, and things associated with the River are detailed throughout Yurok stories⁴⁹.

There are Yurok stories that reinforce the Yurok belief that the River was created in a distinct way in order to provide Yurok people with the best of worlds. For example, Wohpekumeu said, “let the river run downstream” and that is how the River came to flow the direction it does. In the story No’ots, a young man went out on the River and took his paddle and rode about on the River. That is why it is crooked at Olege’l⁵⁰.

The statements of tribal consultants further emphasize relationships with the river.

A Yurok elder said, “without this river we would not know who we are, where we’re from or where we’re going.” Other Native Americans track directionality based on cardinal directions. In a steep riverine environment with a temperate rainforest climate, the suns’ rising and setting points are not accurate ways of tracking time and direction. Instead, the flow of the river is most essential for telling time and direction⁵¹.

(Billy Wilson said) “The River is part of life. No river, no life. God put it there for us, the people, to use. If people don’t use it right, it’s gone. It was a place for everyone. The River is there to supply food to the people who need it. We wouldn’t be here without the River”⁵²

The Karuk people manage their resources by way of ceremonies and traditional rituals. There was the First Salmon Ceremony with taboos associated. It was taboo to eat steelhead before the Pikiawish. And there were four ceremonies in which the Medicine Man needs to go down to the river to bathe. From early July right on through September. They need to bathe in the Klamath River for ten days at a time –up to three, four, five times a day..... We believed that if we took care of our fishery we would always have food. If we didn't manage our fishery right something bad would happen. People would die. So we evolved with that concept. Conservation was the goal of the ceremonies, was the goals of the way of life and it continues that way today. We're still striving to do those same things, trying to figure out how to introduce it to the modern society. The closer we can mimic nature is the best method possible⁵³.

The ethnographic reports make it clear that the river influences and structures virtually all aspects of tribal life and perceptions.

River flow rates under natural conditions indicate both seasonality and time of day. A good Yurok boatman is rated by his ability to navigate the River in the dark. The boatman does this by correlating the location and swiftness of the current and the back eddy of the river in relation to the sound of the river that is uniquely created in each bend, slick and riffle of the riverine environment. Every type of unique feature of the water's movement and

characteristics are named. Even when away from the water directionality is measured by the river flow, requiring people to always know where they are in relation to the river. For example it is not uncommon to refer to burners on one side of a kitchen stove as up or down-river burners⁵⁴.

Not only are the River's fluctuations known by characteristics of water content but... also... by what the water flows additionally provide Yurok people. For example it is known that the spring run of salmon will come soon after the budding of the thimbleberry that grows along the Rivers' courses. It is known that after a good flooding willow-root basket materials are best gathered in a straight narrow section of the river where a flood's raging waters have scoured the roots. After a flood event, specific gravel bars are searched for new deposits of granite boulders used for porch rocks in Yurok traditional homes. It is known that in a drought year, flooding occurs in the lower portions of the River because of sandbar buildup at the mouth of the River. And for all of these natural occurrences Yuroks know of appropriate ceremonies that officiate the human communication with these river processes⁵⁵.

Clearly, the relationship between the Klamath River and the core values and beliefs of the tribes is very strong. The river is integral to core beliefs that underlie the cultural values and practices of the tribes. It has structured the lifeways of the tribes in the past, and continues to do so, albeit in altered and perhaps attenuated form, today. The

Klamath Riverscape must be judged to have integrity of relationship.

Integrity of Condition

The Klamath Riverscape has suffered considerably from the impacts of logging, hydraulic mining, road building, other construction, farming, and – importantly for the purposes of this study – dam building and operation. There is no question that relative to its mid-19th century condition, it has lost a great deal of its integrity of condition. Loss of integrity, however, is a fate that befalls every historic place; it is, indeed, a fundamental byproduct of becoming historic. The question is not whether the Klamath Riverscape has lost integrity; the question is whether it has lost *so much* integrity that its relationships with tribal cultural values and practices do not survive.

National Register Bulletin 38 stresses that:

...the integrity of a possible traditional cultural property must be considered with reference to the views of traditional practitioners; if its integrity has not been lost in their eyes, it probably has sufficient integrity to justify further evaluation⁵⁶.

In other words, integrity of condition must be assessed through the eyes of the group that values the property. In this case, of course, this means through the eyes of the tribes.

The ethnographic reports document in considerable detail the concerns that the tribes and their members feel about the damaged and deteriorating condition of

the riverscape, but they also document the continuing associations that the tribes feel and practice with reference to the river, its animal and vegetal inhabitants, and its environs.

The preamble to the Yurok Constitution speaks to the condition of the river, deploring the damage that has been done to it:

In the 1890's, individual Indians received allotments from tribal land located in the Klamath River Reserve portion of the Hoopa Valley Reservation and almost all of the remainder of the Reserve was declared "surplus" and opened for homesteading by non-Indians. The forests were logged excessively and the wildlife was depleted. Even the great salmon runs went into deep decline due to over-fishing and habitat destruction⁵⁷.

Yet the preamble goes on to note that "the modern Yurok Tribe ... has emerged, strong and proud, from the tragedies and wrongs of the years since the arrival of the non-Indians into our land," and that its "sacred and vibrant traditions have survived and are now growing stronger and richer each year⁵⁸." It then specifies that among the core purposes of the Constitution are to:

- 3) Reclaim the tribal land base within the Yurok Reservation and enlarge the Reservation boundaries to the maximum extent possible within the ancestral lands of our tribe and/or within any compensatory land area;*
- 4) Preserve and promote our culture, language, and religious beliefs and practices, and pass them on to our*

children, our grandchildren, and to their children and grandchildren, on and on, forever... (and)

6) Restore, enhance, and manage the tribal fishery, tribal water rights, tribal forests, and all other natural resources⁵⁹.

The tribe could not realistically envision achieving such purposes if the riverscape – a critical part of its land base, the focus of so many of its religious beliefs and practices, and the source of its fishery, had been damaged beyond recovery. The Yurok Tribe, in other words, appears to believe that the riverscape retains a sufficient level of integrity to justify imagining its reclamation and thinking that it could continue to play its roles in Yurok traditional life.

The Karuk Tribe has invested heavily in the acquisition of land along the river, giving priority to culturally significant sites, and it employs these sites in an ongoing revitalization of its cultural and religious practices. Much of the world renewal site *Paniminik* is now in Karuk hands, for example; the priestly sweat lodge has been rebuilt there and ceremonies are carried out regularly. Ceremonies are carried out at *Katamin* and *Amekiarum* as well, and at other dance sites up and down the river. Tribal representatives express concern about damage to these sites, notably resulting from erosion that they believe is associated with dam operation, but there is no question that the sites and their environs are intact enough to make their ceremonial use feasible. Active efforts are being made to control erosion and other forms of damage; for example, at *Katamin* a sacred pond almost collapsed into the river as a result of the 1997 flood and the effects of nearby

highway construction by Caltrans; in Karuk belief this would have resulted in the end of the world. Karuk tribal members rebuilt the river terrace between the eroding bank and the pond, and were successful in saving it⁶⁰.

The Karuk and Yurok ethnographic reports provides extensive testimony by tribal consultants about the condition of the river; these statements also convey the impression of deep sadness about the condition of the river, but a continuing association with it and at least some hope that it can be restored to something approaching its earlier condition.

For example, Yurok tribal member Walt McCovey, Jr. remembers:

Fish runs on the River included winter steelhead, spring, summer and winter salmon. Many of the salmon spawned in the creeks feeding into the Klamath. He remembers the creeks had a lot of fish in them. He recalled fishing in the creeks when he was around 6-7 years old. Now the creeks are silted in, full of gravel piling up at the mouths, just like cement. Winter salmon used to run in November, December, and January. These runs have disappeared.

The River used to have high winter flows. People would move around in the winter. The River would rise 40-50 feet every year in peak flows. Walt recalls high water and flood events in 1955, 1964, and 1974. High water events removed silt and sediments and large woody debris from the river. Now the flows are not high enough to float out the big logs over the riffles or clear out the

gravel and sediments that pile up at the mouths of the creeks. The construction of dams on the Klamath and the Trinity Rivers had a big impact on the River and its annual flow. Walt stated that a significant decline in fish population was evident after the construction of the dams.

But still...

“The River is the lifeline of the Indian people. We depend on the fish, depend on eels, sturgeon.... River is medicine to him. He can feel lousy as hell and go out on the River and come back feeling good. Gives strength, knowing this is mine; this is where I live, where I’m born. This is where my roots are”⁶¹.

Similarly, former Karuk Tribal Council member Vera Vena Davis recalls:

We had nice deep holes in Ti Creek when I was young. The vegetation wasn’t dried out and broken up the way it is today. ... The river was never scummy the way it is now. You could walk around in the river, there was more sand than sediment. ... We used to eat Kaaf (Indian Rhubarb), and watercress. Now I’d be scared to eat watercress because you don’t know where the water is coming from. And of course we had all the wild turnips. There were lots of crayfish. Now you don’t see them any more. We used to eat freshwater clams too. We used to get clams where we got our eels and fish in one little area there. There was more water in the creeks, now they are all drying up. ... There were fish in all of the big streams. Now there is no

water in these creeks because of greediness. People taking all the water away from the river. ... And we could drink the water. I wouldn’t drink it now. You had to drink it when you came off the ceremonies. When you came off the hill you had to wash yourself as good as you could and you had to drink the water. Before that you couldn’t eat or drink water so I know it was traditional and no one ever got sick. The water always had a little color but it wasn’t like it is now, soapy, with sediment, algae growing in it. Algae did not grow in the river then. It is just dirty now. It was real nice. It was smooth and it was deep, not like it is today⁶².

Ms. Davis’s comments, like those of other older tribal members, are mostly retrospective and focus on how the river has deteriorated. Some younger tribal members are looking for solutions that could bring the river back to its traditional condition. For example, Karuk tribal member and cultural biologist Ron Reed says:

Approximately 80% of the wetlands in the Upper Klamath Basin are no longer in existence. Either they have been drained or they are farmland. That has a profound effect on the Lower Klamath Basin. ... If the dams weren’t there and the wetlands were, you would have the spring freshet system with peak flows during the spring. When the water comes down unnaturally in a dam-regulated flow it accumulates and scours out the riverbank... The regulated flows channelize the Klamath all the way down to the Scott River. The sediment load

gets transported down to our country. Now the system is overloaded with nutrients causing the algae to overtake the river. And what are the effects of that poor quality water on the fish trying to enter these streams? It's not just PacifiCorp, there are other things going on out there upslope that need to be considered too if we are going to get back healthy fish populations. It's sedimentation from Highway 96. It's Forest Service management. My goal is to get all these agencies together in a holistic way to look at these issues⁶³.

Tribal ceremonial life continues to focus on the river and its inhabitants. The Karuk have managed to sustain their World Renewal Ceremony (*Pikiavish*) through the hard times of oppression, genocide, and environmental degradation, and its practice today is experiencing a resurgence. Anthropologist John Salter describes the contemporary arrow-shooting part of the ceremony:

*The archery shooting aspect of the Pikiavish.... is a contest of shooting at a small fork shaped target (yuxpit) set in front of a screen of fir branches and which is often hidden from the shooter behind brush or shrubs, requiring that the shot be angled up sharply so that the falling arrow will land vertically, as the goal is to "wake up the earth" for *Pikiavish* and the new year. The occasion of arrow shooting is one of prayerful concentration followed by exuberant competition with small bets being placed on each round. The winner of a match shoots first in the subsequent match and then goes*

*to a place where he can call out to the remaining shooters where their arrow has fallen in relation to the target. On subsequent days the archers move from location to location, in the sequence preordained by the Ixkareya. In acts of abstinence, concentration and purification reminiscent of the purifications required for deer hunting, the arrow shooters fast from the previous night, neither eating nor drinking water. Following a prayer by the Headman which includes a statement propitiating health "even for the creatures that crawl," the shooters make medicine (*bidish*) using a pinch of tobacco crumbled into a medicine fire and making a war cry in the direction of a sacred peak designated by the Head Man while uttering a phrase in Karuk calling for a long life⁶⁴.*

Similarly among the Yurok:

The Brush Ceremony, still held in several of the traditional villages along the Klamath River requires the proper scenic river qualities and the availability of river resources. As a Brush Ceremony unfolds over a four-day period it attests to the wealth that the riverine environment provides. Baskets made of plant materials collected at the water's edge are used to hold food and ceremonial medicine. Acorns, cooked in the baskets, are converted to a nourishing mush that is rendered by placing several hot rocks (cooking rocks), gathered off of specific river bars, into the acorn flour and water that is placed into the baskets. Regalia that adorn the ceremonialists is constructed out of various plant and animal products that the riverine environment provides. Ceremonial bathing in the River and its tributary

creeks is a requirement for some of the participants. Ceremonialists also prepare themselves by listening to the River's sounds. While many guests today arrive by car, many more arrive by traditional transportation: boats⁶⁵.

