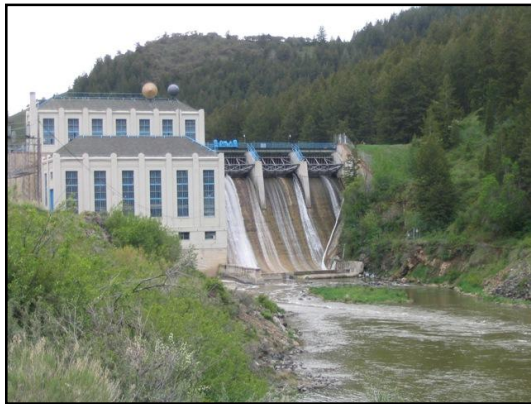


**APPLICATION REVIEW FOR  
LOW IMPACT HYDROPOWER INSTITUTE  
CERTIFICATION  
of the  
PACIFICORP BEAR RIVER PROJECT NO. 20**



**Soda Dam**



**Grace Dam**



**Oneida Dam**

**May 11, 2010**  
**Application Reviewer: Patricia McIlvaine**

**APPLICATION REVIEW FOR LOW IMPACT HYDROPOWER  
INSTITUTE CERTIFICATION**

**PACIFICORP BEAR RIVER PROJECT NO. 20**

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## **APPLICATION REVIEW FOR LOW IMPACT HYDROPOWER INSTITUTE CERTIFICATION**

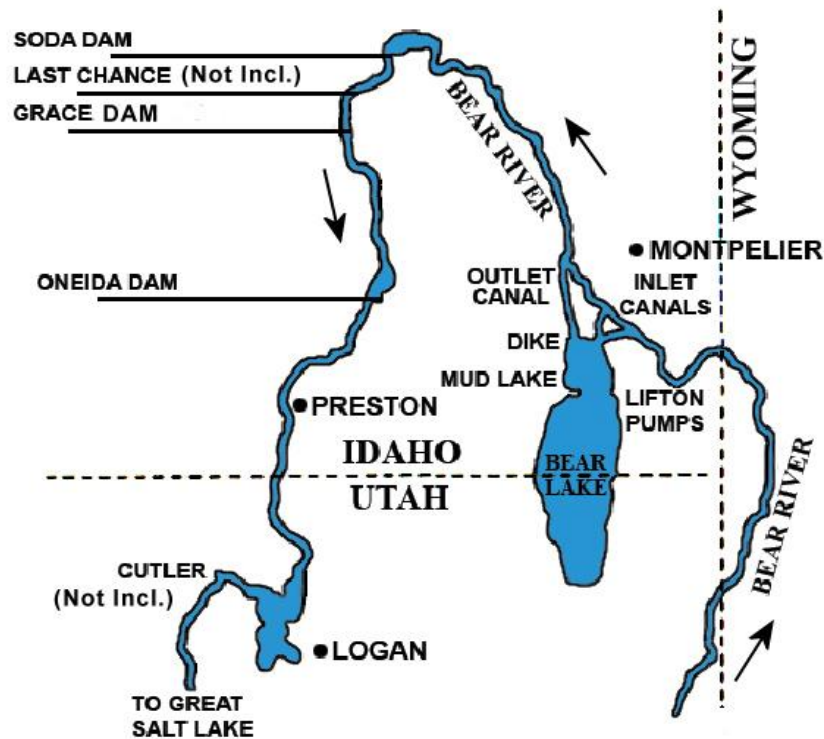
### **PACIFICORP ENERGY PROJECT NO. 20**

#### **1.0 INTRODUCTION AND OVERVIEW**

This report reviews the application submitted by PacifiCorp Energy (PacifiCorp or Applicant) to the Low Impact Hydropower Institute (LIHI) for Low Impact Hydropower Certification for the Bear River Project (Project or Facility). The Bear River Project, located on the Bear River in Caribou and Franklin Counties, Idaho, is currently licensed by the Federal Energy Regulatory Commission (FERC) as Project Number 20. The Bear River Basin is located in northeastern Utah, southeastern Idaho, and southwestern Wyoming. It comprises approximately 7,500 square miles of mountain and valley lands. The Bear River begins in the Unita Mountains in Utah and extends 500 miles, crossing state boundaries five times before ending in the Great Salt Lake.

PacifiCorp owns and operates the Bear River Project. The Bear River Project consists of three dams and powerhouses (Soda, Grace, and Oneida developments) that together have a total installed capacity of 77 megawatts of electrical generation. The Cove development which was originally included in the FERC license issued on December 22, 2003, was decommissioned by FERC Order dated May 23, 2006. The Last Chance Development, located on a diversion from the Bear River downstream of the Soda powerhouse, and the Cutler Project, located on the Bear River downstream of the Oneida development in Utah, also owned by PacifiCorp, are not considered part of this Project. Figure 1 illustrates the geographical relationship of these PacifiCorp Projects.

Figure 1 - Map of PacifiCorp's hydroelectric projects in the Bear River Basin.



### 1.1 Project and Site Characteristics

The Soda development is the farthest upstream dam of the Bear River Project, and is located five miles west of the city of Soda Springs in Caribou County, Idaho.

The Soda development consists of a 103-foot-high by 433-foot-long concrete gravity dam with a 109-foot-long integral powerhouse section containing five headgates that supply water to the generating unit penstocks and to a 900-cubic feet per second (cfs)-capacity low-level discharge (Johnson valve). The concrete dam also has a 210-foot-long non-overflow gravity section and a 114-foot-long gated overflow spillway section containing three, 30-foot by 14-foot Taintor gates. A 55-foot-long by 19-foot-high earth fill dam also forms part of the development. The Soda reservoir (commonly referred to as the Alexander reservoir) has a surface area of 1,100 acres, an

active storage capacity of 16,300 acre-feet, and a normal maximum full pool elevation of 5,720 feet. It extends approximately 4.5 miles upstream to just below the Big Spring Creek confluence with the Bear River. The development's 41-foot by 109-foot powerhouse contains two vertical Francis units, each with an installed capacity of 7 MW and maximum hydraulic capacities of 1,287 and 1,337 cfs, respectively. A total of one acre of land is occupied by non-reservoir features. The development includes a tailrace immediately downstream of the powerhouse with a normal tailwater elevation of 5,641 feet. An estimated 373 acres are contained in a 200-foot zone extending around the impoundment.

The original Grace Dam and the existing power facilities and other appurtenant structures were constructed shortly after 1910. A new dam was constructed in 1951 and the original rock-filled, timber-crib dam is now submerged in the forebay just upstream of the 1951 dam. Grace Dam is a rock-filled, timber-crib structure with a concrete core at the base of the structure. The structure stands approximately 51 feet high including the flashboards. The crest length is 180 feet 5.5 inches. The dam creates a 320 acre-foot forebay with 250 acre-feet of usable storage. A 52-footwide intake structure containing eighteen 5-foot by 10-foot screen sections is housed within a concrete stucco building, adjacent to the earth embankment section of the dam. A 26,000-footlong 11-foot-diameter flowline consisting of 15,000 feet of steel and 11,000 feet of wood stave pipeline conveys water from the intake structure to the surge tanks. There are two surge tanks, one 10 feet in diameter and 38 feet high, located approximately 2.6 miles downstream of the diversion, and the other 30 feet in diameter and 132 feet high, located directly above the powerhouse. Three 90-inch-diameter steel penstocks, equipped with two butterfly valves carry water from the surge tanks to the powerhouse. The powerhouse has three turbine generators rated at 11 MW each for a total plant capacity of 33 MW. Their total hydraulic capacity is 960 cfs. A total of 32 acres of land is occupied by non-reservoir features. The Grace tailrace includes a short concrete-lined section that transitions to an unlined open channel section approximately 350 feet from its confluence with the Bear River. An estimated 79 acres are contained in a 200-foot zone extending around the impoundment to the dam, which is referred to as the "Grace forebay". This area has a surface area of 38 acres and a total storage capacity of 320 acre-feet.

The Oneida development includes a 111-foot-high by 381-foot-long concrete gravity dam that includes a 118-foot-long uncontrolled auxiliary spillway, a 66-foot-long non-overflow gravity section, a 99-foot-long gated spillway containing five Taintor gates, and an 86-foot-long gravity section with ice sluices. There is also a 40-foot-high, 1,100-foot-long embankment dam. The Oneida reservoir, also called the Oneida Narrows, has an active storage capacity of 10,880 acre-feet and a surface area of 480 acres at an elevation of 4,882 feet. A 50-foot-wide by 50-foot-high intake structure, containing six openings fitted with trashracks, transitions to two, 16-foot-diameter circular outlets. A 16-foot-diameter, 2,240-foot-long steel flowline conveys water from the intake structure to a 40-foot-diameter, 142-foot-high surge tank. Three 12-foot-diameter, 120-foot-long steel penstocks extend from the surge tank to the powerhouse. The Grace powerhouse is 52-feet by 162-feet and contains three vertical Francis units, each with an installed capacity of 10 MW and hydraulic capacities of 1,161, 1,161, and 968 cfs, respectively. A total of 9 acres of land is occupied by non-reservoir features. The development has a 64-foot-wide by 118-foot-long rectangular channel tailrace. An estimated 265 acres is contained in a 200-foot zone extending around the impoundment.

Substations containing step-up transformers and circuit breakers are located adjacent to the powerhouses at Soda, Oneida, and Grace. The substations serve as the point of interconnection to the transmission grid system. Land area developed by these features is included in the land acreage noted above for each specific development.

PacifiCorp operates the hydroelectric developments on the Bear River in a coordinated manner to meet irrigation demands and generate power. River flows are generally higher than the natural conditions during the irrigation season (April through October) due to irrigation releases from Bear Lake. The Soda, Grace, and Oneida developments are usually operated in a modified run-of-river mode during this season; water stored in Soda and Oneida reservoirs may be used to satisfy short-term irrigation demand or to maintain reservoir levels in Cutler reservoir. The Cutler reservoir level must be maintained for environmental protection purposes even when the Cutler facility normally ceases to generate power during the summer low-flow period.

## 1.2 Regulatory History

Construction of the Soda, Grace, and Oneida developments, known collectively as the Bear River Hydroelectric Project (FERC Project No. 20) was authorized by the U.S. Secretary of Interior in 1907 for irrigation, flood control and hydroelectric generation. Construction of the dams began in 1909 and was completed in 1927, during which time they were originally licensed. A fourth hydroelectric development, Cove, was part of the original hydroelectric project and was decommissioned in 2006. The Company acquired water rights from various holders during the development years of these projects in exchange for perpetual contracts to deliver irrigation water from Bear Lake. Water rights were further defined by court decrees, the Bear River Compact (as revised), and other subsequent agreements. The Bear River Project is largely dependent on irrigation water pumped from Bear Lake into the river system to generate power. Between 1976 and 1981, the Federal Energy Regulatory Commission (FERC) issued new licenses for the Soda, Grace-Cove, and Oneida projects. These FERC licenses expired in October 2001.

In the late 1990s, as the expiration of the licenses approached, PacifiCorp initiated the relicensing process. After extensive studies and agency consultation over a number of years, the re-licensing process culminated in the signing of the Bear River Settlement Agreement (Settlement Agreement) on August 28, 2002. FERC approved the Settlement Agreement and issued a new 30-year license for the Bear River Project on December 22, 2003. The Settlement Agreement and new license requires the provision of recreation enhancements, minimum in-stream flows to benefit aquatic resources, provision of funds to conserve and benefit natural resources within a defined action area, and other measures related to land management, protection of cultural resources, and restoration of Bonneville cutthroat trout.

