

**Section E: U.S. Department of the Interior 10(a) Recommendations**  
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## **Attachment E: U.S. Department of the Interior 10(a) Recommendations**

### **Klamath Hydroelectric Project - FERC No. 2082**

## **INTRODUCTION**

Section 10(a)(1) of the Federal Power Act (FPA) requires the Project adopted by the Federal Energy Regulatory Commission (Commission) to be, in its judgment, the best adapted to a comprehensive plan for ... beneficial public uses, including ... purposes referred to in section 4(e) (16 U.S.C. § 803(a)(1)). Section 10(a)(2) requires that, in making this determination, the Commission consider the recommendations of Federal agencies exercising jurisdiction over resources of the State in which the Project is located (16 U.S.C. § 803(a)(2)(B)). Pursuant to this authority, the Department recommends the following recommendations be included in any license issued for the Klamath Hydroelectric Project – FERC Project No. 2082:

## **GENERAL**

### **1. Emergency Operations**

Within one year of license issuance the Licensee shall:

- Develop standard operating procedures for emergency situations and develop a plan that addresses procedures, environmental permits, and mitigation in the event of an emergency. The plan should specifically address the emergency spillway and canal and slope failures that could result in the event of an emergency. The plan shall be developed in consultation with the Bureau of Land Management (BLM). The plan shall include implementation strategies for agency coordination, restoration actions, monitoring and evaluation, and potential mitigation measures. The plan shall be approved by the Commission.
- Ensure that the J.C. Boyle Powerhouse has the capacity to maintain flow continuously for 48 hours in the event of a powerhouse failure. In the event of this type of emergency, flow shall be released at the powerhouse for the duration of the failure.
- Develop stabilization plans that consider structural, vegetative, and flow strategy methods to minimize erosion and restore damaged hillslopes, riparian areas and stream channels to minimize resource and visual impacts that could occur in the event of an emergency.
- Develop and submit for FERC approval a plan to restore the Klamath River from the J.C. Boyle Dam to the Copco Reservoir to mitigate impacts associated with the use of the J.C. Boyle Canal Emergency Spillway. The plan should be developed in consultation with the BLM.
- Develop monitoring protocols based on channel cross sections to determine the effectiveness of restoration actions.

Site-specific mitigation plans for the JC Boyle Canal Emergency Spillway and other canal and slope failures shall include the following:

- A map depicting the location of the proposed activity.
- Designs for site stabilization, channel restoration, location of disposal site and erosion control plan.
- Implementation and effectiveness monitoring designed to meet restoration objectives, which include but are not limited to fish passage, channel bed and bank stability, and riparian re-vegetation.
- Survey data, biological evaluations, or results from consultation for ground or habitat disturbing activities on BLM-administered lands.
- An environmental analysis of the proposed action that meets requirements of the National Environmental Policy Act (NEPA).

## **Rationale**

Project lands within the Klamath Falls Resource Area are administered according to the Northwest Forest Plan 1994 Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl. Integral to the Northwest Forest Plan is the Aquatic Conservation Strategy (ACS), which seeks to prevent degradation and restore habitat and ecosystem health by maintaining and restoring aquatic habitat potential, restoring habitat connectivity, and maintaining flows sufficient to sustain component elements of aquatic systems. The Klamath Falls Resource Area Resource Management Plan and Record of Decision was amended to incorporate provisions of the Northwest Forest Plan to achieve ACS objectives.

Current operation of the Klamath Hydroelectric Project (Project) uses the J.C. Boyle Canal emergency spillway to evacuate the canal in the event of an emergency shut down of the J.C. Boyle Powerhouse. This practice has resulted in the erosion of approximately 80,000 cubic yards of material from the hillslope adjacent to the Klamath River, J.C. Boyle Bypassed River Reach. The deposition of the eroded material below and downstream of the spillway has altered the direction of the water flow, and increased channel width, bank erosion, and the amount of sediment that has been and is being deposited into the stream channel. Increased channel width and associated bank erosion reduces fish habitat by eliminating bank vegetation and water depth. Mid-channel deposition of sediments can cause flows to split into two streams that reduce the amount of water in each channel. This deposition can become critical in the J.C. Boyle Bypassed River Reach as low flows in this reach (approx. 320 cubic feet per second) have impaired passage of adult fish through this section of the Klamath River.