On the Trinity River, a major tributary of the Klamath, the Trinity EIS reports that:

The Hoopa Valley Tribe continues to conduct many of their traditional religious ceremonies. The cultural significance of the Trinity River and its sacred localities is captured in many of these ceremonies. Religious sites on the river are ancient and were designated by spiritual deities at a time beyond living memory. Hupa ceremonies are of unique importance not only to Hupa Indians, but to other Northwest California Indians as well. Prayers at the dances are directed toward the well being of everyone, and food served at the dances is shared with all who attend⁶⁶.

Although the tribes view the river as retaining its significance, they also recognize that its integrity is forever under attack. Tribal members regularly use terms like “last hope” and “last chance” when referring to the possibility of maintaining the river’s place in their cultural lives. A vivid example of the dangers the tribes must contend with, and their efforts to contend with them, occurred in the 1970s, when the Karuk were confronted by a Forest Service proposal to build a bridge across the river at Orleans, impacting the World Renewal sacred site of *Paniminik*. As told to the author by Karuk Vice Chairman Leaf Hillman, the Karuk saw this proposal as the “last nail in the coffin” that would make it forever impossible to carry out ceremonies at the site. As a result, they strongly opposed the project during Forest Service NEPA and Section 106 review. *Paniminik*

and its environs were determined eligible for the National Register as the “Karok Panamenic World Renewal District,” and the Forest Service eventually abandoned the project. The tribe has now acquired *Paniminik*, restored the priestly sweat lodge, and re-instituted World Renewal ceremonies there⁶⁷.



Priestly sweat lodge at *Paniminik*⁶⁸

The very fact that the tribes are participating in the relicensing review, and in environmental review of other projects in the area, regularly expressing the desire for dam removal and other actions to restore the river, indicates that they do not view the river as having irrevocably lost its integrity. In traditional historic preservation terms, the river seems to be analogous with a fine old building that has been altered in ways that are unsympathetic with its architectural value, but that is not behind rehabilitation. Such a building would not be said to have lost its integrity of condition; clearly the Klamath Riverscape has not lost such integrity in the eyes of the tribes – whose eyes are the only ones that matter for purposes of evaluating the riverscape as a traditional cultural property. The Klamath Riverscape must be viewed as retaining integrity of condition, despite the impacts it has suffered.

Step Three: “Evaluate the property with reference to the National Register Criteria”

The core of any National Register evaluation is application of the criteria published in regulation by the National Park Service for use in making such evaluations⁶⁹. If a property meets one or more of the criteria it is eligible for the Register⁷⁰; if it does not, it is not.

Traditional cultural properties are most often found to be eligible for the National Register under Criterion “a,” “association with events that have made a significant contribution to the broad patterns of our history.” National Register Bulletin 38 specifies that:

The word “our” in this criterion may be taken to refer to the group to which the property may have traditional cultural significance, and the word “history” may be taken to include traditional oral history as well as recorded history. ... “Events” can include specific moments in history or a series of events reflecting a broad pattern or theme⁷¹.

Thus the Klamath Riverscape may be taken to meet National Register Criterion “a” if it is associated with significant specific moments in or broad patterns of the recorded or traditional history of the Karuk, Yurok, Hupa, Shasta, and/or Klamath tribes. On one level, it is obvious that the riverscape is indeed associated with the traditional history of the tribes. It is, after all, where all the tribes have lived since time immemorial. But Boston is where all Bostonians have lived since the city was established in colonial

times, and this fact has not been taken to justify regarding the entire city as eligible for the National Register. Some more specific evidence of association is required in order to demonstrate eligibility.

The ethnographic reports provide plentiful evidence of association between the Klamath Riverscape and the traditional history of the tribes, both in terms of specific traditional (often “mythological”) events and in terms of the ongoing patterns of traditional tribal life.

Traditional history.

Tribal origin stories account for the creation of the riverscape, and for the placement of a range of contributing elements, including specific geographic features:

When Wesona-me’getoL (the one up-above) created the world, the homes of the supernatural and the people were segregated. The ocean Pish kaL separated the two homes. The region on the other side is further divided into tsi’k-tsik-oL the home of money, culture hero Wopekamaw’s home, Pulekuk, home of gambling, and the home of Koowetsik, the dwelling place of Salmon. Salmon and humans were created to interact with one another and accordingly the River was created to provide a zone of interaction. There are Yurok stories that reinforce the Yurok belief that the River was created in a distinct way in order to provide Yurok people with the best of worlds. For example, Wopekamaw said, “let the River run downstream” and that

is how the River came to flow the direction it does (Kroeber 1978)⁷².

The mouth of the River changes because it is supposed to be a lady. She takes a position for a while, and when she gets tired, she changes position and moves her legs. The two rocks at the mouth are sentinels. The one on the upper side (north) is Or egos (Tucker Rock). It looks like a woman carrying a burden basket⁷³.

Much traditional belief and practice surrounds the salmon – among the most important of the riverscape’s contributing elements:

When Wohpekamaw first came to the Klamath River, he saw that there was no food for the people. There were only two women who had salmon. Wohpekamaw took the salmon from the women and let them go. Wohpekamaw said the people



Or egos, from above⁷⁴

would never catch the Great Salmon (Nepwo). When Nepwo comes up, he will swim in the middle of the River so he isn’t caught with the nets. The Immortals (woge) only wanted salmon to go up on one side of the River to make sure they knew where they could get salmon. But they

never caught anything so they made it so the salmon would come up both sides. A man from the village of Welkwau (south side of the mouth of the Klamath River) wanted to learn how to fish at the mouth of the River so he went to Koowetsik and asked the headman to show him how to harpoon fish. The headman agreed to show the man from Welkwau. When Nepwo came through the mouth of the River, the headman acted as if he was going to spear it. He would make thrusting motions with his spear but not actually spearing it, at the same time, he was praying for more salmon to come up the River. These ritual actions demonstrated to Nepwo that Yurok were sincere in the proper treatment of salmon and Nepwo informed the other salmon that it was good to come into the Klamath River. More salmon came up the River. The headman speared some salmon and the man from Welkwau saw that he handled the fish in a particular way. The headman explained that if salmon was caught at the mouth, a man was not to use a wooden club to kill it; he was to use a stone to hit it in the head. But upstream from the mouth everyone else would use wooden clubs. If a salmon is caught at the mouth it must be buried with only its tail sticking out. People who use a spear to catch fish at the mouth must practice certain medicine before catching salmon. The lamprey eel was also made at Koowetsik and there are certain rules one must follow when catching them. This Yurok story is the explanation for the origin of the first fish ceremony⁷⁵.



The Mouth of the River
with multiple channels⁷⁶

The first fish ceremony and associated ritual activities are of central importance to traditional tribal cultural life and beliefs along the river. For example:

The Karuk are known among Indian tribes of the western United States as “the Fix-the-World People.” This term is derived from the annual Pikiavish Ceremonies, commonly referred to as the World Renewal Ceremonies. This sequence of ceremonies is shared by the Karuk with the downriver Yurok and Hupa Tribes. The timing of the Pikiavish was related to the fall salmon run and at the time approaching the acorn harvest. The dance cycle is determined each year by a ceremonial leader or headman who also appoints the Fatawanun for that year. This appointment is at the same time a source of honor and a great labor, as the Fatawanun is required to undergo a lengthy ordeal including fasting, praying, and walking the Medicine Trails.

Traditionally the Pikiavish was preceded by the Jump Dance held at the Dance Village of Amekiarum a short distance downriver from Katamin, site of the White Deerskin

Dance. The Jump Dance was held at the time when the spring salmon began their run and was initiated by the First Salmon Ceremony.

Powers gives the following account of the First Salmon Ceremony:

...They celebrate it to insure a good catch of salmon. The Kareya Indian [priest] retires into the mountains and fasts the same length of time as in autumn. On his return the people flee, while he repairs to the river, takes the first salmon of the catch, eats a portion of the same, and with the residue kindles the sacred smoke in the sudatory. No Indian may take a salmon before this dance [used in the sense of a ceremony] is held, nor for ten days after it, even if his family is starving (Powers p. 31)⁷⁷.

The First Salmon Ceremony was conducted at the time of the summer salmon run, just before a day of communal fishing. The ritualist began by placing tobacco and herbs in resting pools along the rapids at Hamburg. He then fished at these places with a dip net late at night and early in the morning. As he began to fish, word was sent to neighboring villages, inviting them to come on the last fishing day of the ceremony. Ten fish were roasted for each village that attended. By imbibing the salmon caught by the First Salmon ritualist, the men of the tribe shared in fishing luck and now were granted fishing rights⁷⁸.

Suppressed for many years, the traditional ceremonial activities associated with the coming of the salmon and the renewal of the world

have been revived by the tribes in recent years. Karuk practitioners say that World Renewal ritual observances never really stopped, but had to be held in secret. Public ceremonies recommenced at *Inem*, near Happy Camp, in about 1968, at *Katamin* in about 1972, and very recently (since tribal acquisition of key parcels of land along the river) at *Paniminik* (Orleans)⁷⁹. Among the Yurok:

I first saw a jump dance in 1988, the third time it had been made since the Yuroks restored it in 1984 – forty-five years after the last performance in 1939. The dance struck me with its sheer difficulty and demand for endurance and sacrifice as much as with its extraordinary beauty. “It’s not easy to fix the world,” said a friend, a dancer and ceremonial singer⁸⁰.

Traditional history also accounts for the idea of building fish weirs to capture fish during the great spawning runs:

Weirs were created by one of the immortals (Ikhareya) as an aspect of creating salmon and preparing the structures and techniques that the humans to come would use in their capture:

When he had made the salmon, this ikhareya made what the Indians use: he made the scaffolding to fish from. He made it of long poles. He bruised grapevines with which to tie the poles and made it all good. He thought, “This they will do when they fish.” He laid a plank on the poles to fish from, and on this he put a little stool so that they could sit while they fished. He thought he had

made everything. Then after a time he thought, “It is not quite right as I have made it.” He put a screen of brush at his fishing place. He concluded, “It is not right like that. It is too far out in the stream. Let it move back a little toward the shore.” Then he thought, “It is not right yet. I do not think it will be good if I use brush. I do not want the salmon to go through: I want them to go right where I am fishing with the net. Let me make something flat and even.” So he made a weir (“dam”) of sticks and tied them together with pounded twigs (into a mat). Then he thought, “Now I think it is good as I have made it. Now when the people grow they will do that. It is a good way I have made it now.” So now the people do like that. When they grew they saw what he had made (“Karuk Myths,” Kroeber 1980 pp 71-72)⁸¹.

Fish are not the only animals of the riverscape that figure in the traditional history of the riverscape, and in the traditional beliefs of its people:

An indication of the close focus of Karuk life may be gauged from the aboriginal law that stories could only be told after the Acku-n, or swamp robin (Varied Thrush) returned from its northern migration to winter in the Klamath Basin. In the accompanying legend the Tu-s, or yellow-breasted chat arrives in the spring and is welcomed as a true harbinger of spring (pimnonahesh (pim=before; nonahesh=summer). The thrush, Tu-s, has the praise go to its head and begins singing late into the night so that by late summer people are commenting that that bird never

stops singing. The Tu-s goes into a huff and leaves which opens the way for the Acku-n to return (personal communication; Dwayne Allen 1997)⁸².

Broad Patterns

The ethnographic reports document the following broad patterns of traditional cultural activity and belief associated with the Klamath Riverscape:

The relationship with salmon is at the core of the cultural systems of all the Klamath River tribes. Obviously most of the traditional historical material quoted above deals with salmon and their relationships with humans. This reflects the central role that salmon played and play in the traditional lives of the tribes.

Salmon far exceeds other resources in its importance to the diet and cultures of the Hoopa Valley, Yurok, and other tribes who have historically lived in the Klamath/Trinity Basin.... The United States Court of Appeals for the Ninth Circuit recognized in Blake v. Arnett, 63 F.2d 906, 909 (9th Cir. 1981) (quoting U.S. v. Winans, 198 U.S. 371, 381 [1905]), the primary importance of salmon to these tribes when the court concluded that the fishery was “not much less necessary to the existence of the Indians than the atmosphere they breathed”⁸³.

The English word ‘salmon’, denoting several types of anadromous fish does not readily translate into the Yurok word ‘ne po y’, “that which is eaten.” ‘Ne po y’ denotes more than ‘fish’, but also includes connotations

of Yurok reverence for a creature that provides sustenance to a people and way of life⁸⁴.

In 1855, a letter was written to the Commissioner of Indian Affairs by Special Agent Whipple, the first Indian Agent on the Klamath River Reserve. This letter is important because it clearly describes several aspects of Yurok land use and their relationship to the River. In recommending the reservation boundaries extend five miles away from the River, Whipple recognized the Yurok use of the entire watershed associated with the River. He describes the salmon as “the staff of life” for the Yurok Indians. He also describes the Lower Klamath as the best salmon fishing grounds in northern California. Whipple describes large alluvial terraces along the floodplain of the River that were used to gather a wide variety of plants, roots, and berries for food and supplies (Whipple 1855)⁸⁵.

Salmon and steelhead were not only sources of food, they were important parts of the spiritual environment. Proper attendance to spiritual values could bring the fish; wrong actions could make them stay away. The relationship was symbiotic; people could use spiritual means to help the fish, just as the fish brought spiritual as well as physical sustenance to the people.