As part of the Settlement Agreement, the Environmental Coordination Committee (ECC), a stakeholder group comprised of signatories to the Settlement Agreement, was formed to consult and make decisions regarding the use of funding, and implementation of license and settlement agreement requirements. Decisions of the ECC are by consensus, but they cannot increase the monetary or resource commitments made by PacifiCorp in the Agreement. Participation on the

ECC is voluntary. Most representatives appear to be very active in this group, although Idaho Rivers United, the Shoshone-Bannock Tribes and National Park Service have not been very active in 2008 and 2009 according to the Annual Reports issued by PacifiCorp. The Settlement Agreement (Section 4.6) and License Article 401 specifies that a detailed annual report on the activities of the ECC and implementation of Protection, Mitigation, and Enhancement (PM&E) measures be prepared yearly throughout the term of the license. Reports available on the Applicant's website for 2006 through 2009 were reviewed. The ECC consists of representatives from the following entities:

- U.S. Fish and Wildlife Service
- U.S. Bureau of Land Management
- U.S. National Park Service
- U.S. Forest Service
- Shoshone-Bannock Tribes
- Idaho Department of Environmental Quality
- Idaho Department of Fish and Game
- Idaho Department of Parks and Recreation
- Idaho Council of Trout Unlimited
- Idaho Rivers United
- American Whitewater
- Greater Yellowstone Coalition

A review of the FERC database indicated that since license issuance in 2003, only three extensions and two temporary license condition variances have been requested by PacifiCorp for environmental or recreational issues related to this Project. These requests, which were all approved by FERC, are summarized below.

- On March 3, 2005, FERC approved a temporary modification of the minimum flow to be released from the Grace development to allow for aquatic monitoring to be completed. The revised flow conditions were from 63 cubic feet per second (cfs) to "current leakage". This request was made by PacifiCorp with endorsement of the members of the Environmental Coordinating Committee. A copy of this Order is contained in Appendix A.
- An extension for the filing of the Annual Progress Report for 2005 due by March 1, 2006, was approved for submission by May 15, 2006.



- An extension for the filing of the Annual Progress Report for 2006 due by March 1, 2007 was approved for submission by May 15, 2007
- A one year extension to April 01, 2009 was requested for releases of Whitewater Boating Flows required under Article 419. The original plan called for installation of spill gates at the Grace development by April 1, 2007 and the boating releases by April 1, 2008. On March 3, 2007, the FERC approved a one year delay in gate installation so that the flow ramping studies and gate designs could be completed. Subsequently, FERC Order dated October 30, 2007 approved a corresponding delay in implementation of boating flows until April 1, 2009. A copy of this Order is in Appendix A. No addition extension requests were made by PacifiCorp on this topic.
- The Fish Stranding Minimization Plan, required to address the potential for fish stranding from recreation flow releases, which was approved by the FERC March 7, 2005, was suspended by FERC's Order dated August 22, 2008. In its place, PacifiCorp is conducting a ECC recommended three year study, which focuses on identifying feasible ramping rates during whitewater boating flow releases, and the potential for fish stranding as a result of the whitewater releases. A final report to the ECC and the FERC is required by February 1, 2011. A copy of the FERC Order is included in Appendix A.

Given the limited number of requests, as well as their nature, PacifiCorp appears to have demonstrated conscientious attention to the environmentally related issues associated with the Bear River Projects FERC License and Settlement Agreement. Deviations from minimum flow requirements have occurred, as reported to the FERC. All reported deviations have been found by FERC to not constitute license violations. This issue is further discussed in Section 2.1, *River Flows*.

### **1.3 Public Comment**

No comments were received by the LIHI on PacifiCorp's application for certification for the Bear River Project. The comment period closed on March 3, 2010.

## 2.0 CRITERIA ASSESSMENT

The Low Impact Hydropower Institute certifies those hydropower facilities that meet its eight criteria:

### 2.1 Criteria A - River Flows:

*Goal: The facility (dam and powerhouse) should provide river flows that are healthy for fish, wildlife, and water quality, including seasonal flow fluctuations where appropriate.*

*Standard: For instream flows, a certified facility must comply with resource agency recommendations issued after December 31, 1986, for flows. If there were no qualifying resource agency recommendations, the applicant can meet one of two alternative standards: (1) meet the flow levels required using the Aquatic Base Flow methodology or the “good” habitat flow level under the Montana-Tennant methodology; or (2) present a letter from a resource agency prepared for the application confirming the flows at the facility are adequately protective of fish, wildlife, and water quality.*

PacifiCorp’s Bear River project is in compliance with resource agency recommendations issued after December 31, 1986 regarding flow conditions for fish and wildlife protection for all reaches. Resource agency recommendations regarding flow conditions are contained in Sections 3.2 and 3.3 of the Settlement Agreement adopted by FERC in the new license issued December 22, 2003 and the Section 401 Water Quality Certification (WQC) issued by Idaho Department of Environmental Quality (IDEQ) on June 23, 2003. A summary of the requirements for flow conditions contained in these documents follows.

#### Flow releases:

Article 408 of the project license and the Section 401 WQC established minimum instream flows below each development. With the exception of emergency situations, reservoir drawdowns and project shutdowns are to be scheduled to minimize impacts to aquatic resources, with such scheduling to be reviewed/approved through the ECC. Article 411 required the study of leakage

rates from the three dams to be incorporated into these flow requirements. The Leakage Study Plan was approved by the FERC on May 5, 2005, with the leakage calculations approved on December 2, 2005. On March 3, 2005, FERC approved a temporary modification of the minimum flow to be released from the Grace development to "current leakage" from 63 cubic feet per second (cfs) to allow for aquatic monitoring to be completed. This request was made by PacifiCorp with endorsement of the members of the Environmental Coordinating Committee. Subsequently, the minimum flow requirements were revised May 23, 2006, when FERC issued its Cove Decommissioning Order amending Article 408. The current minimum flows are:

- Below the Soda dam: year-round minimum flow of 150 cfs, or inflow into the Alexander reservoir, whichever is less;
- Grace bypass reach: year-round minimum bypass flow of 63 cfs or inflow, whichever is less, in addition to 2 cfs leakage below the Grace dam;
- Oneida reach below the powerhouse: year-round minimum flow of 250 cfs or inflow, whichever is less, in addition to 1 cfs leakage below Oneida dam.

Per Article 410 of the project license, PacifiCorp developed a plan to modify the flows from Kackley Spring to benefit the aquatic resources in the Bear River, based on the results of studies and monitoring outlined in the Settlement Agreement. The Kackley Springs Plan was approved by FERC Orders dated March 22, 2005. Following the completion of the studies and monitoring, the ECC agreed in 2008 to discontinue diversion of the spring directly into the Bear River and send the water down a longer route that can potentially be used by native fish for spawning and rearing. PacifiCorp completed the work on the reroute in September, 2009. This modification did not require additional FERC approval.

Pursuant to Section 3.1.6 of the Settlement Agreement, PacifiCorp is contributing up to \$35,000 annually for seven years to conduct studies assessing the long term effects of experimental recreation flows released for boaters in the Grace bypass on fisheries resources. These Creel and Macroinvertebrate Studies will assess future flow releases to benefit native biological communities. As these studies may also be considered as assessment of impact mitigation

opportunities to the watershed ecology, this program is also identified under Criteria D - Watershed Protection.

In accordance with Article 420 of the project license, PacifiCorp developed an Operational Regime to minimize the frequency of river level fluctuations below the Oneida powerhouse, thereby reducing bank erosion and turbidity in the river. The Operational Regime was approved by FERC Orders dated August 17, 2005. The record of attainment is provided in the annual Oneida Development Operations Report filed with the IDEQ.

Ramping rates:

Article 412 of the project license, the Settlement Agreement and the Section 401 WQC established maximum ramping rates below the Soda and Oneida dams. A minor discrepancy (dealing with where the flow rates were to be measured) between the project license and the Section 401 WQC was reconciled by FERC Orders issued on July 7, 2004 that modified Article 412 (b). The maximum ramping rates are:

- 1.2 feet per hour in the Soda reach, ascending and descending, as measured at USGS Gage No. 10075000; and
- 3.0 inches every 15 minutes on the descending arm of the ramp in the Oneida reach measured at a designated site between river miles 26 and 30.

The project license, Settlement Agreement and Section 401 WQC also permit PacifiCorp to increase ramping rates associated with emergencies, to comply with legal constraints associated with water rights, for emergency power needs, and to comply with requirements of the downstream Cutler Hydroelectric Project.

The Operations and Compliance Plan specifies how compliance with the license flow rates are to be measured, recorded and reported, including during periods when river flows are less than specified minimum flows. The USGS gauge stations used to monitor the minimum flow rates and ramping rates are maintained by PacifiCorp and the data is provided to the USGS for final

review and publishing. Facility operators manually read and record reservoir elevations in plant data logs. The elevation information is used to calculate inflow changes. River flows are measured, recorded and temporarily stored in an electronic data logger located at each gauging station. Documentation of compliance with the minimum in-stream flows and ramping rate restrictions recommended by the resource agencies is provided in PacifiCorp's annual reports. Deviations from these limits are required to be reported by PacifiCorp to the FERC as soon as possible, but no later than 10 days after the event. The report must provide the reason for the flow modification.

Review of FERC's database indicated that since license issuance in December 2003, through April 1, 2010, there were only nine deviations from minimum flow releases associated with the three dams of the Bear River Project, with six of these reported in 2004 and 2005. FERC did not find any of these deviations to be a violation of the license. Review of available ECC meeting information showed approval of scheduled annual maintenance activities. No exceedances of ramping rates were reported for 2007 through 2009 in the Annual Reports. Review of the FERC database did not show reported deviations in 2003 thorough 2006, nor in 2010 through the 1<sup>st</sup> of April.

**A. Flows – The Facility is in Compliance with Resource Agency Recommendations issued after December 31, 1986, as specified in the FERC license, WQC and Settlement Agreement, regarding flow conditions for fish and wildlife protection, mitigation and enhancement for both bypass reaches. FACILITY PASSES.**

## **2.2 Criteria B - Water Quality:**

**Goal:** *Water quality in the river is protected.*

**Standard:** *The water quality criterion has two parts. First, a facility must demonstrate that it is in compliance with state water quality standards, either through producing a recent (after 1986)*

*Clean Water Act Section 401 certification, or demonstrating compliance with state water quality standards (typically by presenting a letter prepared for the application from the state confirming the facility is meeting water quality standards). Second, a facility must demonstrate that it has not contributed to a state finding that the river has impaired water quality under Clean Water Act Section 303(d) (relating to water quality limited streams).*

The Bear River project is in compliance with the conditions in the Section 401 WQC issued by Idaho Department of Environmental Quality (IDEQ) on June 23, 2003, which was incorporated into the FERC license. In accordance with the 401 WQC and Article 413 of the project license, PacifiCorp prepared and implemented Water Quality Monitoring Plans (WQMPs) for the Grace bypass reach and the Bear River below the Oneida powerhouse to monitor temperature, dissolved oxygen, nutrients, specific conductance, and turbidity. Monitoring in the Grace bypass reach serves as the basis for evaluating both the Grace development and the Soda development's effects on water quality. The WQMPs were completed on June 18, 2004 and approved by FERC Orders dated September 15, 2004.

The 401 WQC also requires PacifiCorp to provide IDEQ with an annual Oneida Development Operations Report. PacifiCorp has submitted this report to IDEQ every year since 2004.

Regarding the issue of facility area and downstream reaches not being in compliance with state water quality standards, TMDLs have been established pursuant to Section 303(d) of the Clean Water Act for phosphorous and total suspended solids in the Alexander reservoir, the Oneida Narrows reservoir, and the Bear River from the Alexander reservoir to the Idaho border. PacifiCorp has conducted extensive water quality monitoring in the Grace bypass and below the Oneida powerhouse beginning in May 2004.

PacifiCorp submitted the 2007 Water Quality Monitoring Report for the Grace-Cove Development to IDEQ in January 2008. Based on the results of the water quality monitoring in the Grace bypass, IDEQ informed PacifiCorp in a letter dated January 20, 2009, that "PacifiCorp's operation has not contributed to violations of State of Idaho water quality

standards,” and that water quality monitoring at Grace can be discontinued (two years before scheduled. (See Appendix A for a copy of this letter.)