This 10(a) recommendation for the J.C. Boyle Bypassed River Reach includes provisions to maintain aquatic connectivity in the event of an emergency and to continue to use the J.C. Boyle emergency canal. This condition would contribute to long term protection and recovery of listed and non-listed species within the project reaches.

## 2. Cooperative Management Agreement

The Licensee shall enter into a Cooperative Management Agreement with the Bureau of Land Management (BLM) to ensure management of Klamath River lands and resources is not compromised as a result of Project operation.

In developing and implementing the agreement, the Licensee shall work with the BLM to:

- Manage riparian and aquatic habitats to maintain or improve fish, wildlife and scenic resources,
- Maintain and enhance species of special concern and their habitats,
- Maintain and enhance recreation and scenic resource values, and provide for safe recreational experiences,
- Manage deer winter range to maintain or improve habitat,
- Manage water resources to meet water quality standards as defined by the states of Oregon and California,
- Protect and interpret archaeological resources and cultural values,
- Provide on-the-ground presence to eliminate or minimize unsafe and unlawful activities.

### **Rationale**

A Memorandum of Understanding between the BLM, PacifiCorp, State and Federal wildlife management agencies, and landowners is in effect for the Upper Klamath River (USDI BLM 1991). In 2001, the Licensee indicated an interest in pursuing a management arrangement with the BLM for lands downstream of the J.C. Boyle Powerhouse near the Oregon – California border and lands between the border and Copco Reservoir where “...the Company was willing to consider options such as...entering into a mutually beneficial land management arrangement.” (PacifiCorp 2001).

Some of the lands that are currently encumbered with licensed facilities are directly or indirectly impacted by operation of the Project and were not proposed for inclusion in the Project boundary in the Final License Application (FLA). As explained thoroughly elsewhere, the Department opposes the omission from the Project of lands encumbered or impacted by Project facilities.

## **AQUATIC RESOURCES**

### 3. Fisheries Technical Subcommittee (FTS)

The Licensee shall establish a Fisheries Technical Subcommittee (FTS) to advise the Licensee on the development of plans and environmental measures related to implementation of the new license. The Licensee shall fund the administrative costs of establishing the FTS.

## **Rationale**

Development of plans and environmental measures related to implementation of the new license will necessitate the continued involvement of the FTS. This FTS will include representatives from the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and other parties to advise the Licensee as requested on implementation issues. While the Licensee is responsible for establishing the FTS, and funding its administrative costs, participants from federal and state agencies shall bear their own participation costs.

## **TERRESTRIAL RESOURCES**

### **4. Fire, Fuels, Forest Health Managing Upland Vegetation**

The Licensee, in consultation with BLM, shall develop and submit to FERC for approval a plan for managing upland vegetation to improve forest health and reduce potential fire hazard adjacent to Project facilities.

For the purpose of reducing the risk of high intensity, stand-replacing wildfires and/or insect infestation that would affect the condition of resources on BLM-administered lands, the plan shall include provisions for the following activities within the Project area and adjacent to Project-related facilities:

- Perform fuel reduction treatments.
- Perform thinning projects to reduce overstocking. Each potential treatment area would be examined to evaluate stand condition and develop prescriptions for thinning and treatment. In more dense stands, up to half of the basal area of trees may require removal.
- Utilize a variety of types of fuel treatments including manual and mechanical treatment and prescribed fire. Mechanical treatment may be necessary to break down or remove vegetation. Excess fuels will be utilized or piled for burning. Prescribed fire would be used to reduce fuels and alter vegetation in conifer and deciduous forests and shrub fields.
- Thin understory trees and ground vegetation to relieve stress on larger, older trees. Larger trees in such stands are typically moisture stressed as a function of dense understory vegetation.
- Remove excess fuels through salvage to reduce high fuel loads and promote long-term enhancement of scenic resources.
- Re-establish conifer forest and woodland stands following stand-replacing events. Management would include revegetation, control of competing vegetation, animal damage control, and, density control thinning of young stand.
- Implement an underburn program following initial treatment. This program would involve periodic light underburns to reduce fuel loading and density of understory vegetation.