A Yurok elder recounts how as a boy in the 1920’s he assisted in a propitiating ceremony held at the mouth of the River during the summer. He recalls going down river in a traditional Yurok dugout canoe powered by an outboard motor and

guided by his father. As they approached within five miles of the coast they noticed that the River was backed up and stagnant because the sand buildup prevented the River from flowing out to the ocean. Prayers and offerings were made on the sandbar. A day later a spirit guardian represented as a large rock granted the request and the River broke through the sand bar, alleviate flooding, and allowed fish to once again enter the River⁸⁶.

Salmon and steelhead continue to be central to the way tribes relate to the riverscape environment, though their depletion and the impacts of modernity on the tribes have complicated the relationship. Karuk elder Norman Goodwin said:

There used to be fish days, only so many fish came up this run, not enough to feed all the communities up to Happy Camp. Therefore Indians speared fish, and had set nets and dip nets at Ikes and Katamin. Now it is different. There is turmoil and it is going to get worse since people are fishing at Katamin for elders all over the place. This can't work. There were fishing days and there were enough owners so a fish day came up every third day under a family's ownership. There were three fishing spots – two on this side and one across the river. So there were three families fishing every day with a total of nine families owning fishing days. Nine owners were a result of determining that that was all that could be taken out of the river without affecting the stock of fish. If you owned a fish day you could take what you needed and

then distribute to others whatever was left over⁸⁷.

Salmon, steelhead, and the other fish on which the tribes have depended are obviously associated with the river. The salmon and steelhead run (or ran) up the river in vast numbers to spawn, and were (and to some extent still are) taken by the tribes using wiers⁸⁸, nets, and spears. The pattern of salmon-human interaction is associated with the river from its mouth to the farthest points upstream at which salmon spawn or spawned in the past, and with the village sites, wier sites, and other fishing sites along the river and its banks.

Ritual activities were and are largely structured around the river and its patterns of annual and seasonal change:

The ceremonial calendar of the Yurok was tied to the River. The First Salmon ceremony occurred at Welkwau and the Fish Weir at Kepel. The ceremonial calendar for Yurok began with the first salmon run in April and concluded in late September near the end of the fall salmon run. The ceremonial cycle of the Yurok was for the purposes of world renewal or purification to ensure good health, prosperity, and abundant food for the people (Kroeber 1976:53). In each of the world renewal ceremonies, the Brush, the Deerskin, and the Jump ceremonies, the River served an important function, either for transportation, or purification.

The River played an important role in Yurok funeral rites and purification rituals associated with death and the dead. Certain rock

features in the river were associated with the proper handling of a corpse and require strict adherence. At some localities, mourners purified themselves after burial, a custom that is still practiced today (Kroeber 1976:68-69)⁸⁹.

Yurok settlements along the River fell into three ceremonial clusters. From Bluff Creek down to Tule Creek (Atsepar to Kenek), the confluence of the Trinity and Klamath Rivers at Weitspus was considered the central location for ceremonial matters. Similarly, from Merip to Erner, Kepel was the central ceremonial location. Rekwoi was the ceremonial center for villages from Turip to the Pacific Ocean (Curtis 1924:40)⁹⁰.



Rekwoi, still a major Yurok center. Or egos center-left⁹¹

The Hoopa Valley Tribe continues to conduct many of their traditional religious ceremonies. The cultural significance of the Trinity River and its sacred localities is captured in many of these ceremonies. Religious sites on the river are ancient and were designated by spiritual deities at a time beyond living memory. Hupa ceremonies are of unique importance not only to Hupa

Indians, but to other Northwest California Indians as well. Prayers at the dances are directed toward the well being of everyone, and food served at the dances is shared with all who attend⁹².

The River has a vital role in both Jump and the Deerskin ceremonies. In the Jump Ceremony, two large canoes are used for a boat dance that marks the climax of the ceremony. In the Deerskin Ceremony held at Wetlkwau, ceremonialists from Turip, Rekwoi and Wetlkwau would dance in several canoes as they approached Rekwoi (Bearss 1969:6). The Yurok Tribe re-introduced the Boat Ceremony on the Klamath River at Weitchpec in 2002. The water level and river flow are critical elements of this ceremony. If there is not enough water in the River, it disrupts the ceremony by causing an unpredictable current. This occurred in 2002 and was attributed to low water causing a centering problem for the boats when they hit the rocky bottom and went off course. The Boat Ceremony in many ways represents the significance of the River in Yurok Ceremonial life and world view⁹³.

The ceremonial eating of the first caught salmon is a common feature in all first salmon ceremonies. In Yurok, Hupa and Karuk cultures the first salmon caught was eaten by the medicine man (or formulist) and his assistant (Gunther 1928:148). Throughout the Pacific Northwest, salmon are believed to be people, who live similar lives to those on land, while out at sea. The salmon

have a chief or leader who leads them upriver and it is this being that is honored in the ceremony. Proper respect for these beings must be demonstrated in preparing and conducting the ceremony in order to insure an abundance of salmon in the annual run (Gunther 1928:150). In the Yurok ceremony, the story of the salmon leader, and his return to the sea is recounted (Gunther 1928:152)⁹⁴.

Spiritual activities involved and still involve all parts of the riverscape, including the slopes and ridges bordering the valley. During the World Renewal Ceremony, the priest travels up the slopes and along the ridges, among other places, to reach places where prayers and rituals are carried out to seek the health of the salmon, the acorns, the people, animals, insects, and all other parts of the world⁹⁵.

Hunting in the hills back away from the river has spiritual connotations:

Deer ... were among the most prized game. Their pursuit required many ritual acts of psychological, sexual and personal purification designed to prepare the hunter's focus and intent. These acts included "sweating bathing, scarification and bleeding for luck, by smoking his weapons with herbs, and by fasting and sexual continence" (Bright, 1978 p. 181). Deer were so much a part of Karuk life, legend and sense of correct cultural behavior that Bessie Tripp recalled her grandfather telling her that when deer and bear came down to the river, the day of the Indian would be over forever⁹⁶.

The steep topography of the river canyon itself was and is important in the strength and endurance training necessary to full participation in the tribes' intensive dance ceremonials:

Winter is no time to be in the mountains, but it is the time to train for strength – the dark, stormy time when the forces lending strength, bravery, and endurance are abroad in the world. A Hupa friend told me that his own training, as a boy of nine or ten, began when his father had him break the ice in the Trinity River and swim in the early morning. "That's really starting 'low,'" he said. Next came running up the bank holding a mouthful of water, and this man's training has proceeded, virtually all of his life, uphill from there. ... (Some men), formally committed to strength training, have practiced running up a mountain every day carrying a stone from the river below, slowly building a cairn of river rocks high in the hills as a testament to their efforts⁹⁷.

Environmental stewardship was and is an essential element of tribal culture in the riverscape; the tribes maintained and still believe in maintaining a healthy symbiotic relationship with the riverscape's plants, animals, water and soil. For example, the tribes traditionally used fire as an important management tool to help maintain the health of the environment:

The Karuk use of fire as a land management tool was complex and multi-faceted. As with other ceremonial and religious aspects of Karuk culture, the role of fire was

one to be contemplated and learned from at the deepest levels. Born in 1904, Johnny Bennett was a Karuk Indian and a lifelong resident of the Salmon River country. In the following statement recorded in 1977, Mr. Bennett discusses his sense of an appropriate relationship of humans to the process of natural succession. He considers the evolution of the forest as a complex process, not entirely comprehensible, but nevertheless subject to penetrating study, one aim being to bring cultural processes into agreement with those of nature. This non-dominating but purposeful relationship to nature is enriched and raised to the level of philosophy by the contemplative quality of his observations. These considerations of the relationship between lightning, biological evolution and cultural practices reflect a uniquely Karuk perspective which is simultaneously sacred and utilitarian.

“I'd like to know what the fires for. I'd just like to know what was the fire for in a lightning, why did it have to burn? It's for some cause now. It could storm without that, y'know, but it had to burn. I think about it many times. The old Indians say the Creator made it that way to clean out the forest. In places where it hit there would be a burn out, y'know, and they never put it out. They'd push it back up the mountain and it would burn, let it go. They wouldn't bother it because they claim it was put there for some cause, and they said it was good because they could sneak up on their game,

pick up their acorns, and it generally never damaged much, because you could go to a forest, great big old trees, like redwoods, been burnt once, the bark is black. One time there was fire there and the same way in this country, when the lightning hit they never put it out, push them back, make a fire line, let them go back up the mountain. Take sticks out there, burn up against it.”

Johnny's discussion moves fluidly from metaphysics to warm personal memories, from the utilization of fire in his own boyhood back to the level of generalization with recognition of the elemental qualities of nature as an implacable total system. His defense of natural processes and relationships is coupled with a mistrust of events and perspectives that tend to alter or slice through this complex system of relationships. From long observation of the self-corrective process of the forest, a series of verities has been deduced which may be formulated as follows: all relationships, in human society as well as in the natural ecology, exist within a range of limits analogous to the cyclical limits observable within nature, and are subject to the same processes of nurturement or destruction as are ecological systems; understanding and harmony with these enduring principles exist at levels which include the conscious and verbal as well as the unconscious and non-verbal. Human life and society are affirmed as aspects of a more inclusive system of natural processes by these conceptions of the forest and of the

place of the community in relation to the forest⁹⁸.

And more generally:

We pray for the health of all the animals, and prudently harvest and manage the great salmon runs and herds of deer and elk. We never waste and use every bit of the salmon, deer, elk, sturgeon, eels, seaweed, mussels, candlefish, otters, sea lions, seals, whales, and other ocean and river animals. We also have practiced our stewardship of the land in the prairies and forests through controlled burns that improve wildlife habitat and enhance the health and growth of the tan oak acorns, hazelnuts, pepperwood nuts, berries, grasses and bushes, all of which are used and provide materials for baskets, fabrics, and utensils⁹⁹.

Passage of the dead into the next world involves the river and landmarks along its course:

Just as children are born into the Yurok world by being introduced in various ways to the River and the culture that surrounds the riverine way of life, so do the elderly depart from this world via the River and its features. Rocks located in the River and at its edge are spirit people who guide Yurok knowledge concerning proper burial procedures. The deceased's last worldly journey is a boat ride up-river. At each of eighteen rocks from the mouth up to Slate Creek and up the Trinity, various burial rites and proscriptions are observed to assure the best departure for the deceased

as well as those that remain in this world. There are several rocks in the mid section of the River that contain rare petroglyphs that indicate instructions from the Creator to the Yurok people. One such instruction is a warning that when the River stops flowing it will mark the end of the Yurok world. Some elders have prophesied that the manipulation of water flows through the dams is the beginning of the end for Yurok culture¹⁰⁰.

In summary, the Klamath Riverscape is intimately associated with the broad patterns of tribal environmental stewardship, spiritual life, and relationships between humans and the non-human world. It is central to the identities of the tribes, and of fundamental importance to the continuance of their spiritual and ceremonial lives. The connection between broad patterns of tribal culture and the riverscape is particularly expressed through tribal relations with the salmon. These associations as well as the way the river and other aspects of the riverscape figure in traditional history justify regarding the Klamath Riverscape as eligible for the National Register under Criterion A.

Other National Register Criteria

A property need meet only one of the National Register Criteria in order to be eligible for the Register. Thus the Klamath Riverscape's eligibility under Criterion A (as argued above) should be sufficient to justify FERC and the other consulting parties in regarding it as eligible. However, there may be some merit in briefly considering the extent to

which the Riverscape might meet any of the other three criteria.

Criterion B provides that a property is eligible if it is associated with the lives of persons significant in our past. National Register Bulletin 38 notes that as with Criterion A, “our” refers to the people who are thought to regard the property as significant. It also says that:

“(P)ersons” can be taken to refer both to persons whose tangible, human existence...can be inferred..., and to “persons” such as gods and demigods who figure in the traditions of a group.¹⁰¹”

Yurok traditionalists believe that the riverscape was made ready for the tribe by the Spirit People, Wo’ge’,” and that the Yurok themselves were placed on the river by the Creator, Ko-won-no-ekc-on Ne ka-nup-ceo¹⁰². Karuk believe that the Creator provides the fish and other food that sustains the people¹⁰³. The First Salmon is another significant “person” associated with the river by all the tribes¹⁰⁴. The association of the riverscape with these traditional “people” should make it eligible under Criterion B.

Criterion C is usually applied to architectural properties; it provides that a place is eligible if it is an example of a type or style or school, displays high artistic value or is the work of a master. It would be a difficult criterion to apply to a property like the Klamath Riverscape. However, Criterion C also specifies that a place can be eligible if it represents “a distinguishable entity, the individual components of which may lack distinction.” It is under this subcriterion that “districts” are usually

found eligible, and landscapes are typically classified as “districts” by the National Register. Following this logic, the Klamath Riverscape can be eligible for the Register even if no particular part of it – no specific site, structure, or object – is particularly “distinguishable.”

Criterion D says that a property can be eligible if it has produced, or may produce, information significant in history or prehistory. Sites excavated by archeologists in the Klamath Riverscape have produced such information, and others might if excavated. Moreover, the riverscape as a whole has been the scene of fruitful ethnographic research, which continues to this day.