A final Oneida Water Quality Monitoring Report was submitted to the IDEQ on April 6, 2007. Supplemental reports and data were provided to IDEQ in February, 2009. This information documents the results of studies that PacifiCorp conducted to investigate potential connections between the facility and water quality criteria exceedances. Operational changes at Oneida to reduce potential contributions to exceedances include the elimination of peaking events and the establishment of a maximum ramping rate based on bank stability. IDEQ has informed PacifiCorp in a letter dated July 24, 2009 (see Appendix A) that the water quality monitoring below the Oneida powerhouse demonstrates that the facility is not contributing to water quality standard exceedances.

**B. Water Quality – The Facility is in Compliance with all conditions issued pursuant to a Clean Water Act §401 in the Facility area and in the downstream reach. The reach of the river upstream, at and downstream of the facility is identified by the state as not meeting water quality standards (including narrative and numeric criteria and designated uses) pursuant to Section 303(d) of the Clean Water Act. There has been a determination that the Facility is not a cause of the violation - FACILITY PASSES**

### **2.3 Criteria C - Fish Passage and Protection:**

**Goal:** *The facility provides effective fish passage for riverine, anadromous and catadromous fish, and also protects fish from entrainment.*

**Standard:** *For riverine, anadromous, and catadromous fish, a facility must be in compliance with recent (after 1986) mandatory prescriptions regarding fish passage (such as a Fish and Wildlife Service prescription for a fish ladder) as well as any recent resource agency recommendations regarding fish protection (e.g., a tailrace barrier). If anadromous or catadromous fish historically passed through the facility area but are no longer present, the applicant must show that the fish are not extirpated or extinct in the area because of the facility*

*and that the facility has made a legally binding commitment to provide any future fish passage recommended by a resource agency.*

*When no recent fish passage prescription exists for anadromous or catadromous fish, and the fish are still present in the area, the facility must demonstrate either that there was a recent decision that fish passage is not necessary for a valid environmental reason, that existing fish passage survival rates at the facility are greater than 95% over 80% of the run, or provide a letter prepared for the application from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service confirming the existing passage is appropriately protective.*

There were no records of anadromous or catadromous fish movement through the facility waters. As identified in the FERC license issued in December 2003, in a letter dated April 15, 2002, the U.S. Department of Interior, Fish and Wildlife Service (USFWS), did not prescribe any fish passage facilities under Section 18 of the Federal Power Act (FPA) for the Bear River Project, but did reserve the authority to do so in the future.

Due to the limited numbers of native fish currently in the Bear River, fish entrainment has not been a significant issue for the project, and consequently, the resource agencies have not made fish entrainment protection recommendations. As reflected in the Settlement Agreement, the ECC has focused on habitat restoration to increase native fish populations in the watershed.

PacifiCorp has completed a funding agreement with IDFG to implement a Broodstock and Conservation Hatchery program for Bonneville cutthroat trout. Per Article 404 of the project license, PacifiCorp will contribute up to \$100,000 annually for three years for broodstock development (Section 3.1.2.5 of the Settlement Agreement). Using the state's Grace Hatchery near Grace, Idaho, the program will focus on enhancing Bonneville cutthroat trout in the Thatcher Reach between the Grace Dam and Oneida Reservoir. The Conservation Hatchery Program will commence on December 22, 2011. Beginning that year, per Section 3.1.3 of the Settlement Agreement, PacifiCorp is obligated to contribute up to \$100,000 annually for the conservation hatchery program for the remainder of the license term. (This item is also



referenced under Criteria D per PacifiCorp's discussion of its merits under Watershed Protection their application for certification.)

Article 403 of the FERC license and the Settlement Agreement do address protection and enhancement for riverine fisheries, with particular focus on restoration of the Bonneville Cutthroat Trout. The Bonneville cutthroat trout is native to the Bear River basin and a species of special concern to the State of Idaho. PacifiCorp completed a Bonneville Cutthroat Trout Restoration Study Plan in July 2004; the Plan was approved by FERC Orders dated December 2, 2004. The Restoration Study Plan specifically included the goal of developing “baseline habitat conditions and fish passage obstruction and diversion information for the Bear River drainage in Idaho to aid in the management of Bonneville cutthroat trout.” However, work on the irrigation diversion/barrier mapping was discontinued by the ECC in 2006 when it was learned that similar information was available from another source. In 2007 a more intensive irrigation diversion mapping study was proposed by the Idaho Department of Fish and Game (IDFG) and the ECC provided the necessary funding to implement it.

In accordance with Article 409 of the project license, a Fish Stranding Minimization Plan was completed as part of the Bear River Hydroelectric Project Implementation Plan filed with FERC May 28, 2004. An order modifying and approving the plan was issued by FERC on March 7, 2005. On March 28, 2008, PacifiCorp, with endorsement of the ECC, requested suspension of the approved Fish Stranding Minimization Plan in lieu of implementation of a three year study investigating impacts of whitewater releases specified under Article 419, along with studies of ramping rates as required under the Settlement Agreement, and potential associated impacts on fish stranding. Studies are to be completed in 2010 with filing of a final report to the FERC by February 1, 2011. Part of the recommendations of that report shall indicate if the original Fish Stranding Minimization Plan will be reinstated or discontinued.

In summary, the Bear River project is in compliance with mandatory resource agency recommendations regarding these resources. Consultation with all resource agencies having interest in fisheries resources were very supportive of the actions undertaken by PacifiCorp in

support of fisheries restoration programs. One individual, Mr. James Capurso, a fisheries biologist with the U.S. Forest Service, expressed some concern with the potential for impacts of planned whitewater flows on fisheries resources. However, he nonetheless endorsed the actions of PacifiCorp.

**C. Fish Passage and Protection – There are no Mandatory Fish Passage Prescriptions for upstream and downstream passage of anadromous and catadromous fish, or riverine fisheries issued by Resource Agencies after December 31, 1986 - The Facility is in compliance with Resource Agency Recommendations for riverine fish protection through the requirement of habitat restoration for specified species.**

**FACILITY PASSES.**

#### **2.4 Criteria D - Watershed Protection:**

*Goal: Sufficient action has been taken to protect, mitigate and enhance environmental conditions in the watershed.*

*Standard: A certified facility must be in compliance with resource agency recommendations and FERC license terms regarding watershed protection, mitigation or enhancement. These may cover issues such as shoreline buffer zones, wildlife habitat protection, wetlands protection, erosion control, etc. The Watershed Protection Criterion was substantially revised in 2004. The revised criterion is designed to reward projects with an extra three years of certification that have: a buffer zone extending 200 feet from the high water mark; or, an approved watershed enhancement fund that could achieve within the project's watershed the ecological and recreational equivalent of land protection in D.1. and has the agreement of appropriate stakeholders and state and federal resource agencies. A Facility can pass this criterion, but not receive extra years of certification, if it is in compliance with both state and federal resource agencies' recommendations in a license-approved shoreland management plan regarding protection, mitigation or enhancement of shorelands surrounding the project.*

There is not a designated buffer zone extending 200 feet from the high water mark around any of the three impoundments associated with the Bear River Project. The buffer zones included in the Land Management and Buffer Zone and Shoreline Buffer Plans are discussed below.

As specified in the Settlement Agreement, there are a number of funding and study requirements addressing protection of watershed resources. Together, these funds and protection measures provide the ecological and recreational equivalent of land protection typically provided through dedication of a conservation buffer zone. The funds include \$648,000 in one time contributions and up to \$567,000 annually, for the studies and implementation of the aquatic resources restoration measures outlined in Section 3.1 of the Settlement Agreement. These measures include the programs summarized.

*Habitat Restoration Program-* PacifiCorp is contributing \$167,000 (in 2002 dollars escalated by GDPI to payment year funds) annually to implement a Habitat Restoration Plan approved by FERC Orders dated March 22, 2005. The Restoration Plan was developed and the fund established per Article 405 of the project license (Section 3.1.4 of the Settlement Agreement). The ECC selects and implements the activities that are implemented under the Habitat Restoration Program. Any remaining funds not expended in one year may be spent on land and water acquisition pursuant to Section 3.1.4 of the Settlement Agreement. Since the program's inception in 2005, the awarded grant funding has been used as private match dollars to leverage an additional \$1,716,000 in funding for a total of \$2,495,000 spent on conservation projects in the watershed.

*Land and Water Conservation Fund-* PacifiCorp is contributing \$300,000 (in 2002 dollars escalated to funding year dollars by GDPI) annually to implement a Land and Water Acquisition Plan approved by FERC Orders dated March 22, 2005. The purpose of the Land and Water Conservation Fund is to take advantage of opportunities to purchase or lease and manage land and water rights and easements in accordance with Idaho water law and policy to benefit Bonneville cutthroat trout and other fish and wildlife resources. To date, six conservation

easements and Fee Title Preserves have been established for a total of over 370 acres of land placed under protection. An additional 237.5 acres of conservation land purchases held by the IDFG were also partially funded through the Land and Water Conservation Fund.

*Broodstock and Conservation Hatchery Program - This funding program established by PacifiCorp has been presented under Criteria C - Fish Passage and Protection due to its focus on restoration of this native fish species. Nonetheless, it is also mentioned here under Watershed Protection as it may also be viewed as some that enhancement of the broodstock may also be considered an enhancement of the watershed's ecological resources.*

*Creel and Macroinvertebrate Studies- The Creel and Macroinvertebrate studies being conducted under an annual funding of up to \$35,000 annually for seven years have been presented under Criteria A - River Flows as a focus of the program is potential adjustment of water flows based on their ecological impacts/benefits. However the program is also mentioned here as the results of the study will help determine the future recreation flows to be adopted that will best benefit native biological communities.*

In addition to the above noted funding programs, PacifiCorp has contributed \$117,702 to collect water quality data and perform a fish stranding study in the Grace bypass from 2008-2010.

PacifiCorp also an approved Land Management and Buffer Zone Plan for the project in accordance with license Articles 424 and 425 license and Section 3.6 of the Settlement Agreement. The Plan identifies areas designated for "Conservation," including shoreline buffer areas required by the license. In consultation with the ECC, PacifiCorp is establishing the buffers, which are at least 100 feet wide in most places, around Bear River, springs, and the wetland and riparian habitats that adjoin the river, springs, and tributary streams. Project lands designated for conservation are managed to retain and preserve a natural, open space character and to conserve and protect fish, wildlife, scenic, historic, archaeological, and cultural values. In addition to the Soda, Grace, and Oneida developments, PacifiCorp has included lands in the adjacent Last Chance project and the decommissioned Cove development in land management

and buffer zone planning. Collectively, approximately 1,637 acres are included in the Conservation land management classification. Additionally, there is a FERC approved Shoreline Buffer Zone Plan for lands owned by PacifiCorp along the Bear River and the reservoirs as well as wetlands and springs for each of the three developments. The plan for these areas was developed in coordination with the ECC.

As noted in Section 4.0, all resource agencies successfully contacted reported that PacifiCorp has been very supportive in meeting funding obligations and implementing any studies recommended by the ECC dealing with resource protection.