## Rationale

The Klamath Falls Resource Area RMP provides for the following uses of prescribed fire:

- as a tool for site preparation, fuel reduction, and to restore or retain natural ecological processes through site disturbance (USDI BLM 1995a, p.33)
- to reduce tree mortality and restore the degree of vigor, resiliency, and stability in forest stands which is necessary in order to achieve land use allocation objectives (USDI BLM 1995a, p.53)
- to meet resource management objectives including, but not limited to, fuels management for wildfire hazard reduction, restoration of desired vegetation conditions, management of habitat, management of fire dependent/adapted species, and silvicultural treatments (USDI BLM 1995a, p.75).

Portions of the Klamath Falls Resource Area, Redding Field Office, and the Ashland Resource Area are located within the range of the northern spotted owl and are administered according to the Northwest Forest Plan. The 1994 Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl (USDA USDI 1994) amended the Redding Field Office's RMP to include new land allocations. The Klamath Falls Resource Area and Medford District RMPs were completed after the ROD was issued, and therefore incorporate direction from the Northwest Forest Plan. The licensing process for non-Federal hydropower projects in the Northwest Forest Plan area are required to implement direction in the 1994 and 2001 RODs, as well as the Final Supplemental EIS and ROD to Clarify Provisions Relating to the Aquatic Conservation Strategy (USDA USDI 2004).

Heavy fuel loads typify forests, woodlands, and shrubfields in the Klamath River Canyon. Dense conifer stands are characterized by ladder fuels that can carry ground fires to the forest canopy. Dense overcrowded stands that are often stressed are at risk of insect (e.g., bark beetle) infestations that can kill trees and further increase fuel loading of these stands. Accumulated logs and other dead material add to fuel loads contributing to the risk of stand-replacing fires. Historically, the Klamath River canyon has had a high incidence of lightning strikes. Given the steep terrain of hillslopes surrounding the river canyon any fire could result in a stand-replacing event. Historically, lightning-caused fires and Native American burning maintained forests in the Klamath River Canyon in an open condition. Recurring fire burned as relatively light ground fires creating a mosaic of sparsely distributed perennial grasses, forbs, and occasional smaller trees clustered among widely spaced, large-diameter Ponderosa pine and Oregon white oak.

Elimination of burning by Native Americans, grazing of ground fuels, and active fire suppression reduced the effect of fire as a disturbance agent in most of these communities. Assuming an average fire-return interval of 15 years, an average of eight light ground fires has not occurred to reduce fuel loading naturally. As a consequence, in many stands, the Douglas fir and ponderosa pine understory has grown very dense.

BLM management objectives for forest health emphasize the use of prescribed fire for site preparation, fuel reduction, and to restore or retain natural ecological processes. Use of fire

accommodates restoration of stand vigor, resiliency, and stability necessary to achieve resource objectives established in BLM management plans. Use of prescribed fire includes, but is not limited to fuels management for wildfire hazard reduction, restoration of desired vegetation conditions, management of habitat, management of fire dependent/adapted species, and silvicultural treatments. The Licensee needs to recognize the value of treating vegetation through the use of fire and other treatments and implement these terms and conditions as a way to protect their facilities. Fuels treatment shall place greater emphasis on the use of prescribed fire.

## **RECREATIONAL RESOURCES**

### **5. Creating and Improving trails in the Link River Reach**

The licensee shall improve the Link River Trail by resurfacing the trail, managing vegetation in the trail corridor, and incorporating river access off the trail. In addition, the Licensee shall develop a trail that links Veteran's Memorial Park and the Link River Trail.

#### **Rationale**

These recreation measures should be included as part of the decommissioning plan to terminate the east and west side developments. The Veteran's Memorial Park/Boat Launch and Link River Trail were shown to be the sites with the highest use measured in recreation days from the studies that PacifiCorp's consultant EDAW conducted during the relicensing process. In addition, trail use is one of the highest recreation activities in the State of Oregon as indicated by the Oregon SCORP, a comprehensive plan filled with FERC. Mitigation needs to be a part of the decommissioning process and these two trails provide excellent opportunities for recreation improvements.

### **6. Developed Trails from J.C. Boyle Reservoir to Copco Reservoir**

As a component of the Recreation Resources Management Plan the Licensee shall develop, and maintain a comprehensive trail network that extends from J.C. Boyle Reservoir to Copco Reservoir.