Thus arguments could be made for the eligibility of the Klamath Riverscape under all the National Register Criteria, but like other traditional cultural properties, the riverscape is most obviously eligible under Criterion A.

Step Four: “Determine whether any of the National Register criteria considerations make the property ineligible.”

The “criteria considerations” in the National Register Criteria (36 CFR 60.4) outline conditions under which a property that might otherwise be thought eligible for the Register is not eligible, because of – as the name implies – certain “considerations.” Most of the “considerations” are obviously inapplicable to the Klamath Riverscape, but one of them might be argued to apply.

The “Religious Consideration”

Criteria Consideration AA holds that a property is not eligible if it is owned by a religious institution or used for religious purposes – except that such a property may be eligible if it derives “primary significance from architectural or artistic distinction or historical importance.” National Register Bulletin 38 deals with the “religious consideration” in some detail, warning that:

Applying the “religious exclusion without careful and sympathetic consideration to properties of significance to a traditional cultural group can result in discriminating against the group by effectively denying the legitimacy of its history and culture.

The bulletin points out that the boundaries between “history” and “religion” are not clearly marked in many indigenous cultures, some of which do not even have words for “religion.” It goes on to state flatly that:

In simplest terms, the fact that a property is used for religious purposes by a traditional group, such as seeing supernatural visions, collecting or preparing native medicines, or carrying out ceremonies, or is described by the group in terms that are classified by the outside observer as “religious” should not by itself be taken to make the property ineligible¹⁰⁵.

The bulletin’s rationale, in a nutshell, is that the “religious” use of a place by a traditional community, or references to it by the community in “religious” terms, probably reflects the historical significance of the place as the

community defines and speaks of it. To deny this historical importance simply because a non-local observer classifies its use or description as “religious” would be ethnocentric and biased.

Clearly, the tribes conduct “religious” ceremonies and rites along the Klamath River, and the river is understood by tribal members to have great spiritual importance. There are particular places along the river that figure in vital ways in tribal spiritual beliefs and practices. These facts do not make the river ineligible for the National Register; rather, they reflect the great historical importance of the river as the tribes understand it – for which precise reason the riverscape *is* eligible for the National Register.

The other criteria considerations

Consideration B says that relocated properties are not ordinarily eligible. Clearly the Klamath Riverscape has not been relocated.

Consideration C excludes properties whose significance is based solely on their being the birthplaces or graves of important people. While important people have been born and interred along the Klamath River, this fact is marginal to the riverscape’s overall significance.

Consideration D excludes cemeteries, except where they are associated with historic events or meet certain other criteria. The Klamath Riverscape includes cemeteries, but is not itself a cemetery, and the cemeteries it does contain are associated with the significant patterns of events that make the riverscape eligible.

Consideration E says that reconstructed properties are not eligible except under narrowly defined circumstances. The Klamath Riverscape has obviously not been reconstructed. Some of the traditional structures along the river, such as the priestly sweathouses, dance pits, and ceremonial grounds of the Yurok and Karuk, have been reconstructed, but these constitute small (though important) parts of the overall riverscape. Furthermore, these structures might well be individually eligible for the Register, because *Consideration E* allows for the eligibility of particularly good reconstructions that represent types not preserved in original structures. One former Keeper of the National Register has also argued that where the nature of a structure is such that it requires frequent rebuilding, a reconstruction – even one reflecting considerable change from the original form – can be eligible for the Register because, in effect, it is the architectural and cultural tradition that counts, not the age of the materials of which the structure is built¹⁰⁶.

Consideration F excludes commemorative properties from eligibility based on association with the events they commemorate. Obviously the Klamath Riverscape is not a commemorative property.

Consideration G says that properties achieving significance within the past 50 years are not eligible, unless they are “exceptionally significant.” Although the Klamath Riverscape has been regarded as significant within the past 50 years, and continues to be so regarded, its significance has far deeper roots.

Conclusion

The above walk through the four-step evaluation process set forth in National Register Bulletin 38 demonstrates that the Klamath Riverscape is eligible for the National Register of Historic Places, and should be regarded as such during FERC’s compliance with Section 106 of the National Historic Preservation Act.



Yurok drift netter and eel fisherman at the mouth of the Klamath¹⁰⁷

The Effects of PacifiCorp's Klamath Hydroelectric Project

It appears inarguable that the Klamath Riverscape is eligible for the National Register of Historic Places, so the next question that FERC will need to consider in the course of its compliance with Section 106 is, what effects does operation of the PacifiCorp Project have on the riverscape?

Under the Section 106 regulations, an action has an adverse effect on a historic property if it alters elements of the property that contribute to its eligibility for the National Register, in ways that diminish the property's integrity.

The effects of the Klamath Hydroelectric Project within the Project footprint – that is, the reaches of the river on which the Project's dams stand and which are flooded by its reservoirs – can be usefully distinguished from those downstream of the Project's most down-river dam, Iron Gate. Effects upstream from the reservoirs are addressed in a separate report (Deur 2004).

Effects Within the General Project Footprint

Within the project footprint, particularly in the reservoir areas proper, village sites, fishing stations, ceremonial sites, and other locations associated with the ancestors of the Shasta and perhaps other tribes have certainly been inundated. The Shasta Ethnographic Report, citing the work of C. Hart Merriam, Bogus Tom Smith, and Moffett Creek Jake in the early twentieth century, lists twenty-eight Shasta village sites within the Project boundaries; it is not clear how many of these may have been inundated

and how many may be eroding around the reservoir shorelines. Obviously one effect of the Project has been to inundate at least some of these sites, erode them, and destroy them in other ways (e.g., through construction impacts and subsequent road building, maintenance, etc.). If there are other sites in the area that Bogus Tom Smith and Moffett Creek Jake did not know about or did not choose to mention to Merriam, they have doubtless been suffering the same fate. The same can be said of culturally significant locations that are not village sites – for example, fishing sites, petroglyph sites, and locations of spiritual importance. Destruction of locations that contribute to the eligibility of the riverscape clearly alters such locations, and hence diminishes the integrity of the riverscape as an eligible property.

Coyote Point provides an example of this kind of effect. This pinnacle, overlooking the flooded river behind Iron Gate Dam, is associated with the widespread story of "Coyote Steals Fire," as told by the Shasta. Two prominent rock outcrops on its slope are called "the witch sisters," who are said to have turned to stone when Turtle went into the river, because they thought he would put out the fire. It is said that Coyote Point was determined ineligible for the National Register by the Bureau of Land Management prior to its transfer out of federal ownership; if so, this determination was almost certainly in error, because the place is equivalent to many, many other places that have been determined eligible as traditional cultural properties. Coyote Peak has not been destroyed, but it has certainly been changed; a parking area and structures have been cut into its flank, and the river

where Turtle entered it is deep underwater. Shasta tribal representative Mary Carpelan says that the Peak's significance has not been destroyed, but only because "no matter what happens to it, it will always be where those things happened"¹⁰⁸ It is difficult (for this author, at least) to believe that the changes imposed upon Coyote Point have not affected the integrity of its association with the story of Coyote Steels Fire, and hence its eligibility for the National Register.



Coyote Point. Witch Sisters center-right¹⁰⁹

The reservoirs have also the effect of keeping Shasta people from accessing the river and any specific places along the river within the Project area. Shasta people need access to the river for purposes of fishing, gathering culturally important plant materials, and other purposes related to the river's cultural significance. Thus blocking Shasta access to the river constitutes an adverse effect on the riverscape, because the relationship between the tribes and the river, including tribal use of the river for cultural purposes, is an element that contributes to the riverscape's significance. Shasta basketmakers today access willow stands and other resources along Camp Creek and Jenny Creek, streams that flow into Iron Gate

Reservoir¹¹⁰; access to these resources may mitigate the effects of blocked access to certain riverine resources, but it does not undo those effects.

Finally, the reservoirs have modified the natural environment of the riverscape within the Project's boundaries in a wide variety of ways, most notably by interrupting salmon runs and inundating the habitats of non-anadromous fish and terrestrial wildlife. There are persistent stories of deliberate eel poisoning at the dams, because the eels "mess up the turbines"¹¹¹. The salmon, other fish, other wildlife, and their natural habitats are all elements that contribute to the eligibility of the riverscape, so such modifications constitute adverse effects.

Effects Downstream from Iron Gate Dam

Effects of the Project downstream from Iron Gate Dam are less straightforward than those within the Project area itself. Such effects must be understood as parts of a complex of cumulative effects – contributions to the overall transformation of the river from its natural condition to the way it is at present. This complex of effects is the result of a variety of forces. Besides the PacifiCorp Project, contributors include the dams managed by the Bureau of Reclamation (BOR), farming practices, particularly in the Klamath Basin upstream from the Project, logging, mining, sewage disposal, and other modern human activities along the river, and offshore commercial and recreational fishing that depletes salmon and steelhead runs in the river. To these contemporary impacts must be added the past impacts of hydraulic mining, which tore down riverbanks, altered

streamflow, and filled in fishing holes. It is beyond the scope of this report to detail all the effects of all these sources, but it may be helpful to characterize them in general and then to consider what contribution the PacifiCorp Project may itself have to the overall pattern of effects.

The culturally significant character of the riverscape is fundamentally controlled by the character of the river, which in turn is controlled by the quantity and quality of water flowing down it and the manner in which flows are regulated, whether by natural or human agent. Insufficient water, or water that has been polluted, obviously affects direct human consumption and other uses, but it also has a variety of damaging effects on the riverscape's cultural values. Effects discussed in the ethnographic reports and elsewhere, and by tribal consultants, include:

- Impediments to tribal river access, particularly just downstream from Iron Gate Dam.
- Blocking the passage of anadromous fish up the river – resulting from the simple presence of the dams¹¹².
- Other impacts on fish – ranging from catastrophic effects like the massive 2002 fish kill to a general decline in the populations of both anadromous and resident fish, and including the complete or near elimination of particular fish runs¹¹³, resulting from such factors as:

- Release of insufficient water down the river, or releases at the wrong times, or in the wrong amounts, to meet the biological needs of all fish species, at all life stages.
 - Release of water that has been warmed (or cooled) by being held in reservoirs, creating an unnatural and detrimental temperature regime for fish.
 - Release of water that is polluted by agricultural runoff from above the reservoirs, full of chemical foam and algae, making it unhealthy not only for fish but also for people to drink or bathe in.
 - Deposition of sediment in cold-water holes where fish congregate.
 - Creation of a flow regime in which periodic flushing flows (“freshets”) are replaced by a flat flow punctuated by flood events¹¹⁴, failing to clear away sand and gravel bars at the mouths of tributaries and thus sealing off spawning ground and fish refugia.
- Through the same alterations in flow regime, causing erosion of culturally important areas along

the river, such as the World Renewal site *Katamin*.

- Through flow alterations, temperature changes, and pollution, causing damage to the health of plants required for basketry and other cultural purposes.

Such effects have obvious implications for the relationships of the tribes to the river, the fish, special places along the river, and other elements that contribute to the significance of the riverscape. If the salmon do not run, the First Salmon Ceremony becomes meaningless. If the priest's sweatlodge washes away, the priest cannot use it during the World Renewal Ceremony. If the river is too polluted to bathe in, important purification rituals cannot be performed. If people cannot get enough salmon, or steelhead, or lampreys, their connection with the riverscape is diminished.

Many of the consultants who contributed to the ethnographic reports, and who met with the author, commented on such effects. Shasta elder Roy Hall, Sr., for example, reports that forty years ago steelhead and salmon were thick in the irrigation ditches around Yreka, but this has not been the case for a long time. Although the Scott River remains fishable, the Klamath itself becomes blackish brown and streaked with foam not far below Iron Gate Dam, and is no good for fishing or the collection of freshwater clams¹¹⁵. Farther downstream, Karuk elder Grant Hillman said:

And this is the whole thing and they say how come the fish all died down there. Pretty simple, when it hits that

*coastal plain that water is just barely moving. I don't care how deep it is, it's just barely moving*¹¹⁶.

Seventy-three year old Laverne Glaze of Orleans said:

*"I remember when I was 10 years old going eeling, there was a platform down at Boise Creek, all the eels that came out of that, I just couldn't believe it. And now we can hardly get an eel. And that was 60 years ago*¹¹⁷."

Based on the testimony of Norman Goodwin, a 74-year old Karuk fisherman at Katimin, the Karuk ethnographic report notes that:

*The Karuk used to fish with spears on creeks, but now the runs are down to a level where this is not feasible as spear fishing requires a lot of fish*¹¹⁸.

The Yurok ethnographic report discusses the observations of Desmond "Merkie" Oliver, a renowned Yurok fisherman:

*Candlefish ... used to be a major fish species in the River. There used to be millions that come up the River. Merkie recounts that the last good run of candlefish happened in 1986. Since then a few trickle through between December and February. He is not sure what has caused the decline in the Candlefish population. They used to catch them in dip nets and they would haul in a full catch. In 1996, he reported seeing only two candlefish*¹¹⁹.