**D. Watershed Protection – A 200 foot designated buffer zone has not been required for dedication to conservation purposes. The Facility is in compliance with an approved watershed enhancement fund that could achieve within the project’s watershed the ecological and recreational equivalent of land protection in D.1, (i.e. a dedicated buffer zone) that has the agreement of appropriate stakeholders and state and federal resource agencies. The facility is also in compliance with state and federal agencies recommendations for a shoreland management plan. - FACILITY PASSES.**

**2.5 Criteria E - Threatened and Endangered Species Protection:**

**Goal:** *The facility does not negatively impact state or federal threatened or endangered species.*

**Standard:** *For threatened and endangered species present in the facility area, the facility owner/operator must either demonstrate that the facility does not negatively affect the species, or demonstrate compliance with the species recovery plan and any requirements for authority to “take” (damage) the species under federal or state laws.*

Impacts to both state and federally listed protected species were investigated by PacifiCorp. In a letter dated April 15, 2002, the USFWS stated that the threatened bald eagle (*Haliaeetus leucocephalus*) occurs in the area of the Soda development, with the potential for occurrence of the threatened Canada lynx (*Lynx canadensis*) and threatened Ute's Ladies' Tresses (*Spiranthes*

*diluvialis*) in the lower Bear River Basin. After completion of Endangered Species Act (ESA) Section 7 consultation by the USFWS on the new project license, bald eagles were federally delisted. Two plant species that, according to the project Environmental Impact Statement, were State listed in 2002 are found in the area: Kelsey's phlox (*Phlox kelseyi*), and red glasswort (*Salicornia rubra*). However, only the red glasswort is currently listed by the Idaho Native Plant Society (as sensitive). Neither species is federally listed.

As a signatory to the Settlement Agreement, the USFWS stated that it anticipated that the operation of the projects, with the provisions of the Agreement, would have no effect on, or is not likely to adversely affect, the bald eagle, nor are adverse impacts anticipated to other listed species. In the project EIS, FERC staff concluded that current and proposed project operations would not affect the bald eagle or any other listed or candidate species. As no federally-listed species are known to occur in the project area, the authority of an incidental taking of a listed species is not required. This conclusion is reflected in ESA Section 7 consultations between USFWS and FERC concerning the new project license, as reported by PacifiCorp.

There are no adopted recovery plans for threatened or endangered species with the potential for occurrence in the Bear River project area. A Recovery Outline for the Contiguous United States Distinct Population Segment of Canada Lynx (*Lynx canadensis*) has been prepared by the USFWS, but it has not been finalized and adopted, based on a review of the USFWS website and as confirmed by an email dated May 11, 2010 from a USFWS representative.

**E. Threatened and Endangered Species Protection – There are no threatened or endangered species or their critical habitat listed under state or federal Endangered Species Acts present in the Facility area. FACILITY PASSES**

## **2.6 Criteria F - Cultural Resource Protection:**

**Goal:** *The facility does not inappropriately impact cultural resources.*

**Standard:** *Cultural resources must be protected either through compliance with FERC license provisions, or, if the project is not FERC regulated, through development of a plan approved by the relevant state, federal, or tribal agency.*

Article 423 of the project license requires PacifiCorp to implement the “Programmatic Agreement Among The Federal Energy Regulatory Commission And The Idaho State Historic Preservation Officer For Managing Historic Properties That May Be Affected By A License Issuing To PacifiCorp For The Continued Operation and Maintenance Of The Soda Project (FERC No. 20), Grace-Cove Project (FERC No. 2401) And Oneida Project (FERC No. 472) In Caribou And Franklin Counties, Idaho,” executed on February 25, 2003. As previously noted, the Soda, Oneida, and Grace facilities are now all licensed under FERC license No. 20.

Consistent with the Programmatic Agreement, PacifiCorp filed a draft Historic Properties Management Plan with FERC on March 29, 2005. The State Historic Preservation Office (SHPO) had comments on the draft that were reconciled in a subsequent draft with which SHPO concurred on July 16, 2007. The final Historic Properties Management Plan (HPMP) was approved by FERC Orders dated June 17, 2008. The Programmatic Agreement also requires PacifiCorp to prepare an annual report of activities implemented pursuant to the Historic Properties Management Plan and file it with FERC, SHPO, the Shoshone-Bannock Tribes, and the Bureau of Land Management (BLM). The first report is due by January 22, 2010.

Activities reported as completed between 2006 and 2009 include:

- the Cultural Resource Coordinator has been identified
- cultural resource pedestrian surveys were completed for the four prioritized areas with the results submitted to the Idaho SHPO.

- the required cultural resources training presentation was prepared and provided to all Bear River operational staff. The training instructs these individuals on how to implement the HPMP
- draft materials for the Public Education and Interpretative Program were prepared

The first Annual Report under this program was submitted to the required parties including the FERC on January 22, 2010. Review of this document was reviewed as part of this assessment.

To date, the Reviewer has not received any response to the telephone calls or email sent to the Shoshone-Bannock Tribes.

**F. Cultural Resources – The Facility is in Compliance with all requirements regarding Cultural Resource protection, mitigation or enhancement included in the FERC license - FACILITY PASSES.**

**2.7 Criteria G - Recreation:**

***Goal:** The facility provides free access to the water and accommodates recreational activities on the public's river.*

***Standard:** A certified facility must be in compliance with terms of its FERC license or exemption related to recreational access, accommodation and facilities. If not FERC-regulated, a facility must be in compliance with similar requirements as recommended by resource agencies. A certified facility must also provide the public access to water without fee or charge.*

Per Article 416 of the license, and Section 3.4 of the Settlement Agreement, PacifiCorp was required to prepare a Recreation Management Plan in corporation with the Bureau of Land Management (BLM). A revised Plan was approved by FERC on October 11, 2005. PacifiCorp also provided \$50,000 to the BLM to upgrade two existing campgrounds. Annual payments of



\$10,000 (in 2002 dollars escalated annually by GDPI) to the BLM for management of these campgrounds are ongoing requirements of the license. PacifiCorp also makes annual payments of up to \$3,000 to Caribou County for management of recreational sites at the Alexander reservoir and an additional \$3,000 to Franklin County Sheriff for assistance in the Oneida Canyon (in 2002 dollars escalated annually by GDPI).

In 2005, in accordance with Article 416 of the project license, PacifiCorp improved the put-in and take-out access points in the Grace bypass reach and in the Oneida reach below the powerhouse. Each of the four access points now includes a hand-launch boat ramp, gravel parking area, and portable restroom. PacifiCorp has also made flow information for the Grace bypass and Oneida reaches available through a website and toll-free phone number.

In addition, per Article 418 of the project license, PacifiCorp consulted with the ECC to prepare a Boating Flow Release Plan that was approved by FERC Orders dated August 11, 2005. The Plan centers on the installation of a spill gate in the Grace dam to facilitate whitewater releases required under Article 419. The facility has been releasing the flows pursuant to Article 419 since 2008. Annual whitewater release calendars are prepared in consultation with American White Water and approved by the ECC. Also, PacifiCorp provides free public access to the reservoirs and downstream reaches of the projects.

**G. Recreation – The Facility is in Compliance with all requirements regarding Recreation protection, mitigation or enhancement included in the FERC license and allows access to the reservoir and downstream reaches without fees or charges - FACILITY PASSES**

**2.8 Criteria H - Facilities Recommended for Removal:**

*Goal: To avoid encouraging the retention of facilities which have been considered for removal due to their environmental impacts.*

*Standard: If a resource agency has recommended removal of a dam associated with the facility, certification is not allowed.*

No resource agency has recommended removal of the Soda, Grace or Oneida dams associated with the Bear River Project. The Cove development, which was originally included in the FERC license issued on December 22, 2003, was decommissioned by FERC Order dated May 23, 2006. The dam was subsequently removed, restoring free flowing conditions to a section of the river. As noted by Mr. James Mende of the Idaho Department of Fish and Game, this decision made by PacifiCorp continues to impress the resource agencies charged with the protection of ecological resources of the river.

<p><b>H. Facilities Recommended for Removal – There are no Resource Agency Recommendations for removal of the three dams associated with the Facility - FACILITY PASSES.</b></p>
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### **3.0 RECOMMENDATION**

This application review was conducted by Patricia McIlvaine, Project Manager with Wright-Pierce. My review of PacifiCorp Hydro LLC's application for certification as a "low impact hydropower facility" under the criteria established by the LIHI consisted of the following:

- review of information submitted by the applicant both in the initial application package and in response to document requests and questions raised by me;
- review of additional documents obtained from the FERC on-line database and PacifiCorp's website available for public review; and
- consultation with the resource agency and non-governmental personnel listed in Section 4.0 of this report.

I believe that the Bear River Project is in compliance with all of the criteria required for certification. Their commitment to ensuring compliance with all environmental, recreational and cultural resource obligations specified in the WQC, FERC license and Settlement Agreement is apparent from review of the numerous documents and reports prepared by PacifiCorp and the ECC. All resource agency and non-governmental organizations reached through telephone consultation provided consistent complementary opinions about PacifiCorp's environmental stewardship activities on the Bear River Project.

I believe that their watershed protection and enhancement measures and funding program combined, provide the ecological and recreational equivalent of land protection that would be established under dedication of a 200 foot buffer zone. These funds include \$648,000 in one time contributions and up to \$567,000 annually, for the studies and implementation of the aquatic resources restoration measures outlined in Section 3.1 of the Settlement Agreement.

In summary, I recommend that the Bear River Project be certified as a "low impact hydropower facility" under the criteria established by the LIHI. Pursuant to Criteria D.2, I also believe that they appear to have demonstrated development of, and compliance with, a watershed enhancement program that qualifies this Project to receive an additional three years of certification.

#### 4.0 RECORD OF COMMUNICATIONS

This section documents the contacts made with resource agencies, other interested parties and the applicant during the review of this application. Attempts were made to contact all members of the Environmental Coordinating Committee. A summary of the comments are included. Where the communications were by email, a copy of the email is contained in Appendix B. No letters were received by the LIHI commenting on this certification application. The table below lists those entities that were contacted several times by telephone and email, but could not be reached and no return calls or emails were received.

Entity / Individual	Contact Information	Dates of Contact Attempts
Shoshone-Bannock Tribes Mr. Hunter Osborne	208-478-3743 <a href="mailto:hosborne@shoshonebannocktribes.com">hosborne@shoshonebannocktribes.com</a>	4/15, 4/19/10 calls 4/19/10 email
Idaho Department of Environmental Quality Mr. Lynn Van Every	208-236-6160 <a href="mailto:lvanevery@deq.state.id.us">lvanevery@deq.state.id.us</a>	4/13, 4/15, 4/19/10 calls 4/19/10 email
US Fish and Wildlife Service Ms. Lori Nordstrom	<a href="mailto:Lori_nordstrom@fws.gov">Lori_nordstrom@fws.gov</a>	4/28/10 and 5/11/10 emails
Center for Biological Diversity Mr. Noah Greenwald	<a href="mailto:ngreenwald@biologicaldiversity.org">ngreenwald@biologicaldiversity.org</a>	4/28/10 and 5/11/10 emails

The last two contacts were made to confirm whether or not a final Recovery Plan has been adopted for the Canada Lynx. Late on May 11, 2010 an email was received from Shawn Sartoris of the USF&WS confirming that a Recovery Plan for the Canada Lynx has not yet been adopted.

If any of the individuals listed above respond following submission of this Report to LIHI, copies of those responses will be immediately provided to the LIHI Board of Directors.

**Communications Made**

Date of Communication	Emails dated 4/7, 4/8 and 4/12, 2010 Telephone call 4/21/10
Application Reviewer	Patricia McIlvaine
Persons Contacted	PacifiCorp Hydro LLC <ul style="list-style-type: none"> <li>• Mr. Randy Landolt, Managing Director, Hydro Resources</li> <li>• Mr. Mark Stenberg, Hydro License Program Manager, Idaho</li> <li>• Mr. Mike Ichisaka, Hydro Resources Staff</li> </ul> Telephone consultation on 4/21/10 was made with Mark Stenberg.
Telephone and/or email address	<a href="mailto:Randy.landolt@pacificorp.com">Randy.landolt@pacificorp.com</a> <a href="mailto:Mark.Stenberg@pacificorp.com">Mark.Stenberg@pacificorp.com</a> <a href="mailto:Mike.Ichisaka@acificorp.com">Mike.Ichisaka@acificorp.com</a>
Appendix B contains a copy of emails sent to and received from PacifiCorp representatives. Inquiries were made of PacifiCorp regarding availability of the 2009 Annual Project Status Report, confirmation of the agreement with the Idaho Department of Fish and Game regarding funding for the Broodstock and Conservation Hatchery required under FERC Article 404 and the need for FERC approval of discontinuation of the diversion from Kackley Springs to the Bear River. The report and written agreements were provided. PacifiCorp's response indicated that only ECC approval, and not FERC approval, was needed for the Kackley Springs modification. PacifiCorp also promptly responded that participation is strictly voluntary on behalf of the ECC members in response to the inquiry regarding limited participation by several members. Mark Stenberg provided a copy of the January 2010 cultural resources status report on 4/21/10.	