Within one year of issuance of the License, the Licensee shall:

- Improve scouting trails at the Caldera and Hell's Corner rapids. Scouting trails shall be designed for safe hiking and scouting and shall originate at locations that accommodate safe ingress and egress for rafts and visitors.

Within two years of issuance of the License, the Licensee in coordination with Bureau of Land Management (BLM) and Oregon Parks and Recreation Department (OPRD) shall:

- Develop an off-highway vehicle (OHV) management program. Additional opportunities for OHV use shall be explored to mitigate for loss of existing OHV

opportunities from necessary road/trail closures around the J.C. Boyle Reservoir and along the Upper Klamath River. OHV trails should be developed to accommodate OHV use while minimizing impacts to other resources.

Within three years of issuance of the License, the Licensee shall:

- Implement a comprehensive trail development plan for the J.C. Boyle Reservoir that links Topsy Recreation Site, Sportsman's Park, and Pioneer Park.
- Work with the Bureau of Land Management (BLM) to design trails that provide universal access to fishing, wildlife viewing, and dispersed camping at appropriate sites.
- Improve trail access to design standards for semi-primitive gradients to access fishing sites and provide river access along the J.C. Boyle Bypassed River Reach.
- Improve the hiking trail upstream of the parking area at the J.C. Boyle Powerhouse to enhance fishing and boating access and improve user safety.
- In cooperation with the BLM and Oregon Parks and Recreation Department (OPRD) design and construct a hiking trail connecting the J.C. Boyle Powerhouse to Copco, California.
- Develop several parking sites connected by a trail system along the powerhouse road. The powerhouse road may be used in lieu of new trails for short stretches where trail construction would be extremely difficult or expensive.
- Work with the BLM to design trail sections to connect with Klamath River canyon dispersed sites.
- Replace a bridge across the Klamath River in the upper Frain Ranch at the location of the old powerhouse road bridge crossing to provide pedestrian access and access for administrative vehicular traffic.
- Work with BLM, OPRD, and the National Park Service (NPS) to design and locate the bridge and trails along the east side of the Klamath River that connect dispersed camping and fishing sites to maintain the outstandingly remarkable scenic values in the Wild and Scenic River corridor.

Within five years of issuance of the License, the Licensee in partnership with OPRD shall:

- Design a non-motorized trail to connect with the new upper J.C. Boyle boat access and an existing non-motorized trail that provides fishing and hiking access to the Keno Reach of the Klamath River.

## **Rationale**

Non-motorized recreation trails are non-existent in the Project area. Casual use trails have been established along the J.C. Boyle Reservoir, the J.C. Boyle Bypass Reach, and along the Upper Klamath Wild and Scenic River. Most of these trails afford limited access due to steep gradients or uneven terrain. Existing scouting trails are likewise user-created, are poorly located, present safety concerns, and are in poor condition.

There is a moderate level of dispersed recreation on lands surrounding J.C. Boyle Reservoir and use of the Klamath River canyon for OHVs, camping, hiking, and mountain biking, hunting, fishing, swimming, picnicking, and sightseeing. Vehicular access to the Upper Klamath Wild and Scenic River below the J.C. Boyle Powerhouse is gained via a Project road which joins the Topsy Road above Frain Ranch. A bridge spanning the Klamath River that connects the existing Project road with Topsy Road was constructed to support the Klamath Project. The bridge was destroyed many years ago and was not replaced. Public access previously provided by the bridge is lost. No other nearby bridge crossing the river is available for public use.

There is a recognized lack of developed trails for both non-motorized (hiking, horseback riding and mountain biking) and OHV recreation within the Project area. The Oregon State Comprehensive Outdoor Recreation Plan (SCORP) has identified the need for additional trails in this region. There has been increased use of both public and private lands surrounding J.C. Boyle Reservoir and river area roads by OHVs, mountain biking, hiking, camping, horseback riding and driving for pleasure. Both non-motorized and OHV use have resulted in creation of new trails and access roads. These roads and trails are steep, established on uneven grades, or are in poor condition and present a safety hazard. Many of these roads are impacting the quality of the natural environment for dispersed recreation users, are impacting cultural sites and wildlife, and create problems related to erosion and loss of vegetative cover.