Mr. Oliver reports that deep pools in the river where fish used to congregate have become filled in, and that islands have formed due to the relatively slow movement of the water. The mouths of small streams that used to provide refugia and spawning

areas for fish have become choked with gravel bars resulting from upstream logging, which are not flushed away by the river because the water flows too slowly¹²⁰.



Example of sediment buildup at tributary mouth¹²¹

Karuk elder Renee Stauffer said:

Now nobody swims in the river anymore. The water will give you parasites. It seems like even when I used to swim in it, like say this time of the year, the river didn't look like what it looks like now. Now it looks like stagnant water there, even though the water was lower, it still had movement. That was in the fifties. We'd swim down here by the bridge and it was all sand. There wasn't the big willows growing there. Now there is vegetation growing up that didn't used to be there and the algae and stuff growing in the river making access hard¹²².

Fishing and swimming are not the only culturally important activities that are affected by changes in the river. Access to plants needed for basket-making, one of Native California's supreme art forms, is also affected. Karuk elder Mavis McCovey said:

Now the water comes up and silts in around them (willow) because there are big bunch of them and sand comes in across these river bars. There used to be sand on the river bar at the end of Orleans Bridge. There wasn't all those big gray willow trees. There was just clumps of little willows toward the edge. The basket weavers all started to complain in the Seventies that their willows were buggy. They weren't sending out new shoots and they just got buggy and it's because they were above the water line. The water had gone down. In '76 the creeks all started to get low and get sluggish looking, dark green oily looking. All over the river moss was growing¹²³.

Tribal consultants view the water of the river as polluted, too warm, too slow-flowing, and full of algae. They report significant decreases in a wide range of animals and plants, notably salmon and steelhead but also including other fish, eels, and food and basket plants that used to grow along the river. Their observations are broadly consistent with those of environmental scientists¹²⁴.

The impacts of changes to the river on the spiritual/cultural uses of the riverscape are obvious to consultants. Karuk elder Grant Hillman said:

Everything about our ceremonies here on the river is about fish. Ninety percent of it has to do with fish. Bringing the fish up at the right time and with the dam up there you can't bring them up at the right time. And you can't change fish. They have been coming up this river since time

*began. So they ain't gonna change; they will die first*¹²⁵.

Yurok elder Merkie Oliver showed the author many tributaries along the lower river whose mouths have become clogged with gravel and sand. Although this sedimentation is said to result from poor logging practices in the upper watersheds of the streams, insufficient flows in the river are blamed for failing to flush the sediment out and open the streams up for fish.

Karuk Vice-Chairman Leaf Hillman, as mentioned above, showed the author a number of ceremonial sites that have been affected seriously by erosion in recent years, endangering and in some cases simply removing locations needed in the ongoing conduct of Karuk traditional religious and cultural practice.



Eroding sweathouse site at *Amekiarum*, documented to have been in use through early 20th century¹²⁶

Upstream in Shasta country, Roy Hall Sr. emphasized not only that the river below Iron Gate Dam has become too polluted to use safely, but that tribal access to the river has been blocked by agricultural interests that have obtained title to the land.

The Karuk ethnographic report sums up:

*A profound unity emerged from the concerns of Karuk individuals with (the) core elements of water quality and fish at two levels. First, these were issues that concerned every person interviewed. Secondly, there was a remarkable consistency between these Native concerns... and those of the technical experts addressing the state of the Klamath River from the perspectives of biologists, geomorphologists, and other professionals examining the same range of issues*¹²⁷.

In the context of the present study, the observations of tribal consultants and analysts, and the author's own limited observations, not only support the well-known conclusion that the river's health has been severely compromised, but indicate that the association of the tribes with the riverscape, which gives the riverscape its cultural significance, is also at risk.

Relevance of Downstream Effects to PacifiCorp's Project

But how much of this pattern of change for the worse is attributable to PacifiCorp's Project? Many of the tribal consultants see very direct links¹²⁸. Yurok elder Walt McCovey said:

I think Iron Gate has a lot to do with the Klamath River because what it's doing is during these slack years when there is less water, that algae builds up in the bottom of swimming ponds, well that's the same thing that's happening up there now and we're getting this fertilizer and stuff from them farms building up on the

floor of these little reservoirs. It is building up thick and then we get a little high water and they hold the water back. They hold the water back because they're trying to keep their water level in the reservoirs which cuts it short from going into the ocean. Then it just builds up and finally we get our weather and they say, 'Okay, we hit our level,' and they turn it loose. Then they open the gates and all we get is that slush and cow shit and debris from them reservoirs and it's pouring into our water and there is that white foamy stuff on the top of the water and this algae that is so thick you can't even walk in it and it's no good for the fish. It's no good for the wildlife. It's no good for nothing. And anymore even if we do have a high water it doesn't flush it. It goes down the little channels where the water is supposed to be and all this algae is on the sides and it floats up and goes down to where the fish are and never goes away. There it is. That has a lot of effect on our river.

The River used to have high winter flows. People would move around in the winter. The River would rise 40-50 feet every year in peak flows. Walt recalls high water and flood events in 1955, 1964, and 1974. High water events removed silt and sediments and large woody debris from the river. Now the flows are not high enough to float out the big logs over the riffles or clear out the gravel and sediments that pile up at the mouths of the creeks. The construction of dams on the Klamath and the Trinity Rivers had a big impact on the River and its annual flow. Walt stated that a significant decline in fish population was evident after the construction of the dams¹²⁹.

Karuk elder V. Grant Hillman spoke similarly:

I've noticed as a kid swimming down here, how the water fluctuated every afternoon. The river, you could go down there swimming like at noontime, the water's going down. Then around 4:30 or 5 o'clock, here comes the river back up – from the dam. Every single day. You could set your clock by it. And I'm down there swimming every day and this water is going up and down every day. That was during the depression years, like '35, '34 or '35. If you're raising this water every day then dropping it, you could go along the shore when you're swimming and you see schools of these little bitty fish, thousands of them all along the river banks. When this river raises every day, then drops these fish are caught because they are right along the shore where they are safe. These were baby salmon and steelhead. There was everything. I don't believe it really affected the eels because I've seen eels like in the sand, sandbars, y'know where the sand is wet. They would be in there. But these little fellows...they did it every day¹³⁰.

Consultants do not fail to see other sources of impact on the river. Earl Aubrey, Karuk, said:

Our weather has changed. We ain't got the snow. We ain't got the rain. We ain't got the water. And with everybody taking water out of the water that's here, it even makes it less water than we should have¹³¹.

Some even find good in the dams. Karuk Norman Goodwin said:

When I was young, the water flow would begin rising about two o'clock in the afternoon. This was due to the Copco Dams operating on a schedule of 12 hours on and 12 hours off. In this situation, Iron Gate helped the fish due to evening out the flow, this helped out the spawning. With uneven water flows gravel bars would be exposed which trapped and killed young fish.

However, he went on:

Even so, I don't think the dams are needed. If Iron Gate and the Copco Dams were removed the salmon would be able to spawn again in the upper Klamath¹³².

Similarly, Shasta elder Roy Hall, Sr. advised the author that he favored the dams as a way to control flow down the river, and saw agricultural pollution as a far bigger problem¹³³. His daughter Mary Carpellan, however, provided a succinct assessment of the relationships between agricultural pollution and the dams. The pollution, she said, flows into the reservoirs and then “sits there and stews,” creating a rich, warm broth of chemicals and algae that then is released down the river¹³⁴.

The varying views of the tribal consultants are not surprising, given the complexity of the system they have been observing over their lifetimes. It is apparent that many factors interact to cause the river's ongoing deterioration – including more or less natural, or at least large-scale, factors like regional and even global weather/climate change,

variables that operate far upstream – both PacifiCorp and Bureau of Reclamation dams, the diversion of water for agriculture, the input of pollutants from agriculture and the growth of algae in over-warm water – and variables that operate below the dams, like logging, roadbuilding and maintenance, and residential/commercial development. The effects of long-past and abandoned practices like hydraulic mining may contribute to the situation as well. The effects of development and land use on the Klamath River are a classic example of cumulative impacts, which are notoriously difficult to sort out. FERC and other agencies are responsible for considering such impacts¹³⁵, however, and it is hard to imagine that PacifiCorp's dams are not parts of the cumulative impact equation.

One clue to the dams' contribution to cumulative impacts, or at least to that of Iron Gate Dam, may lie in the timing of reported impacts on the riverscape's integrity. Roy Hall, Sr. reported that fish have not been seen in the irrigation canals below Iron Gate since about forty years ago. Mavis McCovey said the creeks began to get “low and sluggish looking” in 1976. Ron Reed and Leaf Hillman of the Karuk, men in their 40s, reported that the heavy erosion of ancient sites like *Kataman* has happened in their lifetimes. Merkie Oliver said that an extensive island now present near the mouth of the river had appeared about twenty years ago¹³⁶. These reports collectively suggest that whatever had happened to the river earlier, some sort of significant change for the worse occurred around 40 years ago. A cursory inspection of the historical record reveals only one event in the early 1960s that might have had such an

effect – construction of Iron Gate Dam in 1962¹³⁷. On the other hand, agricultural use of the Klamath Basin expanded in the decades following World War II, and there may be other factors that could have contributed to the reported changes. At the very least, however, the testimony of tribal consultants suggests that Iron Gate Dam has contributed to erosion, island creation, and drastic reductions in fish populations. In the last context, it is worth noting that low releases from Iron Gate Dam are specifically implicated in the September 2002 fish kill on the lower Klamath, both by the U.S. Fish and Wildlife Service¹³⁸ and by the California Department of Fish and Game. However, the water available for release from Iron Gate is dependent on what is available from farther up the Klamath system, and the 2002 fish die-off is only one, albeit spectacular, example of the problems that beset the river.

What, then, would be the effect of relicensing the PacifiCorp Project? Relicensing would perpetuate PacifiCorp's contributions to the Klamath's troubles, whatever those contributions may be. Absent some remarkable showing that the dams somehow are not part of the pattern of cumulative effects on the river, it has to be concluded that relicensing would have an adverse effect on the Klamath Riverscape. Section 106 of the National Historic Preservation Act requires review not only of new effects but of continuing ones¹³⁹; PacifiCorp's Klamath River Project is making a continuing contribution, at some level, to cumulative impacts on the quality of the Klamath River and the viability of its use by the tribes for cultural purposes.

Adversity of Effects Under Section 106

The Section 106 regulations specify that an adverse effect on a historic property exists –

-- when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association¹⁴⁰.

It appears, at the very least, that the PacifiCorp Project – together with other human actions in the Klamath Basin – is altering characteristics of the Klamath Riverscape that make it eligible for the National Register, in ways that diminish the integrity of its setting, feeling, and association with the cultural values of the Shasta, Karuk, and Yurok Tribes.

Significance of Effects Under NEPA

We have been considering the significance of the Klamath Riverscape, and Project impacts on it, largely in the context of FERC's responsibilities under Section 106 of NHPA. Even if Section 106 did not apply, however, FERC and other Federal agencies would have responsibilities toward the riverscape under the National Environmental Policy Act (NEPA).

The regulations governing compliance with the procedural requirements of NEPA, at 40 CFR 1508.27(b)(3) and (b)(8), identify “cultural resources” (distinguished from “historic resources” and from National Register eligible

properties) among the factors to be considered in judging the significance of environmental impacts. Although most of this report has focused on the National Register eligibility of the Klamath Riverscape, it should be evident both from the above discussion and from the ethnographic reports that the Klamath Riverscape *is* the physical cultural environment of the tribes, and that its health is intimately related to the health of their less tangible cultural institutions. The Klamath Riverscape, the river itself, and its fish would be key cultural resources for the tribes even if they were not eligible for the National Register. To the extent the dams contribute to the pattern of cumulative impacts on the riverscape, they have an adverse effect on the integrity of these resources, which must be considered in project review under NEPA.

Effects on Native American Graves and Cultural Items

Section 3(d) of the Native American Graves Protection and Repatriation Act (NAGPRA) prescribes how discoveries of ancestral Native American graves and cultural items are to be handled on Federal and tribal lands. The regulations governing NAGPRA compliance specify a rather elaborate process of tribal and agency notification and consultation, leading to the disposition of human remains and cultural items discovered¹⁴¹. They also permit agencies to avoid undertaking such elaborate procedures with respect to each discovery if they have developed a “plan of action” in consultation with tribes¹⁴².

To the extent the PacifiCorp Project is causing erosion of tribal residential, ceremonial, and burial sites – as seems,

at least, to be happening along the river in Karuk country – then if such sites are on Federal (e.g. Forest Service) or tribal (e.g. Karuk or Yurok) lands¹⁴³ it would appear that PacifiCorp and FERC would be responsible for consulting with the tribes to develop and implement a NAGPRA plan of action, or for addressing each discovery individually as prescribed in the regulations. The difficulty in carrying out this responsibility, of course, would lie in deciding the extent to which PacifiCorp action was responsible for the discovery.

Effects on Archeological, Historical, and Scientific Data

The Archeological Data Preservation Act (ADPA), also known as the Archeological and Historic Preservation Act, makes Federal agencies responsible for recovering “historical, archeological, or scientific data” threatened by actions they propose to carry out, assist, or license. Such data may be in archeological (or other) sites that are eligible for the National Register, but they need not be to qualify for consideration under the ADPA.