Date of Communication	Telephone call on 04/13/10
Application Reviewer	Patricia McIlvaine
Person Contacted	Mr. Arn Berglund Resource Coordinator/Fisheries Biologist US Bureau of Land Management
Telephone and email address	208-524-7509 / Arn.Berglund@blm.gov
<p>Mr. Berglund reported that the Bureau of Land Management is one of the largest land owners in the region and as such, has interface with a number of western dam projects. He reported that PacifiCorp at the Bear River Project has been a very "good neighbor". He stated that PacifiCorp has been very instrumental in providing public access across PacifiCorp property and to the free-flowing sections of the Bear River. He also complemented the applicant's efforts on the Bonneville Cutthroat Trout enhancement program and is supportive of their recreational boating releases. He stated that the area is important to the Bald Eagle and many other raptors, as well as several species of unique plants, such as the Box Elder, along with numerous native mammals. He is also pleased with the studies being pursued for possible installation of a fish ladder for the Oneida Narrows for the Bonneville Cutthroat Trout. He stated that in his opinion, "for the most part, PacifiCorp does everything they can do" to support the ecological preservation and enhancement efforts recommended by the ECC".</p>	

Date of Communication	Telephone call on 04/13/10
Application Reviewer	Patricia McIlvaine
Person Contacted	Mr. James Mende, Environmental Staff Biologist Idaho Department of Fish and Game
Telephone and email address	208-232-4703 / jmende@idfg.idaho.gov
<p>Mr. Mende was involved at the beginning of the re-licensing process, calling it an "epic event" which lasted 12 years. At first, there were a number of hurdles and some slowness to the process. However, once PacifiCorp elected to initiate the Settlement Process, the activities moved much quicker. He stated that PacifiCorp has invested a substantial amount of money for a substantial period of time through the agreements reached. He believes they have and continue to demonstrate "the highest level of environmental stewardship" on the project. They have met all commitments, and are open minded to the ideas of the ECC, describing them as a "good partner". He stated that he, along with many others involved in resource protection, continue to be impressed by their removal of the Cove project in order to open a section of the river.</p>	

Date of Communication	Telephone call on 04/13/10
Application Reviewer	Patricia McIlvaine
Person Contacted	Mr. Kevin Lewis Conservation Director Idaho Rivers United
Telephone and email address	208-343-7481 / kevin@idahorivers.org
<p>Mr. Lewis stated he was very happy with the conditions of the Settlement Agreement and PacifiCorp's dedication to fulfilling their commitments. He commented that PacifiCorp has invested "millions of dollars" in environmental protection programs and has a very good attitude in this regard. He is especially happy with the effort expended on the ECC. Although he does not make every meeting, he is active in reviewing all ECC material and voting on decisions before by the ECC. He commented that he is pleased to see that PacifiCorp is supportive in the resource agencies' "fight against" the new hydropower developer proposing a facility downstream of the Bear River Project on the Bear River.</p>	

Date of Communication	Telephone call on 04/15/10
Application Reviewer	Patricia McIlvaine
Person Contacted	Mr. Kevin Colburn (ECC alternate) American Whitewater
Telephone	801-424-4244 (office); 406-543-1802 (cell)
<p>Mr. Colburn is the alternate to Charlie Vincent on the ECC and has been active on the ECC. His organization's primary interest is the flow regime to be established for recreational boaters. The flow regime being restored to the bypass reach is still undergoing a three-year test period. He stated he was impressed by the apparent dedication by PacifiCorp of a full-time coordinator to the ECC activities and commitments, and that working with PacifiCorp has gone very well so far. He is happy with the reporting and negotiation activities that have occurred to date, as well as the dispensing of funding as required by the settlement Agreement. He was especially pleased with the removal of the Cove dam which opened additional recreational waters for the public.</p>	

Date of Communication	Telephone call on 04/15/10
Application Reviewer	Patricia McIlvaine
Person Contacted	Mr. Marv Hoyt Idaho Director Greater Yellowstone Coalition
Telephone and email address	208-522-7927 / mhoyt@greateryellowstone.org
<p>Mr. Hoyt has been involved in the re-licensing process for Bear River since 1996 through the signing of the settlement Agreement and still participates on the ECC. He stated that PacifiCorp is very responsive to questions and recommendations raised through the ECC, and that they send two to four individuals to every meeting. In his opinion, they go beyond what he expected to ensure that all commitments established by the Settlement agreement are met.</p>	

Date of Communication	Initial telephone calls on 04/13 and 04/15/10. Discussion on 04/19/10
Application Reviewer	Patricia McIlvaine
Person Contacted	Mr. Jim Capurso Fisheries Biologist U.S. Forest Service
Telephone and email address	208-557-5780 / jcapurso@fs.fed.us
<p>Mr. Capurso and other staff members in his office serve as the lead negotiators for the Forest Service in this region, and as such, have extensive experience dealing with FERC licensing of hydropower projects. Since initiation of the Settlement Agreement approach, he has been very pleased with PacifiCorp's over all management of the environmental and recreational issues. In his opinion, the only "downside" of the Agreement as it stands today, is the planned whitewater releases that have been negotiated, and that are now under study for a three year period. His concern is that these rapidly changing flows are unnatural and can have negative impacts to the ecology of the river. He recognizes however that these are part of the Settlement Agreement and therefore PacifiCorp is obligated to proceed with the program. Mr. Capurso felt that the whitewater organizations "came in at the last minute and expressed no recognition or concern over the potential for such impacts". He did say that the monitoring that is being done through 2011 will be reviewed by the ECC and that there will be an opportunity to re-examine the issue once those studies are completed. He is hopeful that if negative impacts are found, that the re-negotiation would result in a flow regime that would be less stressful to the environment. In summary, Mr. Capurso stated he would support certification of the Bear River Project as a low-impact hydropower facility.</p>	



Date of Communication	Initial telephone calls on 04/13 and 04/19/10 Discussion on 4/19/10
Application Reviewer	Patricia McIlvaine
Person Contacted	Ms. Sandy Oriena U.S. Fish and Wildlife Service
Telephone	208-237-6232
Ms. Oriena has replaced Damien Miller, who was formerly very involved with the Bear River Project and was a member of the ECC. As she has not been involved with the Project, she recommended that I contact Mr. Jim Esch at 208-378-5099 who has served as ECC alternate to Mr. Miller.	

Date of Communication	Initial telephone calls on 04/13 and 4/15/10 Discussion on 4/19/10
Application Reviewer	Patricia McIlvaine
Person Contacted	Ms. Susan Rosebrough Planner U.S. National Park Service (NPS)
Telephone and email address	206-220-4121 / susan_rosebrough@nps.gov
Ms. Rosebrough stated she was not personally involved in the Settlement Agreement. She has also not been active on the ECC. The NPS's key area of interest is recreational water releases. She recommended contacting Mr. Dan Miller, of NPS, River and Trails Program at 360-816-6232 who is active on the ECC.	

Date of Communication	Initial telephone calls on 04/19/10 Discussion on 4/22/10
Application Reviewer	Patricia McIlvaine
Person Contacted	Mr. Jim Esch U.S. Fish and Wildlife Service
Telephone	208-378-5099
Mr. Esch stated that he has not been personally involved with the Bear River project. He did state that in past discussions with Damien Miller who was the USFWS ECC representative, that Mr. Miller had been pleased with PacifiCorp's performance on their environmental programs and commitments at the Bear River Project. Mr. Esch could not answer my question on the status of the recovery plan for the Canada Lynx but suggested the information would be available on the USFWS website. He invited me to call him back if additional information is needed.	

Date of Communication	Initial telephone calls on 04/13, 4/15 and 4/19/10. Email sent 4/19/10 Discussion on 4/26/10
Application Reviewer	Patricia McIlvaine
Person Contacted	Mr. Warren Colyer Project Manager Idaho Council of Trout Unlimited
Telephone and email address	435-753-3132 / wcolyer@tu.org
<p>Mr. Colyer reported that PacifiCorp has been the major partner in funding towards fisheries restoration projects of the Bear River. Although the various members of the ECC, including PacifiCorp, occasionally have differing opinions on use of funds for the various resource projects, PacifiCorp has been instrumental in bringing such differences to an agreeable resolution for which all ECC members can adopt. He stated that his organization originally wanted the Bear River Lake to be included in the area covered by the Settlement Agreement, but it was not included. He stated that in the future, inclusion of the Lake may be reconsidered. Nonetheless, he is pleased overall with PacifiCorp's actions to date. He feels that the company works hard to balance the interests of the various resource protection entities and the company's desire to generate economical power.</p>	

Date of Communication	Initial telephone calls on 4/19 and 4/22/10. Discussion on 4/26/10
Application Reviewer	Patricia McIlvaine
Person Contacted	Mr. Dan Miller National Park Service River and Trails Program
Telephone	360-816-6232
<p>Mr. Miller stated his primary area of interest is recreational use of the project lands and waters. He is pleased with the current studies dealing with recreational white-water flows. He reported that PacifiCorp has been "good to work with" and has provided study reports and other documents to the ECC in a timely fashion. They appear to work well with the various stakeholders involved with the project.</p>	

Date of Communication	4/13, 4/15, 4/19/10 calls 4/19/10 email sent 5/10/10 email response received
Application Reviewer	Patricia McIlvaine
Person Contacted	Ms. Mary Lucachick Water Recreation Analyst Idaho Department of Parks and Recreation
Telephone	208-334-4180 ext 2482 <a href="mailto:mlucachi@idpr.state.id.us">mlucachi@idpr.state.id.us</a>
An email was received on May 10 <sup>th</sup> , 2010 from Rick Just, Chief of Planning of the Idaho Department of Parks and Recreation, in response to my email to M. Lucachick informing me that Ms. Lucachick is no longer with the Department. Mr. Garth Taylor was identified as the individual now responsible for the Bear River Project for the Department.	

Date of Communication	5/11/10 call and email sent
Application Reviewer	Patricia McIlvaine
Person Contacted	Mr. Garth Taylor Idaho Department of Parks and Recreation
Telephone	208-525-7121
Both an email and call were made to reach Mr. Garth Taylor. The receptionist at the Department identified that Mr. Taylor would not be back in his office until May 13, 2010, at which time a follow-up call will be made.	

**APPENDIX A**

**AGENCY CORRESPONDENCE REFERENCED IN THIS  
REVIEW DOCUMENT**

UNITED STATES OF AMERICA 110 FERC ¶62,206  
FEDERAL ENERGY REGULATORY COMMISSION

PacifiCorp

Project No. 20-038

ORDER GRANTING TEMPORARY VARIANCE TO MINIMUM FLOW  
REQUIREMENTS UNDER ARTICLE 408

(Issued March 03, 2005)

On December 12, 2004, PacifiCorp (licensee) filed an application for a temporary variance to the minimum flow requirements under article 408 of the license for the Bear River Project (FERC No. 20).<sup>1</sup> Article 408 (b) requires the licensee to maintain, from the Grace bypassed reach, a year-round minimum flow of 80 cubic feet per second (cfs) or inflow, whichever is less, in addition to current leakage from Grace dam. The project is located on the Bear River in Caribou and Franklin Counties, Idaho.