Unregulated use of lands, roads, and trails around the J.C. Boyle Reservoir for OHV recreation, mountain biking, hiking, camping, horseback riding, and pleasure driving has degraded the condition of other resource values. Further, because roads and trails are established on steep or uneven grades and are not maintained, they threaten the condition of other cultural, wildlife, water quality and vegetation resources as well as present a safety hazard.

## 7. Interpretation and Education Program

Within three years of issuance of the License, in coordination with Bureau of Land Management (BLM) the Licensee shall develop an Interpretation and Education program for the Klamath Project (Project). The plan shall identify interpretive opportunities (including brochures) and signage needs at recreation sites, Project facilities and along Project roads. Interpretive “portal information kiosks” shall be considered for the Topsy Road, Highway 66, and other major thoroughfares. The plan shall address monitoring and maintenance of these facilities. The program shall include provisions for developing information specific to health and safety, public access, off-highway vehicle (OHV) use, illegal dumping, and use of firearms. The program shall include information regarding public service announcements and early warning systems to provide real-time flow information for the J.C. Boyle Bypass and Keno Reaches.

### **Rationale**

Few interpretive or educational plans or programs have been developed for the Project. Although BLM has developed some informational signs that are posted at the Topsy Recreation site, Spring Island boat launch, and the Klamath River campground and PacifiCorp has placed

informational signs at the six fishing access sites above Copco Reservoir and at other Project recreation facilities, the majority of these amenities are deteriorating and/or need updating and replacement. The Oregon Department of Forestry posts seasonal fire regulation signs and the Oregon Department of Fish and Wildlife posts fishing regulations. PacifiCorp has also installed signage, primarily to warn visitors about hazards and dangers associated with Project operations. Aside from these facilities, no provisions for early warning or emergency management are provided in areas that receive a high degree of organized or dispersed use.

## 8. Recreation Law Enforcement Program

Within one year of issuance of the License, the Licensee shall:

- Negotiate an agreement fund the Klamath County Sheriff's Department to retain a land-based deputy for four to six months to patrol Project roads.
- Negotiate an agreement to fund the Klamath County Sheriff's Department to retain a part-time water-based deputy to patrol the J.C. Boyle and Keno Reservoirs during periods of peak recreation use (e.g., mid-May through October).
- Fund the operation of a 4-wheel drive vehicle to patrol the Project area.
- Fund a communications firm to analyze the feasibility of establishing and improving an emergency/early warning system that would be maintained over the period of the new License. This system would be available to public agencies and commercial interests for notifying law enforcement of emergencies and for the Licensee to provide early warning to the public in the event of an emergency at the J.C. Boyle Dam or Powerhouse.
- Increase on-river patrols and management presence and improving river access sites in the Middle Klamath Reach. The Licensee shall provide for on-river patrols and management in the river segment between Iron Gate and Happy Camp during the peak recreation season (mid-spring to mid-fall). In addition, the Licensee shall conduct maintenance and improve three river access sites – one below Iron Gate Dam, one near Interstate 5, and the Indian Creek access. These measures shall be developed and approved by the USFS and NPS and incorporated into the Recreation Resource Management Plan.

### **Rationale**

Within Project: The upper Klamath River and Project reservoirs are easily accessible by a variety of recreation users which presents problems associated with unregulated or uncontrolled access to Bureau of Land Management (BLM) administered lands and resources. Resource concerns include excessive litter and dumping, vandalism, use of firearms, and uncontrolled OHV use. Much of the resource damage and vandalism and many of the law enforcement concerns could be addressed with appropriate interpretive and informational resources. High recreation use and access also contribute to personal and safety concerns. Currently, there is insufficient specialized law enforcement available to address these issues.

In addition to resource damage, uncontrolled recreation use and vandalism in the Topsy, J.C. Boyle Bluffs, Pioneer Park, and Sportsman's Park Recreation areas, and at the Frain Ranch, threaten resource conditions on Federal lands adjacent to the Project. Increased use associated with the area's popularity and increasing population in the local area will continue to threaten resource condition. The focal point for visitation to the J.C. Boyle Reservoir are the J.C. Boyle Bluffs, Pioneer Park, and recreation use by water skiers, personal watercraft, fishers, and swimmers.

Limited telephone or radio communications, especially within the Klamath River canyon below the powerhouse, result in safety concerns related to wildfires, human accidents, hydropower flow release changes and law enforcement emergencies. Improved communications are necessary to meet basic emergency management and safety needs.