Certainly the ancient village, ceremonial, and burial sites that are eroding along the river, and that presumably lie under and around the shores of the reservoirs, contain the kinds of data that are the subjects of the ADPA, so FERC and other agencies involved in the reservoirs or in management of flows down the Klamath may have responsibilities under this act as well as under Section 106, NEPA, and NAGPRA.

Effects on Traditional Tribal Religious Practice

Another law that is pertinent to tribal use of the Klamath Riverscape is the American Indian Religious Freedom Act (AIRFA), which articulates a policy of respect for and protection of tribal rights to the practice of traditional religion. Although AIRFA provides little direction about how agencies are to carry out this policy, it has generally been interpreted to require consultation with tribes when planning actions that might affect religious practice, and actions to avoid impact to such practice where feasible.

The tribes obviously use the Klamath River, its water, its fish, and other elements of the Klamath Riverscape for religious purposes. It is not at all too much to say that the river is central to the tribes' religious practice. The Klamath Hydroelectric Project and other projects in the Klamath Basin have changed the river, and continue to change it, in ways that are deleterious to tribal religious practice. They do this by altering the quality of the river's water, which is traditionally used for purification rituals. They do this by altering the habits and habitats of the fish that play central roles in religious belief. They do this by causing the erosion of locations where key spiritual activities must take place. They do this by fundamentally altering the character of the river as an environment in which people can touch the immortal.

Under AIRFA, FERC and other Federal agencies are obligated to consult with the tribes and try to make decisions about actions affecting the river in such a way as to avoid doing further injury to

religious practice. The logic of AIRFA would also suggest that FERC should seriously consider doing what it can to undo damage done in the past, in order to help the tribes regain the ability to practice their religion in traditional ways.

Effects on Indian Sacred Sites

Executive Order 13007 directs Federal agencies to try to avoid physical impact to "Indian sacred sites" on Federal and Indian land, and to avoid blocking tribal access to such sites. Sites like *Paniminik*, owned by the Karuk Tribe and recognized as a place of great spiritual importance, qualify as such sites; there may be sites meeting the executive order's definition on other tribal land or on land managed by the Forest Service, Bureau of Land Management, or Bureau of Reclamation. A site need not be eligible for the National Register to be a "sacred site" in terms of the executive order. FERC¹⁴⁴ and other agencies need to consider this possibility in making decisions about the Klamath Hydroelectric Project and other actions along the river.

Trust Responsibility for the Riverscape

Beyond the requirements of any specific law or executive order, the federal government has a broad trust responsibility toward federally recognized Indian tribes, derived from the Constitution, a great many treaties, laws and policies extending back to the earliest days of the nation, and a massive corpus of case law. The trust responsibility has most recently been articulated in a government-wide manner in Executive Order 13175.

Partly in response to this executive order, FERC has acknowledged in official polity that—

--as an independent agency of the federal government, it has a trust responsibility to Indian tribes and this historic relationship requires it to adhere to certain fiduciary standards in its dealings with Indian tribes¹⁴⁵.

FERC goes on to pledge itself to working with tribes on a government-to-government basis to address the effects of proposed projects on tribal rights and resources. Thus FERC has committed itself to exercising the Federal government's trust responsibilities toward tribes

Depending on its context, the term “trust responsibility” with respect to Indian tribes and the United States government is usually taken to connote either the relatively narrow responsibility to protect tribal interests in “trust assets” to which a tribe has rights by treaty, statute, or outright ownership (timber, minerals, fish)¹⁴⁶, or the more general responsibility to be sensitive to and represent tribal interests vis-à-vis other parties.

Taking the narrow definition first, it is well established that the Yurok and Hupa Tribes have federally recognized rights to fish in the Klamath River and its tributaries¹⁴⁷. The Karuk have not been held to possess such rights, apparently because the tribe lacks a treaty explicitly reserving them. However, one of the central tenets of Indian law is that tribes retain all rights not explicitly ceded¹⁴⁸, so arguably the

Karuk have retained rights to the Klamath's fish as well.

Apparently using a broader definition, the Trinity River EIS identifies not only anadromous fish but “non-anadromous fish, water, wildlife, and vegetation” as “trust-protected assets”¹⁴⁹.

All this suggests that in order to implement its policy on consultation with tribes, FERC must understand itself to have a trust responsibility toward at least tribal rights to anadromous fish in the Klamath Riverscape, and arguably toward a broad array of the riverscape's other contributing elements.

Environmental Justice Considerations

Executive Order 12898 on “environmental justice” calls upon Federal agencies to do what they can to prevent disproportionate adverse environmental impacts on low income and minority populations. The tribes – both those that are federally recognized and those that are not – constitute such populations.

Guidance from the Council on Environmental Quality, Environmental Protection Agency, and Department of Justice indicates that agencies are to comply with Executive Order 12898 by identifying low income and minority communities that might be affected by their actions, by involving such communities in their environmental review work, and by working with such communities to identify and, if possible, avoid or mitigate disproportionate adverse effect on aspects of the environment that affect or are important to low income and minority people. In the case of the Klamath Riverscape, all

the tribes (both federally recognized and non-recognized) are minority communities, and probably low-income as well.

It is evident from the preceding discussion that the dams contribute to a pattern of cumulative effects on the cultural values and interests of the tribes – aspects of the environment that are of great importance to them. This would be the case even if the Klamath Riverscape were found ineligible for the National Register, because whatever the significance of the riverscape in the eyes of the National Register, to the tribes it is utterly central to their cultural identity.

This being the case, it is equally evident that the effects of the dams, together with the other contributors to the Klamath's plight, fall disproportionately on the tribes. While others live within the riverscape, travel through it, fish in it and hunt in it, only the tribes have an intimate cultural connection to the riverscape going back to time immemorial. Only to the tribes is the riverscape the core of their cultural identity. Maintaining and reinforcing this association is particularly important today, as the tribes work to reestablish their traditional belief systems and ways of life.

This suggests that FERC and other federal agencies, in carrying out environmental review of the Klamath Hydroelectric Project and other actions along the river, should give special attention to effects of all kinds – including cultural effects – that are important to the tribes, including not only the federally recognized Yurok, Karuk, and Hupa, but the non-recognized Shasta as well.

The California Environmental Quality Act

FERC and such other federal agencies as the Forest Service, Bureau of Land Management and Bureau of Reclamation are not required to comply with the California Environmental Quality Act (CEQA), but state agencies and subdivisions are, so PacifiCorp is doubtless subject to CEQA's terms. CEQA is much like NEPA – it requires an analysis of a project's environmental impacts, and consideration of the results of this analysis in decision making.

Among the resource types that must be considered under CEQA are “historical resources” – defined as resources listed in, or determined eligible for listing in the California Register of Historical Resources¹⁵⁰. Properties listed in or formally determined eligible for the National Register are automatically included in the California Register. If a property is not included in, and has not yet been determined eligible for, the California Register, the State's CEQA guidelines imply, but do not very explicitly require, that the agency or local government responsible for review take steps to determine its eligibility¹⁵¹. The criteria of eligibility for the California Register closely parallel those for the National Register.

In CEQA review of a PacifiCorp (or other) project affecting the Klamath Riverscape, it would almost certainly be most efficient simply to regard the riverscape as eligible for the State Register and proceed to consider effects on it.

The CEQA guidelines' criteria of adverse effect are more narrowly defined

than those in the Section 106 regulations. A project must “demolish... or materially alter.. in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for” the California Register¹⁵².

All of the elements identified in this report as contributing to the significance of the Klamath Riverscape have physical characteristics. The river is a physical characteristic, the water in it is physical, as are the fish, the lands alongside the river, the plants that grow there, the specific fishing and living and ceremonial sites, and for that matter the people who use the river. Fish are certainly affected by being killed or kept from spawning; World Renewal Ceremony sites are affected by being washed away. But is the riverscape, as a physical phenomenon, affected by something as intangible as the destruction of the tribes’ cultural links to the river and its denizens?

One could certainly argue that it is not, but to do so would be to deny what must be CEQA’s central purpose. Perhaps, as some tribal people would probably argue, the riverscape itself is a sentient being that is pained by being adversely affected, but it is doubtful that the California Legislature had this in mind in enacting CEQA. It surely must be the case that CEQA was enacted because it was construed to have some value to the people of California. If this is so, it would be nonsensical not to consider the intangible cultural values that people ascribe to the environment when analyzing environmental impacts.

One could certainly split hairs about whether the Klamath Riverscape’s eligibility for the National Register would make it eligible for the State Register as well, and about whether an adverse effect under Section 106 would necessarily equal an adverse change under CEQA. To do so, however, would be at best inadvisable – not only because it might deprive the riverscape of a degree of consideration under the law, but because it would immensely complicate the environmental review process. The riverscape is significant under multiple federal laws – NHPA, NEPA, AIRFA, and others – whose application overlaps that of CEQA. Trying to tease these apart and treat them separately is a formula for confusion and frustration. It would be far wiser to acknowledge the manifest significance of the riverscape and the seriousness of effects on it, and look for ways to address the latter in ways that are sensitive to the former.



Two of the Riverscape’s most important contributing elements: fish and culture¹⁵³

Recommendations

The ethnographic reports and other data suggest that the Klamath Riverscape is eligible for the National Register and that the operations of the Klamath Hydroelectric Project, coupled with the effects of other projects, are having adverse effects on it. These effects must be addressed by FERC and others under a range of legal requirements, including Section 106 of NHPA, NEPA, NAGPRA, AIRFA, Executive Orders 12898 and 13007, and the federal government's trust responsibility toward tribes; nonfederal entities may also need to address them under CEQA. So what can be done to reduce the adversity of the effects?

Recommendations to FERC

The impacts of the Klamath Hydroelectric Project on the cultural integrity of the Klamath Riverscape cannot be segregated from its effects on the natural environment, including but not limited to salmon and steelhead populations and other anadromous and resident fish. No resolution to the project's adverse effects on the riverscape exists that is exclusively the domain of historic preservation, or exclusively under the purview of the cultural resource legal authorities. What FERC decides to do about the project's impacts on the natural environment will determine what it does about impacts on the cultural environment. In this case, the natural environment *is* the cultural environment.

As a result, FERC's historic preservation responsibilities bear directly on FERC's basic relicensing decision. Not relicensing the project, and requiring that

PacifiCorp remove all project facilities and restore the river to something approximating its pre-dam condition, would contribute to restoring the riverscape's culturally valued character and arresting the decline of its integrity. An alternative short of this doubtless controversial step would be to relicense the Project with the requirement that Iron Gate Dam and the Copco complex be removed. There may be other combinations of dam removal and retention that would be helpful. Nothing FERC causes PacifiCorp to do will be a cure-all for the Klamath River's problems, but FERC's decision will affect whether the river's fisheries and riparian conditions – and hence its cultural integrity – can ever be restored.

The Klamath Hydroelectric Project has been identified by tribal observers as serious contributors to the riverscape's ill health. These conclusions should be respected – based as they are on an observational history extending farther into the past than that of any other party monitoring the river's condition, and supported as they are by current scientific analyses. FERC should give serious consideration to not relicensing the project and requiring removal of at least Iron Gate Dam. FERC must weigh the beneficial use of the River as a traditional Riverscape, along with the value of its fisheries to the tribes and for society as a whole, against the hydropower the project generates. The burden of proof should be placed upon PacifiCorp to present and justify alternatives to dam removal.

Recommendations to PacifiCorp

When FERC relicenses a hydroelectric project, it characteristically requires the

applicant to prepare and implement a “Historic Properties Management Plan” (HPMP) in consultation with tribes, State Historic Preservation Officers, Tribal Historic Preservation Officers, and other stakeholders. The HPMP should follow guidelines issued jointly by FERC and the Advisory Council on Historic Preservation¹⁵⁴. Among the principles that the guidelines say should guide HPMP development are that –

The scope of the HPMP should be clearly defined, and should establish an approach to address effects on private lands¹⁵⁵.

The discussion of this principle in the guidelines reminds applicants that “the Project area is not necessarily the same as the area that is affected by project operations and management,” and directs that “the geographic scope of the HPMP should not necessarily be limited to Project lands.”

PacifiCorp has recently written the tribes and the California and Oregon SHPOs proposing that the “area of potential effects” of the project is limited to the area within project boundaries. As this report hopefully makes clear, this proposition is in error. There are many apparent downstream effects on the Klamath Riverscape that must be taken into account in any PacifiCorp HPMP.

PacifiCorp may argue that it is not responsible for dealing with downstream impacts, pointing to the guidelines’ acknowledgement that “the HPMP cannot compel actions on private lands where the licensee has been denied access¹⁵⁶.” Such an argument would be spurious, not only because PacifiCorp has not been denied access to lands

downstream from Iron Gate Dam, but because the major actions that PacifiCorp might take to alleviate impacts on the Riverscape would necessarily be taken at the dams themselves, by altering flow regimes, effecting fish passage, or removing facilities.