LICENSEE'S VARIANCE REQUEST

The parties to the Bear River Settlement Agreement (Agreement), which include the licensee, U.S. Fish and Wildlife Service, U.S. Bureau of Land Management, National Park Service, U.S. Forest Service, Shoshone-Bannock Tribes, Idaho Department of Environmental Quality, Idaho Department of Fish and Game, Idaho Department of Parks and Recreation, Idaho Council of Trout Unlimited, Idaho Rivers United, Greater Yellowstone Coalition, and American Whitewater are currently executing an amendment to the Agreement which involves decommissioning the Cove development. The Cove development is one of four developments which comprise the Bear River Project.

The parties are developing an amendment to the Agreement which will specifically define required actions and measures for decommissioning the Cove development. The parties expect to file an amendment application with the Commission in May 2005 requesting that the Commission order the decommissioning of the Cove development and permanently amend article 408(b) to reduce the minimum flow requirement from 80 cfs to the lower of 63 cfs or inflow, in addition to current leakage from Grace dam.

The licensee and the settlement parties request in this application that a temporary amendment to article 408 be given upon the Commission's receipt of the amendment application (to be filed with the Commission by May 2005) that will allow the minimum flow requirement to be reduced during the time that the Commission is conducting its analysis to reach a decision on the amendment application. The temporary amendment

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<sup>1</sup> 105 FERC ¶ 62,207.

will be necessary to permit the settlement parties to conduct aquatic habitat assessments, beginning in May 2005.

In the event that the Commission does not order the decommissioning of the Cove development, or the decommissioning does not proceed due to other circumstances, the licensee indicates the minimum flow requirement at Grace dam would return to that required by the license order and the Agreement, and the value of the minimum flow reduction for the period from the Commission's receipt of the amendment application on the Cove development through the cessation of project decommissioning would be reimbursed by the licensee to the parties to be used as mitigation funding.

## PUBLIC NOTICE

On January 4, 2005, a public notice was issued by the Commission requesting comments on the application. The deadline for filing comments or motions was February 7, 2005. By letter dated January 25, 2005, the licensee and the parties to the Agreement indicated their continued support of the amendment request. By letter dated January 31, 2005, the Department of the Interior indicated it had no comments to offer.

## DISCUSSION

The licensee and the parties to the Agreement request that a temporary variance to article 408(b) be in effect from the time the licensee files an amendment request to decommission the Cove development through the Commission's processing of that amendment application.

Granting the request will temporarily reduce the minimum flow below Grace dam and allow the licensee to conduct aquatic habitat assessments during 2005. Since the parties indicate they will request that this minimum flow reduction be made permanent as part of the Cove decommissioning application, starting the initial assessments in 2005 would be beneficial to use as a comparison for future years. The temporary variance should only go into effect when the licensee actually files an amendment application regarding the decommissioning of the Cove development.

The licensee's request for a temporary variance to article 408(b) is in the public interest and should, therefore, be approved.

### The Director orders:

(A) Upon the date of the licensee filing an amendment application requesting approval to decommission the Cove development of the Bear River Project (FERC No. 20), article 408(b) is amended to require the licensee to maintain, from the Grace bypassed reach, a year-round minimum flow of 63 cubic feet per second, or inflow, in

Project No. 20-038

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addition to current leakage from Grace dam. This temporary variance shall remain in effect pending further order of the Commission.

(B) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 CFR § 385.713.

George H. Taylor  
Chief, Biological Resources Branch  
Division of Hydropower Administration  
and Compliance

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

PacifiCorp Energy

Project No. 20-080

ORDER GRANTING EXTENSION OF TIME  
FOR WHITEWATER BOATING FLOWS PURSUANT TO ARTICLE 419

(Issued October 30, 2007)

PacifiCorp Energy, licensee for the Bear River Hydroelectric Project No. 20,<sup>1</sup> has requested a one-year extension of time to comply with the release of whitewater boating flows pursuant to article 419 of the license and the Order Approving Implementation Plan Pursuant to Article 401, issued December 13, 2004.<sup>2</sup> The project is located on the Bear River in Caribou and Franklin Counties, Idaho.

The Implementation Plan required by article 401 established PacifiCorp's schedule to meet the requirements of several license articles, including articles 418 and 419. Article 418 required the licensee to develop a plan to release whitewater boating flows from the Grace Dam. Included in the plan were necessary calculations and analyses needed to demonstrate that the facilities have sufficient capacity to release the maximum flow provided for in article 419. Article 419 required the licensee to discharge whitewater boating flows between April 1 and July 15 of each year or in accordance with an approved schedule as determined by the Implementation Plan required under article 401.

On August 11, 2005, the Commission issued the Order Modifying and Approving the Flow Release Plan, pursuant to article 418 and 419, which established a deadline for spill gate installation of April 1, 2007, to facilitate the whitewater release required under article 419.<sup>3</sup> Whitewater flow releases were scheduled to begin one year from the spill gate installation (April 1, 2008).

On March 30, 2007, an unpublished Order Granting Extension of Time to Install Spill Gate was issued extending the deadline for the licensee to install the spill gate until April 1, 2008. The extension was requested due to the licensee requiring more time to

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<sup>1</sup> See 105 FERC ¶ 62,207.

<sup>2</sup> See 109 FERC ¶ 62,184.

<sup>3</sup> See 112 FERC ¶ 62,128.



Project No. 20-080

- 2 -

complete the ramp rate determination, spill gate design, and installation processes. The request to release whitewater flows should be extended until April 1, 2009 to allow for a one-year time frame from the scheduled spill gate installation.

The reason advanced by the licensee in support of the requested extension of time is reasonable and justifies the extension.

The Director orders:

(A) The deadline for PacifiCorp to release of whitewater boating flows for the Bear River Project, FERC Project No. 20, pursuant to article 419, is extended to April 1, 2009.

(B) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. §385.713.

Jade Alvey  
Environmental Biologist  
Division of Hydropower  
Administration and Compliance

124 FERC ¶ 62,144  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

PacifiCorp

Project No. 20 - 082

ORDER MODIFYING AND APPROVING SUSPENSION OF FISH STRANDING  
MINIMIZATION PLAN UNDER ARTICLE 409

(Issued August 22, 2008)

On March 28, 2008, PacifiCorp (licensee) filed a request to suspend its Fish Stranding Minimization Plan pursuant to Article 409 of the Order Approving Settlement Agreement and Issuing New License,<sup>1</sup> issued December 22, 2003, and the March 7, 2005 Order Modifying and Approving Fish Stranding Minimization Plan<sup>2</sup> for the Bear River Hydroelectric Project. The project consists of the Soda, Grace, and Oneida developments and is located on the Bear River in Caribou and Franklin Counties, in southeastern Idaho.

BACKGROUND AND LICENSE REQUIREMENTS

License Article 409 required the licensee to file, for Commission approval, a plan to minimize fish stranding resulting from the operation of the project developments prepared in consultation with the Environmental Coordination Committee (ECC).<sup>3</sup> The objective of the licensee's original plan filed under Article 409 was to address potential fish stranding in Black Canyon as a result of scheduled whitewater boating flows beginning in 2008.

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<sup>1</sup> 105 FERC & 62,207 (2003)

<sup>2</sup> 110 FERC & 62,214 (2005)

<sup>3</sup> The ECC is comprised of individuals from the U.S. Fish and Wildlife Service (FWS), U.S. Bureau of Land Management (BLM), National Park Service (NPS), Idaho Department of Fish and Game (IDFG), Idaho Department of Environmental Quality (IDEQ), Idaho Department of Parks and Recreation (IDPR), Idaho Rivers United (Idaho RU), Idaho Council of Trout Unlimited (Idaho TU), Greater Yellowstone Coalition (Coalition), and American Whitewater (AW).

Project No. 20-082

2

## LICENSEE'S PLAN

In lieu of their plan under Article 409, the licensee plans to implement a three-year Black Canyon Fish Stranding Study (Study) to quantify fish stranding related to implementation of whitewater boating flows under Article 419 in combination with determining feasible ramping rates. The licensee states that Article 419 requires that whitewater boating flows comply with ramping rates specified in Article 412; however, Article 412 provides no ramping rates for whitewater boating flows whereas Settlement Agreement Section 3.4.4 states that the ECC will determine feasible ramp rates during whitewater boating flows. As a result, the licensee's proposed Study would estimate the effects of three alternative down-ramp rates on fish stranding from 2008 to 2010. Study results along with findings from Article 407's six-year Black Canyon Monitoring Study would be used to identify a suitable down-ramp rate with consideration of the effects to aquatic resources. Depending on Study results, the ECC and the licensee would request that the plan under Article 409 either be reinstated or that the requirements under Article 409 and their associated plan be eliminated.

The objective of the licensee's proposed Study would be to quantify the mean number of fish stranded at individual survey plots as well as estimate the total area vulnerable to fish stranding in three separate study reaches in the 6.2-mile-long Black Canyon. The Study would test the following hypothesis: (1) fish stranding for respective survey sites in study years 2008, 2009 and 2010 will be similar for the three ramping rates regulating flows from Grace Dam; (2) fish stranding will not vary over time in a single year within a respective sample site; and (3) the number of fish stranded will not change under different whitewater release flows (800 to 1500 cubic feet per second).

Initially, the Study would characterize the varial zone<sup>4</sup> with respect to fish stranding susceptibility based on slope, substrate composition, vegetation density and presence of depressions or pockets. Areas vulnerable to fish stranding would be mapped during the first whitewater release in 2008. The total area susceptible to fish stranding in the 6.2-mile-long Black Canyon would be quantified through a stranding area reconnaissance in the first year of study. The reconnaissance study would provide a perspective on the percentage of varial zone susceptible to stranding as well as provide a reasonable basis for estimating the total stranding in the study area. The total stranding

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<sup>4</sup> The area periodically inundated between the base flow and the peak flow wetted perimeter is referred to as the varial zone.

area, when combined with the stranded fish densities, would provide a reasonable basis for estimating the magnitude of stranding throughout the Black Canyon by study reach. The reconnaissance study would occur during or prior to, the first whitewater release in 2008 near the higher end of the whitewater flow range.

Five separate study plots would be investigated. The plots would be selected by the ECC based on representative and typical stranding conditions in each reach and likelihood of stranding. River stage height would be measured at 15-minute intervals in the respective river reaches. Staff gages would also be used at study plots to identify critical flow or stage, below which stranding may occur in a given study plot. Fish stranding surveys would occur on three whitewater boating flow events annually. These surveys would commence in 2008 after the completion of the reconnaissance study and the determination and marking of the survey plots. The three surveys would be distributed seasonally over the three-month period (April 15 to July 15) in years 2008, 2009 and 2010 for the sixteen scheduled whitewater releases. During a test, survey plots would be visually assessed for stranded fish during the downramping from the peak flows during the whitewater release event.

The specific tests and analysis would be determined after the data have been evaluated to meet the assumptions required by different methods. The licensee's plan discusses the number of study sites and replicates needed to test for differences between ramp rates and the statistical approach to data analysis planned for the survey. The initial analysis would screen the data to determine which statistical tests are appropriate. Statistical endpoints would include variables related to the total number of fish stranded. The statistical analyses would test the aforementioned hypotheses.

The licensee plans to prepare annual study reports for that years' stranding data for 2008 and 2009 with a final data analysis report in 2010. The reports would be completed by November of the respective year. The 2008 and 2009 reports would provide the raw counts from the stranding plots and the 2008 report would also include the estimates of total stranding area produced earlier in that year. The 2010 final report would include stranding counts adjusted by population abundance information from the Study data and the completed data analysis to address the associated hypotheses.

## AGENCY CONSULTATION

Article 409 requires the licensee to prepare the plan in consultation with the ECC. The licensee's filing included meeting minutes from the January 17, 2008 ECC meeting.

Project No. 20-082

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The licensee's proposed three-year Study plan was approved by the ECC with the stipulation that the Study include an annual review of results.