Below Iron Gate Dam: The project and its operations have affected the river reach below Iron Gate Dam. Since the Iron Gate Dam became operational in the mid-1960s, project operations have greatly increased the stability and reliability of river flows downstream. This has been beneficial to summer boating activities for whitewater boating and boat-based fishing. This predictability extends as far as Seaid Valley, California, if not down to the Salmon River confluence. Regulated river flow conditions have resulted in a unique whitewater boating setting for this Klamath segment, with distinct types of attractions, boaters, and river trips. Commercial outfitters comprise 80% of both the Klamath River white water boating and fishing recreation from Iron Gate Dam to the Salmon River. This segment of the Klamath River is also a designated WSR segment and these improvements are needed to protect and enhance this segment. The Klamath National Forest (KNF) and NPS have joint WSR management responsibilities on the Lower Klamath River. The Middle Klamath River communities depend on the economic benefit that the recreation boating and fishing revenue bring to these communities. These communities qualify as economically disadvantaged populations, and have high populations of Native American representation (Karuk Tribe), which depend on the river's fisheries and recreation river use for income. Thus, these recommended mitigation measures will also help support achievement of the environmental justice goals for these economically disadvantaged communities and populations. Due to the flow regime provided by the project, recreation use has increased and is project-induced. Therefore, PacifiCorp should share in the management responsibilities. Two primary management responsibilities are needed. These include improving river access sites and increasing on-river patrols.

## **CULTURAL RESOURCES**

### **9. Historic Properties Management Plan**

Within one year of issuance of the License, the Licensee shall:

- In consultation with the affected Tribes, the BIA, and the State Historic Preservation Officer (SHPO), develop an Historic Properties Management Plan (HPMP) for the

identification, evaluation, assessment, and treatment of cultural resources within the Project's Area of Potential Effect (APE) for approval by FERC.

- at its own expense, arrange for processing, cataloging, accessioning, storing, inspecting, inventorying, maintaining, and conserving material remains and associated records recovered and developed as a result of cultural resource surveys or excavations on lands within the APE pursuant to 36 C.F.R. § 79.7(d). In addition, the Licensee, at its own expense, shall arrange for a suitable repository capable of meeting the requirements of 36 C.F.R. § 79.9 for the long-term curatorial services called for in this condition.
- in consultation with the affected Tribes and the SHPO develop and fund a cultural resources monitoring program. The program shall include periodic monitoring of known cultural resource sites (including historic and traditional cultural properties and archaeological sites) to assess impacts from Project activities, recreational use, vandalism, or any other impacts; periodic reconnaissance of the impoundment shorelines to assess damage to known cultural resources and to identify and avoid adverse Project effects to previously unknown cultural resources exposed by erosion; and monitoring of all ground-disturbing activities to identify and avoid adverse effects to previously unknown cultural resources.
- in consultation with the affected Tribes, the BIA, and other resources agencies, shall evaluate the monitoring program annually to ensure mitigation measures and corrective actions are effective.

## **Rationale**

Section 106 of the National Historic Preservation Act (NHPA) requires that Federal agencies consider the effects that their projects and programs will have on historic properties. In this case the Commission can “use the services of applicants, consultants, or designees to prepare information, analyses and recommendations ...” 36 CFR § 800.2(a)(3). However, the Commission is ultimately responsible for completing the Section 106 process. Therefore, it is appropriate that any new license contain conditions requiring Pacific Corp to complete the various phases of the Section 106 process. Including these recommendations as conditions in the license assures that if Pacific Corp fails to complete its duties, it will be subject to the Commission's enforcement authority.

Operation of the Project has disturbed and otherwise affected cultural and historical sites of significance to the Tribes, requiring that such sites be investigated and, potentially, mitigated through data recovery excavation. The regulations implementing the National Historic Preservation Act and the Archaeological Protection Act of 1979 establish requirements for the protection of archaeological resources recovered from public and Indian lands, including provisions for the preservation of material remains and associated records. See 36 C.F.R. Part 79. These regulations contain requirements by which a repository for curatorial services may meet federal standards for such services. Requiring Pacific Corp to fund these curatorial services constitutes simple recognition that it is Pacific Corp's Project that has made necessary the recovery and displacement of the artifacts from their current locations, and it is Pacific Corp's responsibility to pay for curatorial services and storage for these artifacts at a suitable facility.