The guidelines go on to note that:

The HPMP should be based on sufficient studies to predict the likely effects of Project activities on historic properties, and should provide for the conduct of additional studies that may be needed¹⁵⁷.

As repeatedly noted above, it is difficult to sort out precisely what the effects of the Klamath Hydroelectric Project are vis-à-vis those of other human activities in the Klamath Basin – notably the Klamath Irrigation Project. It might thus be argued that sufficient studies have not been done to predict the likely effects of hydroelectric project activities. This could be a formula for delay in doing anything to address what is clearly a critical suite of impacts on the Klamath Riverscape. Granting that sufficient studies may not yet have been completed, it is suggested that enough data exist to indicate that the hydroelectric project is having adverse effects on the riverscape. The acceleration of effects that tribal consultants say began around the time Iron Gate Dam was constructed, and the timing of erosion at Karuk ceremonial sites, suggests that the hydroelectric project is more than a minor contributor to the overall pattern of cumulative effects. Further studies may be useful, but their conduct should not be allowed

to delay taking concrete steps to alleviate impacts on the riverscape.

A key principle articulated in the guidelines is that:

The HPMP should establish management priorities and steps to be taken to ensure long-term preservation of historic properties¹⁵⁸.

Presumably, PacifiCorp will propose that at least some of its dams and reservoirs be retained in service, and it will prepare an HPMP for this alternative. This HPMP should establish as a high management priority the restoration of the Klamath Riverscape's integrity, and it should establish steps that PacifiCorp will take to help achieve this goal. Since an alternative available to FERC is to require removal of the dams by declining to relicense the project, PacifiCorp's HPMP should seek to demonstrate that its management approach will be at least as effective as dam removal in reducing impacts on the riverscape.

Recommendations to the Bureau of Reclamation

Among all the federal agencies whose actions affect or may affect the Klamath Riverscape, the Bureau of Reclamation (BOR) is the most significant. It is BOR that manages the Klamath Irrigation Project, that decides how water will be allocated, and that determines flow levels over Iron Gate Dam. If any single federal agency can be truly effective in reducing impacts on the Klamath Riverscape, BOR can¹⁵⁹.

BOR's operation of the Klamath Irrigation Project is obviously a federal

undertaking as defined in Section 301(7) of the National Historic Preservation Act¹⁶⁰. Thus it requires review under Section 106 if it represents a "type of activity that has the potential to cause effects on historic properties¹⁶¹." As the most important federal influence on the health of the Klamath Riverscape, the Klamath Irrigation Project obviously not only has the *potential to cause* effects, it most certainly *is causing* effects. A cursory review of files maintained by the Advisory Council on Historic Preservation indicates that BOR has conducted Section 106 review on a few specific project actions affecting particular historic sites and structures, but has never subjected the Irrigation Project as a whole to review. It is the whole project that is affecting the Klamath Riverscape, and BOR should initiate Section 106 review on the effects outlined in this report as soon as possible.

Recommendations for Land Management Agencies

Land management agencies like the Bureau of Land Management, Forest Service, and Fish and Wildlife Service have control or influence over a wide range of activities that contribute to adverse effects on the Klamath Riverscape, notably logging, roadbuilding, and grazing. Each timber sale, grazing lease, or fire road may have only miniscule impacts, but collectively they contribute to river pollution and siltation, which in turn affect the health of the river for fish, wildlife, and plants, which in turn affects the riverscape's cultural qualities. The agencies should not ignore these effects simply because they are not point-specific; they should undertake programmatic consultation

with the tribes, SHPOs and THPOs, and others under Sections 106 and 110 of the National Historic Preservation Act and the other cultural resource authorities, to seek overall ways of protecting the Klamath Riverscape's cultural integrity.

Recommendations to the California Department of Forestry and Fire Protection (CDF)

CDF regulates certain major operations of timber companies like Simpson Timber, under the authority of the California Forest Practice Act. The main context in which CDF can influence such operations is in its review of Timber Harvesting Plans (THPs)¹⁶².

In reviewing THPs, CDF should ensure that the tribes are fully and adequately consulted, and that the full range of possible impacts on the cultural value of the Klamath Riverscape are addressed. These effects, of course, go far beyond adverse physical effects on archeological sites; they include siltation and pollution effects on streams flowing into the river, interference with traditional tribal access routes between the river and the uplands, and visual/auditory effects on traditional tribal religious practices in the high country.

Recommendations to Local Governments and State Agencies

Local governments and state agencies in California are responsible for CEQA compliance, and hence with considering the effects of actions they may undertake or permit on places included in or eligible for the California Register of Historical Resources. The Klamath Riverscape is not included in the California Register, and being regarded

as eligible for the National Register will not make it so¹⁶³. However, the same logic that argues for its National Register eligibility suggests that it should be regarded as eligible for California's list of significant historic resources.

It is important to understand what eligibility for either the State or National Register does and does not mean. Neither means that the riverscape is sacrosanct, or that the federal or state government has suddenly developed a property right in it. Neither means that projects that would affect the riverscape cannot be carried out. Both *do* mean that the effects of such projects must be considered during decision making by governments and government agencies to which the laws apply.

The effects of land use and development on the Klamath Riverscape as a cultural resource are closely linked to – indeed, they can be said to be the same as – their effects on the riverscape's natural character. But there is a tendency in CEQA analyses (as in those done under NEPA) to segregate analyses by discipline, so “cultural resources” are viewed as the business of archeologists, while the natural environment is taken care of by biologists. In the case of the Klamath Riverscape, review agencies (and project proponents) should attempt a more holistic approach, recognizing that the natural environment of the riverscape, and such contributing elements as salmon, steelhead, eels and basketry plants, are themselves cultural resources, whose cultural significance needs to be addressed in planning. Neither archeologists nor biologists are necessarily equipped to analyze and understand such aspects of significance, but consultation with the tribes will go a

long way toward putting them in proper perspective. Close consultation with the tribes is recommended in all CEQA analyses dealing with projects in and around the Klamath Riverscape.

General Recommendations

What is really needed, of course, is a coordinated interagency and intergovernmental approach to preserving and restoring the health of the Klamath Riverscape. As Ron Reed of the Karuk Department of Natural Resources said:

It's not just PacifiCorp, there are other things going on out there upslope that need to be considered too if we are going to get back healthy fish populations. It's sedimentation from Highway 96. It's Forest Service management. My goal is to get all these agencies together in a holistic way to look at these issues¹⁶⁴.

A great deal of intergovernmental, interagency, interstate, and interpersonal coordination is already going on in the Klamath Basin and along the river, by the Klamath Fishery Management Council, the Klamath Basin Fisheries Task Force, the Klamath Trinity Salmon Restoration Advisory Committee, the Klamath Basin Federal Working Group, the Upper Klamath Basin Working Group, various PacifiCorp relicensing working groups, and others. Still another group to look into cultural matters would probably not be useful. But the cultural values of the riverscape, the fish, and the people whose lives are tied up in the riverscape need to be factored in to the deliberations of the various working groups. For example, working group members should come to

understand that fish species are not important only when and because they are endangered, or because of their economic or recreational functions; they are also important because of the central roles they play in the traditional culture, heritage, and religion of Indian tribes along the river. Restoring the health of the Klamath River should be understood to be not only an ecological imperative, but a vital cultural issue as well. The survival of the tribes as cultural entities is as tied to the river's health as is the survival of the salmon.



Yurok dip netting¹⁶⁵

Summary Conclusion

The evidence reviewed in preparation of this report indicates that the Klamath Riverscape is eligible for the National Register under National Register Criterion “a” as a traditional cultural property. It also shows that the riverscape, regardless of Register eligibility, is a significant part of the tribes’ cultural environment. The riverscape has suffered a wide range of impacts, including but going well beyond those caused by the presence of PacifiCorp’s dams and reservoirs, and these impacts fall disproportionately on the tribes. Removing the dams as a result of FERC’s decision not to relicense the PacifiCorp Project would have positive effects on the riverscape’s condition and hence on its viability as a central element of tribal culture.

However, the data reviewed for this report do not provide a basis for judging just how significant this positive effect would be in the absence of other actions to halt degradation of the river.

Available data also do not provide a basis for evaluating alternatives to dam removal that might contribute to the health of the river and hence to preservation of the riverscape. Such alternatives, together with the option of removing the dams as part of an overall program of cooperative, holistic management, should be the subjects of ongoing consultation under Section 106 of NHPA and other legal authorities. FERC and all other federal agencies operating in and around the Klamath River Basin should ensure that such consultation takes place, and that such management is vigorously pursued. In the short run, PacifiCorp should ensure that its Historic Properties Management Plan for whatever alternative it proposes

for relicensing includes mechanisms for protecting and restoring the river below Iron Gate Dam are at least as effective as dam removal would be.



Sunset at the river’s mouth
Or egos in right-center¹⁶⁶

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Endnotes

¹ Courtesy Tony O'Rourke, Yurok Tribe GIS & Survey Mapping Division

² Photo by the author

³ Set forth in Federal regulation at 36 CFR 800.5-7

⁴ Photo by the author.

⁵ *Ethnographic Riverscape: Regulatory Analysis*. Prepared by Yurok Heritage Preservation Office for PacifiCorp, November 2003, Contract #P13342 (hereinafter "Regulatory Analysis").

⁶ *London's Riverscape, Lost and Found*. London's Found Riverscape Partnership 13 Heathfield Drive, Redhill, Surrey RH1 5HL, Published with the support of Fairview Limited. The Regulatory Analysis (p. 12) noted similar perspectives in U.S. National Park Service documentation on the St. Croix National Scenic Riverway and the Buffalo National River.

⁷ Found in *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*, p. 4. National Park Service Cultural Resource Stewardship and Partnerships, Heritage Preservation Services, Historic Landscape Initiative, Washington D.C. 1996; see also NPS Preservation Brief 36, *Protecting Cultural Landscapes*, by Charles A. Birnbaum, ASLA, NPS 1994

⁸ The term "cultural resource" is understood here to mean "those parts of the physical environment – natural and built – that have cultural value of some kind to some sociocultural group," together with "social institutions, ... beliefs, ... accustomed practices, and ... perceptions of what makes the environment culturally comfortable" (King 1998:9). It embraces the cultural aspects of the environment that must be considered in planning federal actions under a number of legal authorities – not only the National Historic Preservation Act, but also the National Environmental Policy Act, the Native American Graves Protection and Repatriation Act, the American Indian Religious Freedom Act, the Archaeological and Historic Preservation Act, and Executive Orders 12898, 13006, 13007, and 13287.

⁹ *Secretary of the Interior's Standards*, p. 4

¹⁰ Merriam-Webster online dictionary; <http://aolsvc.merriam-webster.aol.com/home-aol.htm>

¹¹ In the same way that referring to an ancestral site as an "archeological site" or a tool or

weapon as an "archeological artifact" implies that their significance lies in their utility in archeological research.

¹² The compilations of data on which this report is based, for example, are correctly called "ethnographic reports."

¹³ For further discussion of this point see King 2002:15-18, King 2003:139-40

¹⁴ "A landscape containing a variety of natural and cultural resources that associated people define as heritage resources. Examples are contemporary settlements, religious sacred sites, and massive geological structures. Small plant communities, animals, subsistence and ceremonial grounds are often components." *Secretary of the Interior's Guidelines p. 4*; Preservation Brief 36: 2

¹⁵ See

<http://www.cr.nps.gov/nr/publications/bulletins/nrb30/>

¹⁶ Why NPS has issued several sets of guidance dealing with historic/cultural landscapes that organize and define categories of landscape in different ways, without even explaining how they relate to one another, is a mystery.

¹⁷ See National Register Bulletin 38, page 1. See also King 2003:Chapters 1, 2, 6.

¹⁸ 36 CFR 60.4

¹⁹ Thomas Buckley, in his recent study of Yurok spirituality (Buckley 2002:200-201) has criticized use of the National Register to characterize tribal spiritual areas for purposes of land use planning, in the process sniping rather gratuitously at Bulletin 38. This author agrees with Buckley that the Register is a poor instrument to use for such purposes, but alas, it is the instrument that is available. It would be wonderful to change the law to address tribal spiritual and cultural values more appropriately, but until this happens, tribes and others are stuck with the law we've got.

²⁰ Few would probably argue with this premise, but what is a "river?" Merriam-Webster defines "river" as "a natural stream of water of usually considerable volume." This definition does not take us very far, but as soon as we go farther we begin to tread on shaky ground. A natural stream would not remain a stream if it did not have banks and a bottom, so are the banks and bottom of the river parts of the river? If we say "yes," then how thick do we take the banks to be? Does the "river" include the entire floodplain? Terraces left by earlier stands of the river? Everything out to the bases of the surrounding hills? For the purposes of this

report it does not much matter, since the lands along the river are themselves obviously parts of the riverscape, whether or not they are viewed as parts of the river itself.

²¹ Yurok ethnographic report p. 20

²² Except in the Los Angeles basin, where different definitions apply.

²³ Karuk ethnographic report, p. 22

²⁴ “Vegetation features” are identified in the *Secretary of the Interior’s Guidelines for the Treatment of Cultural Landscapes* (p. 15) as typical character-defining landscape features.