## DISCUSSION AND CONCLUSIONS

Although the licensee's proposed plan focuses on identifying feasible ramping rates during whitewater boating flow releases, it also addresses fish stranding as a result of the whitewater releases as was required and planned under Article 409. The licensee plans to prepare annual summary reports and a final report following completion of their study in 2010. In order to be apprised of the Study's final results; the licensee should file their Final Black Canyon Fish Stranding Study Report with the Commission by February 1, 2011. The report should include the study results from all three years of monitoring; including any recommendations or proposed changes to project operations, whitewater boating flow release protocols, and a determination if the licensee plans to reinstate their plan under Article 409 or discontinue their plan. The report should be prepared in consultation with the ECC. The licensee should allow the ECC 30 days to comment on the report before filing with the Commission. The report should include documentation of ECC consultation and the licensee's response to any ECC comments and recommendations.

The licensee's proposed three-year Black Canyon Fish Stranding Study should assist in quantifying fish stranding related to implementation of whitewater boating flow releases and determining feasible ramping rates for future whitewater releases. Additionally, the licensee's participation in the ECC should provide the flexibility necessary to determine any additional study needs or modifications to ensure the successful implementation of their proposed Study and associated objectives.

The licensee's proposed plan and request to suspend their plan under Article 409 is acceptable and as modified, should be approved.

### The Director orders:

(A) The three-year Black Canyon Fish Stranding Study Plan, filed March 28, 2008, and request to suspend their plan under license Article 409 of the December 22, 2003 Order Approving Settlement and Issuing New License and the March 7, 2005 Order Modifying and Approving Fish Stranding Minimization Plan for the Bear River Hydroelectric Project, as modified by paragraph (B), is approved.

Project No. 20-082

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(B) The licensee shall file their Final Black Canyon Fish Stranding Study Report with the Commission by February 1, 2011. The report shall include the study results from all three years of monitoring; including any recommendations or proposed changes to project operations, whitewater boating flow release protocols, and a determination if the licensee plans to reinstate their plan under Article 409 or discontinue the plan. The report shall be prepared in consultation with the ECC. The licensee shall allow the Environmental Coordination Committee (ECC) 30 days to comment on the report before filing with the Commission. The report shall include documentation of ECC consultation and the licensee's response to any ECC comments and recommendations. The Commission reserves the right to require changes to any revised plan.

(C) The licensee shall file an original and seven copies of any filing required by this order with:

The Secretary  
Federal Energy Regulatory Commission  
Mail Code: DHAC, PJ-12.3  
888 First Street, NE  
Washington, DC 20426

(D) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days from the date of issuance of this order, pursuant to 18 CFR § 385.713.

George H. Taylor  
Chief, Biological Resources Branch  
Division of Hydropower Administration  
and Compliance

Document Content(s)

19551726.DOC.....1-5



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

444 Hospital Way #300 • Pocatello, Idaho • 83201

24 July 2009

C.L. "Butch" Otter, Governor  
Toni Hardesty, Director

Mark Stenberg  
PacifiCorp Energy, Grace Hydro Plant  
822 Grace Power Plant Road  
Grace ID 83241

RE: Oneida Hydroelectric Project, FERC No. P-20, Clean Water Act Section 401 Certification.

Dear Mr. Stenberg:

The Idaho Department of Environmental Quality (DEQ) has reviewed "Water Quality Summary 2004-2005 for the Oneida Hydroelectric Project," 31 May 2006, and "Supplemental Report to the May 2006 Water Quality Summary 2004-2005," 26 February, 2009, (hereafter "Reports") submitted on behalf of PacifiCorp by Ecosystems Research Institute of Logan, Utah. The reports are intended to fulfill Section 5 and 6 requirements of the 401 water quality certification issued by DEQ on 23 June 2003. The reports describe the relationship among flow changes and turbidity, and other water quality parameters in Bear River downstream of the Oneida Hydroelectric Project (project). Additionally, at DEQ's request, PacifiCorp provided raw data and filtered data used to compile the reports. DEQ conducted an internal analysis of this data set which included turbidity, flow, stage, and precipitation records from 2004-2005. Finally, you, Conley Baldwin and the consultant team have taken time to meet with Greg Mladenka and me on numerous occasions to discuss operational considerations and license constraints at the project, possible additional data analysis and the reports' conclusions, with a goal of understanding and evaluating the project's contributions to exceedances of State of Idaho Water Quality Standards.

After extensive evaluation of the reports, the 2004-05 data, and much discussion, internally and with PacifiCorp, it is DEQ's opinion that project operations that occurred in compliance with FERC license conditions (Articles 408, 412 and 420) during the study period of 2004-05, the Oneida Hydroelectric Project did not contribute to violations of State of Idaho Water Quality Standards.

In the event that PacifiCorp anticipates operating the project in a manner substantially different than during the 2004-2005 study period PacifiCorp shall consult with IDEQ in advance. Examples of such changes include significant changes to the frequency or magnitude of daily stage changes than those presented in the reports (2004-2005 data). If significant operational changes are planned or occur, DEQ may require further study of water quality effects to determine if operations are causing exceedances of Water Quality Standards.

Section 4 of the 401 water quality certification requires reporting of the preceding water year on an annual basis to DEQ. In addition to the items list in Section 4, the annual report shall include summary statistics for the frequency and magnitude of daily stage changes and downramp.

We appreciate your cooperation in complying with conditions in the Water Quality Certification. If you have any questions or need clarification, please contact me at 208-236-6160.

Sincerely,

Lynn Van Every  
Regional Water Quality Manager

Bruce Olenick, DEQ Regional Administrator





STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

444 Hospital Way, #300 • Pocatello, Idaho 83201 • (208) 236-6160

C.L. "Butch" Otter, Governor  
Toni Hardesty, Director

January 20, 2009

Mr. Mark Stenberg  
PacifiCorp Energy  
License Program Manager – Idaho  
822 Grace Power Plant Road  
Grace ID 83241

RE: Compliance with DEQ's 401 certification condition 1 (a. and b.), Grace/Cove water quality monitoring.

Dear Mr. Stenberg:

In compliance with DEQ's 401 certification for PacifiCorp's Bear River Hydroelectric Projects, PacifiCorp Energy has monitored water quality through Grace/Cove from 2004-2007. DEQ Pocatello Regional office staff have reviewed these data and concluded that PacifiCorp's operation has not contributed to violations of State of Idaho water quality standards. DEQ's 401 certification of June 2003 required PacifiCorps to implement water quality monitoring in this project reach for six (6) years.

Based on the four (4) years of data (2004-07) and our agreed upon need to reallocate those monitoring resources to documenting water quality associated with the whitewater boater flow program in 2008 (and following years) DEQ is relieving PacifiCorp of the last 2 years (2008-2009) of water quality monitoring as required under condition 1 (a. and b.) in the 401 certification.

Should new or additional information suggest that PacifiCorp's ongoing operation of the Grace Project is causing water quality violations, DEQ reserves the right, in consultation with PacifiCorp, to reopen the 401 certification.

Please call me at 236-6160 if you have questions or want to discuss.

Sincerely,

A handwritten signature in black ink, appearing to read "Lynn Van Every".

Lynn Van Every  
Regional Water Quality Manager

Cc: file

## **APPENDIX B**

### **COPIES OF COMMUNICATIONS WITH RESOURCE AGENCIES AND NON-GOVERNMENTAL ORGANIZATIONS**

**Patricia B. McIlvaine**

---

**From:** Ichisaka, Michael [Michael.Ichisaka@PacifiCorp.com]  
**Sent:** Wednesday, April 07, 2010 8:19 PM  
**To:** pbm@wright-pierce.com  
**Cc:** Garrett, Monte  
**Subject:** LIHI certification review request - Bear River

Hi Pat,

I work in PacifiCorp's hydro resources department and I'll try to round up the information that you've requested in your email below.

Regarding #1, thanks for pointing out that the Bear River annual report is linked to the old report. We've fixed the link and you should be able to download the 2009 version as advertized - Sorry about that.

I'm checking on the other questions. Let me know if you need additional information.

Mike Ichisaka  
(503)813-6617

**From:** Patricia B. McIlvaine [mailto:pbm@wright-pierce.com]  
**Sent:** Wednesday, April 07, 2010 11:37 AM  
**To:** Landolt, Randy  
**Subject:** LIHI certification review request - Bear River

Mr. Landolt

I want to introduce myself. I have been retained by the Low Impact Hydropower Institute to be the independent reviewer for your application for LIHI certification for your Bear River project. I have begun my review and have a few questions for you. As I continue my review I may also have some follow-up questions. If you are not the individual I should be coordinating with from PacifiCorp on this project, please let me know who is the correct person.

I am happy to communicate via email or by telephone, which ever is easiest for you. Being that I am on the east coast, I will provide you two alternative numbers to reach me...with the times (East coast times) I am generally reachable at these numbers. Both numbers have an answering machine. The second number is my home, but I often do work from home, in the evenings, when our client's are on the west coast. So please do not hesitate to call me at that number. I wanted to alert you to the fact that it is my home number...in case you reach my answering machine instead of me. If you do, leave me a message and I will call you right back.

East Coast time 8am - 4pm Mon-Thursday - 207-798-3785  
East Coast time 6pm - 8pm Mon- Thursday - 207-688-4236

Following are my current questions:

- 1) The PacifiCorp website (which is excellent by the way) appears to have the 2008 Annual Report linked under the 2009 Annual Report tab. Is the 2009 report available? Please feel free to email it to me if the link cannot be easily corrected. If it is still in draft form,
- 2) On pg 6 of your LIHI application, you discuss the ECC agreement in 2008 to discontinue the diversion from Kackley Springs directly into the Bear River, and that PacifiCorp completed the rerouting work in 2009. Was there any FERC approval Order tied to this agreement and re-routing? If so, could you please provide me the date of that FERC order?
- 3) On pg 16 of your application, you discuss the funding agreement reached with IDFG for the Broodstock and Conservation Hatchery program as required under Article 404 of the FERC license. Is there any formal

4/20/2010

documentation confirming that this agreement has been reached?

Thank you for your time. Please do not hesitate to call me if you have any questions.

Pat McIlvaine

---

**Pat McIlvaine | Project Manager**

**Wright-Pierce | Water, Wastewater & Infrastructure Engineers**  
**[www.wright-pierce.com](http://www.wright-pierce.com)**

99 Main Street | Topsham, ME 04086  
Tel 207.725.8721 x.3785 | Fax 207.729.8414

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**Patricia B. McIlvaine**

---

**From:** Stenberg, Mark [Mark.Stenberg@PacifiCorp.com]  
**Sent:** Thursday, April 08, 2010 10:38 AM  
**To:** Patricia B. McIlvaine  
**Cc:** McCune, Kimberly  
**Subject:** RE: PACifiCorp Bear River Broodstock Agreement

Hi Pat, I'll ask Kim to send you an email when the report is correctly linked on our webpages. Kackley Springs Plan, Article 410 is reported on page 24 of the 2009 Annual Report to FERC. Mark

---

**From:** Patricia B. McIlvaine [mailto:pbm@wright-pierce.com]  
**Sent:** Thursday, April 08, 2010 8:33 AM  
**To:** Stenberg, Mark  
**Subject:** RE: PACifiCorp Bear River Broodstock Agreement

Mark

Thanks for the information. I'll check back on your website for the 2009 report. Email is great...but yes, some documents are just too large!

Thanks

Pat

---

**From:** Stenberg, Mark [mailto:Mark.Stenberg@PacifiCorp.com]  
**Sent:** Thursday, April 08, 2010 10:17 AM  
**To:** pbm@wright-pierce.com  
**Cc:** Ichisaka, Michael; Garrett, Monte  
**Subject:** PACifiCorp Bear River Broodstock Agreement

Hi Pat, Find attached agreement with IDFG for Broodstock development on the Bear River. I just tried to send you a PDF of the annual report and it bounced as it is 16mb. We should have the website version fixed shortly so you can view it there.