Archaeological sites contain ancestral artifacts of the Tribes that define their existence and sense as a people. Several known sites within the Project boundary have been subjected to erosion caused, or exacerbated by, the operation of the Project. Project operations during the future license term may continue to cause damage to these and other as yet unknown sites. Given the length of the licensing period, it is critical that the licensee, in consultation with tribal and resources agencies staff, establish a monitoring program to ensure appropriate and alternative mitigation measures are in place. More importantly, since tribal staff are most familiar with locations of culturally sensitive sites, it is sensible that the licensee invite tribal staff to be part of the monitoring team.

Direct tribal involvement and participation will not only ensure that damages to cultural resources are alleviated, but also minimized further deterioration due to possible neglect and failure to implement the HPMP.

#### 10. Mitigate Recreational Impacts on Cultural Resource Sites

- The Licensee, within one year of license issuance and in consultation with the affected Tribes, the SHPO, and the BIA, shall develop a vandalism awareness program to educate short-term visitors and local area residents about the legal and ethical implications of activities that disturb culturally sensitive sites. The program should include methods, such as distribution of flyers, placement of signs, erection of fences, and development of interpretive centers, that will help deter such activities.
- The Licensee, within one year of license, shall develop and implement an erosion protection program to protect and stabilize cultural resource sites that have been affected by unauthorized off-road vehicle use and other unnatural causes.
- The Licensee, within one year of license issuance and in consultation with the affected Tribes and the BIA, shall develop and implement a comprehensive monitoring program that should include, but not be limited to, surveillance cameras at sensitive sites and periodic patrols by personnel, including tribal staff, with communication equipment capable of dispatching local law enforcement authorities.
- The Licensee, within six months of license issuance and in consultation with the affected Tribes, shall establish a program providing access by tribal members to traditional gathering areas. The program shall include methods for ensuring accessibility to gathering sites, particularly those that are gated, through the use of tags, vehicle window stickers, passes, and notification to Pacific Corp personnel prior to entrance. The program should also include methods for limiting access by non tribal members to gathering sites.

#### **Rationale**

People are drawn to the Project area because of the natural and recreational amenities within the Project boundary. Roads, parking lots, and facilities associated with recreational activities within and outside the Project boundary allow easy access to cultural resource sites, which

include gathering, archaeological, burial, ceremonial, and sacred sites that are of paramount importance to the Tribes. As a result of this access, cultural resources are degraded and destroyed.

To protect sensitive cultural sites from these effects, there is a need to educate the public about Native American traditional and cultural heritage. Interpretive centers, signs, and flyers can be used to achieve this purpose. In addition, we believe surveillance cameras and periodic patrols, limiting the siting of new campgrounds and day use areas in culturally-sensitive sites, and controlling access to traditional gathering areas - will reduce the negative effects of these recreational activities.

### 11. Native Plant and Noxious Weed Management

The Licensee, within one year of license issuance and in consultation with the affected Tribes, shall develop and implement a vegetation management plan to re-establish native vegetation and plants that are suitable to tribal members for food, medicine, basket materials, cradles, art and other cultural products. Those plants could include, but are not limited to red bud, willow, hazel shoots, pine roots, white grass, bear grass, silver leaf willow, and maidenhair fern.

#### **Rationale**

Operation of the Project and recreation activities within the Project area have contributed to loss of vegetation. It is important to re-vegetate areas that have been affected. The BIA believes it is logical to use native vegetation for this purpose. Native plants have traditionally been gathered and used by the Tribe for many cultural products. By the same token, efforts to re-establish native vegetation should coincide with efforts to reduce or eradicate noxious weeds

### 12. Safety of Dams – Emergency Action Plan

The Licensee, within one year of license issuance and in consultation with the Tribes and the BIA, shall invite tribal staff to participate in the annual Emergency Action Plan exercise and meeting.

#### **Rationale**

PacifiCorp must ensure representatives from all Tribes are invited to the annual emergency action plan exercise/meeting. This exercise/meeting involves major coordination and participation among various Federal, State, and local agencies, and would provide tribal staff with the opportunity to understand how their reservations might be impacted and to provide input to the emergency preparation process.