²⁵ Hillman and Salter 1997:5

²⁶ P. 15: “Character-Defining Features of the Landscape”

²⁷ Alvis Johnson, quoted in Hillsman and Salter 1997:10.

²⁸ Photo by Arnold Nova.

²⁹ Shasta ethnographic report, p. 7-11

³⁰ Trinity EIS, p. 3-414

³¹ Photo by the author

³² The Karok Panamenik (sic) World Renewal District, determined eligible in 1978 by the USDA Forest Service, is listed in the National Register Information System (NRIS). Other eligibility determinations were reported by the tribe but have not been confirmed.

³³ Yurok ethnographic report:11

³⁴ National Register Bulletin 38:18

³⁵ See

http://www.cr.nps.gov/nr/publications/bulletins/nrb30/nrb30_8.htm

³⁶ King 2002:117-9; 2003:169-74

³⁷ 48 *Federal Register* 44720

³⁸ King 2003:174

³⁹ This follows one of eight non-exclusive possibilities listed in the Regulatory Analysis (pp. 18-19), none of them particularly happy ones.

⁴⁰ Such adjustments would be needed to avoid excluding major river-related sites like the Karuk town of *Katamin*, which extends upslope onto terraces that are well above the 500-year floodplain.

⁴¹ Courtesy Tony O'Rourke, Yurok Tribe GIS & Survey Mapping Division

⁴² Section 301(5): 16 USC 470w(5)

⁴³ See King 2003:17n6

⁴⁴ National Register Bulletin 38:10

⁴⁵ Yurok ethnographic report:7

⁴⁶ Karuk ethnographic report:10

⁴⁷ Yurok ethnographic report:10

⁴⁸ Karuk ethnographic report:16

⁴⁹ Yurok ethnographic report:14

⁵⁰ Yurok ethnographic report:14

⁵¹ Yurok ethnographic report:10

⁵² Yurok ethnographic report:50

⁵³ Karuk ethnographic report:69

⁵⁴ Yurok ethnographic report:10

⁵⁵ Yurok ethnographic report:10

⁵⁶ National Register Bulletin 38:10

⁵⁷ Yurok ethnographic report:8

⁵⁸ Yurok ethnographic report:9

⁵⁹ Yurok ethnographic report:9

⁶⁰ On-site personal communication by Leaf Hillman and others.

⁶¹ Yurok ethnographic report:46-49

⁶² Karuk ethnographic report:37

⁶³ Karuk ethnographic report:67-8

⁶⁴ Karuk ethnographic report:29

⁶⁵ Yurok ethnographic report:16

⁶⁶ Trinity EIS:3.216

⁶⁷ Leaf Hillman, personal communication 2/6/04; eligibility determination confirmed by National Register Information System (NRIS). It is interesting to note that this determination occurred in 1978, twelve years before issuance of National Register Bulletin 38.

⁶⁸ Photo by the author.

⁶⁹ 36 CFR 60.4

⁷⁰ Subject to the application of “criteria considerations” that may render an apparently eligible property ineligible; these will be discussed below.

⁷¹ National Register Bulletin 38:11

⁷² Yurok ethnographic report:14

⁷³ Yurok ethnographic report:49

⁷⁴ Photo by the author

⁷⁵ Yurok ethnographic report:14-15

⁷⁶ Photo by Arnold Nova

⁷⁷ Karuk ethnographic report:28

⁷⁸ Shasta ethnographic report:22

⁷⁹ Leaf Hillman, personal communication 2/6/04

⁸⁰ Thomas Buckley: *Standing Ground, Yurok Indian Spirituality 1850-1990*. University of California Press, Berkeley, 2002, page 4.

⁸¹ Karuk ethnographic report:23

⁸² Karuk ethnographic report:9

⁸³ Trinity River EIS:3-213

⁸⁴ Yurok ethnographic report:14

⁸⁵ Yurok ethnographic report:12

⁸⁶ Yurok ethnographic report:11

⁸⁷ Karuk ethnographic report:43

⁸⁸ The great fish dams or wiers of the past are not in use at the present, but the Yurok commercial fishing enterprise at the mouth of the river is in some ways their functional and social equivalent.

⁸⁹ Yurok ethnographic report:24-25

⁹⁰ Yurok ethnographic report:24

⁹¹ Photo by the author

⁹² Trinity River EIS:3-216

⁹³ Yurok ethnographic report:25

⁹⁴ Yurok ethnographic report:27

⁹⁵ Leaf Hillman personal communication 2/6/04 regarding contemporary practice. For historical practice see, for instance, Drucker 1936.

⁹⁶ Karuk ethnographic report:25

⁹⁷ Buckley 2003:92

⁹⁸ Karuk ethnographic report:12-14, quoting from Salter 1981

⁹⁹ Preamble to the Yurok Tribal Constitution; Yurok ethnographic report:7

¹⁰⁰ Yurok ethnographic report:23

¹⁰¹ National Register Bulletin 38:11

¹⁰² Preamble to the Yurok constitution; Yurok ethnographic report:8

¹⁰³ Karuk ethnographic report:37.

¹⁰⁴ Shasta ethnographic report:21-2, Karuk ethnographic report:68, Yurok ethnographic report:14

¹⁰⁵ National Register Bulletin 38:13

¹⁰⁶ Russell A. Apple and Jerry L. Rogers: “Historical Integrity and Local Significance in the Pacific Island Context.” *Guam Reporter* 1:33-36, Hagatna, Guam

¹⁰⁷ Photo by Arnold Nova

¹⁰⁸ Mary Carpelan, personal communication on-site, 2/7/04

¹⁰⁹ Photo by the author.

¹¹⁰ Mary Carpelan, Betty Hall, personal communication on-site 2/7/04

¹¹¹ Personal communication by multiple tribal consultants, 2/4-7/04

¹¹² See KRITFWC 2003. Karuk and Yurok consultants disparage the extent to which hatcheries can make up for this blockage, reporting that hatchery fish are very different from wild fish – softer, spongier. Shasta consultants did not make this distinction but reported similar differences between wild and farmed salmon, and all consultants commented on the problem of competition between hatchery-raised fish and wild fish, arguing that the wild population is endangered by the release of hatchery fish.

¹¹³ For summary statistics from Federal government sources, see Karuk ethnographic report:77-8

¹¹⁴ See, for instance, Karuk ethnographic report:57-8

¹¹⁵ Roy Hall, personal communication: 2/7/04

¹¹⁶ Karuk ethnographic report:47

¹¹⁷ Karuk ethnographic report:41

¹¹⁸ Karuk ethnographic report:43

¹¹⁹ Yurok ethnographic report:47

¹²⁰ Merkie Oliver, personal communication: 1/4/04

¹²¹ Photo by author

¹²² Karuk ethnographic report:72

¹²³ Karuk ethnographic report:54

¹²⁴ See, for instance, Thomas B. Hardy and R. Craig Addley. *Evaluation of Interim Instream Flow Needs in the Klamath River, Phase II Draft Report*, prepared for the U.S. Department of the Interior by the Institute for Natural Systems Engineering, Utah Water Research Laboratory Utah State University Logan, Utah 84322. November 21, 2001; National Marine Fisheries Service (NMFS), *Biological Opinion: Klamath Project Operations*. Section 8.6, “Coho Salmon Critical Habitat,” Long Beach, CA, May 31 2002; National Research Council: *Scientific Evaluation of Biological Opinions on Endangered and Threatened Fishes in the Klamath River Basin*. 2003, National Academy Press, Washington D.C.; California Department of Fish and Game: *September 2002 Klamath River Fish Kill: Preliminary Analysis of Contributing Factors*. State of California Resources Agency, January 2003; U.S. Fish and Wildlife Service: *Klamath River Fish Die-Off September 2002: Causative Factors of Mortality*. U.S. Department of the Interior, 2003.

¹²⁵ Karuk ethnographic report:47

¹²⁶ Photo by author

¹²⁷ Karuk ethnographic report:82

¹²⁸ As does the KRITFWC, whose 2003 Goals Statement (KRITFWC 2003) identifies the Copco I and Iron Gate dams as “solely responsible for the termination of anadromous fish runs of salmon, steelhead and lamprey into the Upper Klamath Basin.”

¹²⁹ Yurok ethnographic report:48

¹³⁰ Karuk ethnographic report:44

¹³¹ Karuk ethnographic report:39

¹³² Karuk ethnographic report:42

¹³³ Roy Hall, Sr., personal communication 2/7/04

¹³⁴ Mary Carpellan, personal communication 2/5 & 2/7/04

¹³⁵ Under NEPA, see 40 CFR 1508.7, 1508.25, 1508.27; under Section 106 of NHPA, see 36 CFR 800.5(a)(1); under CEQA, see California Resources Agency CEQA Guidelines Sec. 15355.

¹³⁶ Personal communications, 2/4-7/04

¹³⁷ See, for instance, “History of Klamath County irrigation, the Klamath Project, and other important events leading to the 2001 Water Allocation Decision, by Douglas F. Markle, in *Endangered Species, irrigated agriculture and*

rural communities: the Klamath Basin Case. AREC507/FW599/PS507/SOC599, http://oregonstate.edu/dept/pol_sci/fac/steel/cl/ps507/history.htm, accessed 2/12/04.

¹³⁸ “This analysis supports the conclusion that 2002 featured an unique combination of low discharges (especially from Iron Gate Dam) and high run size” (USFWS, *Klamath River Fish Die-Off*:34); “September flow releases from Iron Gate Dam in 2002 ... were the lowest on record when returning numbers of fall Chinook salmon were at average or above average levels” (California Dept. of Fish and Game, *September 2002 Klamath River Fish Kill*:54).

¹³⁹ *McMillan Park Committee v. National Capital Planning Commission*, 759 F. Supp. 908 (D.D.C. 1991), rev’d; 968 F.2nd 1283 (D.C. Cir. 1992)

¹⁴⁰ 36 CFR 800.5(a)(1)

¹⁴¹ See 43 CFR 10.4 and .5

¹⁴² 43 CFR 10.5(e); this alternative is specifically made available only for discoveries on Federal land, but it is hard to imagine some similar approach not being acceptable for discoveries on tribal lands as well.

¹⁴³ Tribal lands are defined as all lands within the exterior boundaries of reservations, so all land on the Yurok reservation would be included, regardless of actual ownership.

¹⁴⁴ The applicability of executive orders to independent agencies like FERC is uncertain, but FERC’s *Tribal Policy Statement* promulgated July 23, 2003 includes Executive Order 13175 among its authorities, suggesting that FERC views itself as obligated to be responsive to such orders.

¹⁴⁵ *FERC Tribal Policy Statement*: 18 CFR 2.1c(b)

¹⁴⁶ 25 CFR 900.6

¹⁴⁷ *Trinity River EIS*:3-208; The primary Hupa rights are to fish in the Trinity, one of the Klamath’s main tributaries.

¹⁴⁸ The “Reserved Rights Doctrine,” see *U.S. v. Winans*, 198 U.S. 371 (1905).

¹⁴⁹ *Trinity River EIS*: 3-205

¹⁵⁰ California Resources Agency, CEQA Guidelines, Section 15064.5(a)(1)

¹⁵¹ CEQA Guidelines, Section 15064.5(a)(5)

¹⁵² CEQA Guidelines, Section 15064.5(b)(2)(A)

¹⁵³ Photo by Arnold Nova

¹⁵⁴ FERC and ACHP: *Guidelines for the Development of Historic Properties Management Plans for FERC Hydroelectric Projects*. Washington D.C., May 20, 2002

¹⁵⁵ FERC and ACHP *Guidelines*: Principle 2, page 11

¹⁵⁶ FERC and ACHP *Guidelines*: 11

¹⁵⁷ FERC and ACHP *Guidelines*: Principle 3, page 11

¹⁵⁸ FERC and ACHP *Guidelines*: Principle 5, page 12

¹⁵⁹ BOR bases its decisions on the biological opinion issued by the National Marine Fisheries Service in 2002, apparently without compliance with Section 106. NMFS would doubtless argue that in issuing such an “opinion” it lacks the discretion to consider impacts on the cultural environment, but in fact the opinion establishes “reasonable and prudent alternatives,” “reasonable and prudent measures,” “terms and conditions,” and “conservation recommendations” that certainly are discretionary (NMFS 2002).

¹⁶⁰ “*Undertaking*” means a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including—

- (A) those carried out by or on behalf of the agency;
- (B) those carried out with Federal financial assistance;
- (C) those requiring a Federal permit, license, or approval; and
- (D) those subject to State or local regulation administered pursuant to a delegation or approval by a Federal agency.

¹⁶¹ 36 CFR 800.3(a)

¹⁶² Practices like site preparation and pre-commercial thinning are not subject to CDF oversight, however. Thanks to Dan Foster of CDF for a quick lesson in CDF authorities.

¹⁶³ Hans Kreutzburg, California Office of Historic Preservation, personal communication 2/18/04. The linkage between the National and State Registers if formal listing and determinations of eligibility.

¹⁶⁴ Karuk ethnographic report:68

¹⁶⁵ Photo by Arnold Nova

¹⁶⁶ Photo by Arnold Nova