The emergency action plan exercise details site-specific information and emergency management roles, responsibilities, and procedures that the licensee, authorities, and affected parties including

the tribes might have in responding to an emergency event. Thus, it is of paramount that tribal staff are informed and involved in this process. Tribal participation and awareness could serve as an integral role in warning and evacuation process. Particularly, tribal readiness to response to an emergency affecting the dam(s) will help save lives and prevent loss of properties.

### 13. Tribal Participation

The Licensee, within one year of license issuance and in consultation with the Tribes and the BIA, shall allocate annual funding for tribal staff participation in cultural resource related mitigation programs.

## References Cited

APLIC 1996. Avian Power Line Interaction Committee. 1996. Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996. Edison Electric Institute/Raptor Research Foundation. Washington, DC.

APLIC and USFWS 2005. Avian Power Line Interaction Committee and U.S. Fish and Wildlife Service. 2005. The Edison Electric Institute's Avian Power Line Interaction Committee Avian Protection Plan (APP) Guidelines. Edison Electric Institute/Raptor Research Foundation. Washington, DC.

Isaacs and Anthony 2004. Isaacs, F. B., R. G. Anthony 2004. Bald Eagle nest locations and history of use in Oregon and the Washington portion of the Columbia River Recovery Zone, 1971 through 2004. Oregon Cooperative Fish and Wildlife Research Unit, Oregon State University, Corvallis, Oregon.

PacifiCorp 2001. PacifiCorp Land Tenure Adjustments, May 2, 2001 - Letter and attached "Preliminary Allocation Map".

PacifiCorp 2004a. PacifiCorp, 2004. Final License Application, Klamath Hydroelectric Project, FERC Project No. 2082. Portland, OR.

PacifiCorp 2004c. PacifiCorp, 2004. Terrestrial Resources Final Technical Report, Klamath Hydroelectric Project, FERC Project No. 2082. Portland, OR.

PacificCorp and USFWS. 2005. United States Fish and Wildlife Service. Avian Protection Plan for the Klamath Basin. Revision 4.

USDA USDI 1994. U.S. Department of Agriculture, Forest Service; U.S. Department of Interior, Bureau of Land Management, 1994. Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl. Portland, OR.

USDA USDI 2004. U.S. Department of Agriculture, Forest Service; U.S. Department of Interior, Bureau of Land Management, 2004. Record of Decision Amending Resource Management Plans for Seven Bureau of Land Management Districts and Land and Resource Management Plans for Nineteen National Forests Within the Range of the Range of the Northern Spotted Owl – Decision to Clarify Provisions Relating to the Aquatic Conservation Strategy. Portland, OR.

USDI BLM 1991. U.S. Department of Interior, Bureau of Land Management, 1991. Memorandum of Understanding among Pacific Power and Light Company [PacifiCorp], Oregon

Department of Fish and Wildlife, California Department of Fish and Game, Weyerhaeuser [U.S. Timberlands] and the Bureau of Land Management. Klamath Falls, OR.

USDI BLM 1993. U.S. Department of Interior, Bureau of Land Management, 1993. Redding Resource Management Plan and Record of Decision. Redding, CA.

USDI BLM 1995a. U.S. Department of Interior, Bureau of Land Management, 1995. Klamath Falls Resource Area Record of Decision and Resource Management Plan and Rangeland Program Summary. Klamath Falls, OR.

USDI BLM 1995b. U.S. Department of Interior, Bureau of Land Management, 1995. Medford District Record of Decision and Resource Management Plan. Medford, OR.

USDI BLM 2005a. U.S. Department of Interior, Bureau of Land Management, 2005. BLM Comments on PacifiCorp Klamath River Hydroelectric Project Regimenting (FERC No. 2082), Third Submission of 2004 Study Information: Spring Creek Water Quality Investigations Final Technical Report. Medford District, Medford, OR.

USDI BLM 2005b. U.S. Department of Interior, Bureau of Land Management, 2005. Cascade-Siskiyou National Monument Proposed Resource Management Plan/Final Environmental Impact Statement. Medford, OR.

USGS 1982. U.S. Geological Survey. 1982. Measurement and Computation of Streamflow: Volumes 1 and 2, Geological Survey Water-Supply Paper 2175.