On the Kackley Springs project no FERC approval was requested or required, only the stakeholder coordination and approval from the Bear River Hydroelectric Project Environmental Coordination Committee.

IDFG announced at our last ECC meeting that they will likely make the first conservation stocking of the first hatchery Bonneville Cutthroat Trout this fall into Whiskey Creek, a tributary to the Bear River between the Grace and Oneida Hydro Projects.

Mark Stenberg  
PacifiCorp Energy  
License Program Manager – Idaho  
208 547-7305

**Patricia B. McIlvaine**

---

**From:** Stenberg, Mark [Mark.Stenberg@PacifiCorp.com]  
**Sent:** Monday, April 12, 2010 4:09 PM  
**To:** 'Patricia B. McIlvaine'  
**Cc:** Ichisaka, Michael; Garrett, Monte  
**Subject:** RE: ECC Participation

Hi Patricia, its really the organization's choice to participate or not. We try to keep our contacts current and everyone gets meeting announcements, agenda's and notes distributed to them. I know Kevin Lewis of Idaho River's United does weigh in on email decisions, as did the Shoshone-Bannock Tribe on a recent Land and Water Acquisition Fund Conservation Easement purchase. We haven't seen much of the Tribe over the last couple years. I'd have to check our annual report attendance logs but I was thinking that the NPS Seattle office had called in on our Black Canyon Boater Flow discussions. Since you asked, "from my perspective," we don't have a lot of controversy over implementation actions or license compliance right now so folks may be focusing on other priority issues to their organization. You'd have to ask them to be sure.

Mark Stenberg  
Hydro License Program Manager – Idaho  
208 547-7305

---

**From:** Patricia B. McIlvaine [mailto:pbm@wright-pierce.com]  
**Sent:** Monday, April 12, 2010 11:50 AM  
**To:** Stenberg, Mark  
**Subject:** ECC Participation

Mark

One aspect of LIHI's certification review process, as you may know, is my contacting agency and NGO representatives regarding the project under review. I happened to notice that there was no participation at any of the ECC meetings in 2008 or 2009 from the National Park Service, Idaho Rivers United nor the Shoshone-Bannock Tribes, although all three entities have members on the ECC (as well as alternates). From your perspective, is there a specific reason why these organizations have not been attending? Have these agencies been involved during conference calls in these years or "email voting"?

Pat

---

**Pat McIlvaine | Project Manager**

**Wright-Pierce | Water, Wastewater & Infrastructure Engineers**  
[www.wright-pierce.com](http://www.wright-pierce.com)

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Tel 207.725.8721 x.3785 | Fax 207.729.8414

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**Patricia B. McIlvaine**

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**From:** Stenberg, Mark [Mark.Stenberg@PacifiCorp.com]  
**Sent:** Wednesday, April 21, 2010 4:25 PM  
**To:** 'Patricia B. McIlvaine'  
**Attachments:** FERC LTR Annual Report 2010\_1-22\_BR\_2009\_HPMP-Cmplt[1].pdf

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**Patricia B. McIlvaine**

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**From:** Patricia B. McIlvaine [pbm@wright-pierce.com]  
**Sent:** Monday, April 19, 2010 4:32 PM  
**To:** 'wcolyer@tu.org'  
**Subject:** Bear River Project

Dear Mr. Colyer

I am serving as the independent reviewer for the Low Impact Hydropower Institute on PacifiCorp's application for certification of the Bear River Project as a "low impact facility". Part of my review to consult with individuals who are knowledgeable of the project and of its environmental license requirements. I am contacting you as a listed member of the Environmental Coordination Committee. I would like to discuss with you, some of the key information presented in their application, and to determine if there are any issues associated with the Bear River Project regarding compliance with the FERC license, the Settlement Agreement conditions, or other recommendations you believe were made at the time of license renewal or during your involvement on the Environmental Coordinating Committee. I would like to get your perspective on their stewardship policies, timeliness of their actions, etc. related to those issues/resources for which your organization is most interested in seeing protected.

I have tried to reach you several times at 435-753-3132, as well as your cell phone, but unfortunately have not been able to reach you. I would appreciate the opportunity to discuss the project with you. If you believe that you have no specific issues, concerns or comments you wish to share with him, please feel free to let me know that by email if that better suits your needs.

I look forward to hearing from you. I can be reached at 207-798-3785 from 8am to 4pm East Coast time. If you need to reach me later in the day, please feel free to call me at 207-688-4236 until 8pm east cost time.

Thank you

Pat

---

**Pat McIlvaine | Project Manager**

**Wright-Pierce | Water, Wastewater & Infrastructure Engineers**  
[www.wright-pierce.com](http://www.wright-pierce.com)

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Tel 207.725.8721 x.3785 | Fax 207.729.8414

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**Patricia B. McIlvaine**

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**From:** Patricia B. McIlvaine [pbm@wright-pierce.com]  
**Sent:** Monday, April 19, 2010 4:29 PM  
**To:** 'mlucachi@idpr.state.id.us'  
**Subject:** Bear River Project

Dear Ms. Lucachick

I am serving as the independent reviewer for the Low Impact Hydropower Institute on PacifiCorp's application for certification of the Bear River Project as a "low impact facility". Part of my review to consult with individuals who are knowledgeable of the project and of its environmental license requirements. I am contacting you as a listed member of the Environmental Coordination Committee. I would like to discuss with you, some of the key information presented in their application, and to determine if there are any issues associated with the Bear River Project regarding compliance with the FERC license, the Settlement Agreement conditions, or other recommendations you believe were made at the time of license renewal or during your involvement on the Environmental Coordinating Committee. I would like to get your perspective on their stewardship policies, timeliness of their actions, etc. related to those issues/resources for which your organization is most interested in seeing protected.

I have tried to reach you several times at 208-334-4180 but unfortunately have not been able to reach you. I would appreciate the opportunity to discuss the project with you. If you believe that you have no specific issues, concerns or comments you wish to share with him, please feel free to let me know that by email if that better suits your needs.

I look forward to hearing from you. I can be reached at 207-798-3785 from 8am to 4pm East Coast time.

Thank you

Pat

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**Pat McIlvaine | Project Manager**

**Wright-Pierce | Water, Wastewater & Infrastructure Engineers**  
[www.wright-pierce.com](http://www.wright-pierce.com)

99 Main Street | Topsham, ME 04086  
Tel 207.725.8721 x.3785 | Fax 207.729.8414

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**Patricia B. McIlvaine**

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**From:** Patricia B. McIlvaine [pbm@wright-pierce.com]  
**Sent:** Monday, April 19, 2010 4:27 PM  
**To:** 'lynn.vanevery@deq.idaho.gov'  
**Subject:** Bear River Project

Dear Mr. Van Every

I am serving as the independent reviewer for the Low Impact Hydropower Institute on PacifiCorp's application for certification of the Bear River Project as a "low impact facility". Part of my review to consult with individuals who are knowledgeable of the project and of its environmental license requirements. I am contacting you as a listed member of the Environmental Coordination Committee. I would like to discuss with you, some of the key information presented in their application, and to determine if there are any issues associated with the Bear River Project regarding compliance with the FERC license, the Settlement Agreement conditions, or other recommendations you believe were made at the time of license renewal or during your involvement on the Environmental Coordinating Committee. I would like to get your perspective on their stewardship policies, timeliness of their actions, etc. related to those issues/resources for which your organization is most interested in seeing protected.

I have tried to reach you several times at 208-236-6160 but unfortunately have not been able to reach you. I would appreciate the opportunity to discuss the project with you. If you believe that you have no specific issues, concerns or comments you wish to share with him, please feel free to let me know that by email if that better suits your needs.

I look forward to hearing from you. I can be reached at 207-798-3785 from 8am to 4pm East Coast time. You can also try me at 208-688-4236.

Thank you

Pat

---

**Pat McIlvaine | Project Manager**

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**Patricia B. McIlvaine**

---

**From:** Patricia B. McIlvaine [pbm@wright-pierce.com]  
**Sent:** Monday, April 19, 2010 4:23 PM  
**To:** 'hosborne@shoshonebannocktribes.com'  
**Subject:** Bear River Project

Dear Mr. Osborne

I am serving as the independent reviewer for the Low Impact Hydropower Institute on PacifiCorp's application for certification of the Bear River Project as a "low impact facility". Part of my review to consult with individuals who are knowledgeable of the project and of its environmental license requirements. I am contacting you as a listed member of the Environmental Coordination Committee. I would like to discuss with you, some of the key information presented in their application, and to determine if there are any issues associated with the Bear River Project regarding compliance with the FERC license, the Settlement Agreement conditions, or other recommendations you believe were made at the time of license renewal or during your involvement on the Environmental Coordinating Committee. I would like to get your perspective on their stewardship policies, timeliness of their actions, etc. related to those issues/resources for which your organization is most interested in seeing protected.

I have tried to reach you several times at 208-478-3743 but unfortunately have not been able to reach you. I would appreciate the opportunity to discuss the project with you. If you believe that you have no specific issues, concerns or comments you wish to share with him, please feel free to let me know that by email if that better suits your needs.

I look forward to hearing from you. I can be reached at 207-798-3785 from 8am to 4pm East Coast time.

Thank you

Pat

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**Pat McIlvaine | Project Manager**

**Wright-Pierce | Water, Wastewater & Infrastructure Engineers**  
[www.wright-pierce.com](http://www.wright-pierce.com)

99 Main Street | Topsham, ME 04086  
Tel 207.725.8721 x.3785 | Fax 207.729.8414

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**Patricia B. McIlvaine**

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**From:** Patricia B. McIlvaine [pbm@wright-pierce.com]  
**Sent:** Tuesday, May 11, 2010 10:42 AM  
**To:** 'Garth Taylor'  
**Cc:** 'Rick Just'  
**Subject:** RE: Bear River Project

Mr. Taylor:

I will give you a call between 8:30-9:30 am your time this morning to discuss the Bear River project with you. We are looking to complete our review on this project by tomorrow, so hopefully we will be able to connect today. As I did not have a direct number for you, I will use the number listed below for Rick Just (208-914-2480).

Mr. Just:

Thank you for getting back to me on my email. I was on vacation yesterday and didn't get your email until this morning.

Pat McIlvaine

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**From:** Rick Just [mailto:Rick.Just@idpr.idaho.gov]  
**Sent:** Monday, May 10, 2010 9:34 AM  
**To:** pbm@wright-pierce.com  
**Cc:** Garth Taylor  
**Subject:** FW: Bear River Project

Pat, due to budget cuts, Mary Lucachick is no longer working for the Idaho Department of Parks and Recreation. We are currently distributing her workload. Garth Taylor, whom I have copied in on this email, will be handling Bear River Project issues.

Rick Just  
Chief of Planning  
Idaho Department of Parks and Recreation  
<http://www.idahoparks.org>

President  
National Association of Recreation Resource Planners  
[www.narrp.org](http://www.narrp.org)

208-514-2480  
Cell 208-914-4825  
FAX 208-334-3741

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**From:** Mary Lucachick  
**Sent:** Friday, May 07, 2010 10:14 AM  
**To:** Rick Just  
**Subject:** FW: Bear River Project

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**From:** Patricia B. McIlvaine [mailto:pbm@wright-pierce.com]  
**Sent:** Monday, April 19, 2010 2:29 PM  
**To:** Mary Lucachick

5/11/2010

**Subject:** Bear River Project

Dear Ms. Lucachick

I am serving as the independent reviewer for the Low Impact Hydropower Institute on PacifiCorp's application for certification of the Bear River Project as a "low impact facility". Part of my review to consult with individuals who are knowledgeable of the project and of its environmental license requirements. I am contacting you as a listed member of the Environmental Coordination Committee. I would like to discuss with you, some of the key information presented in their application, and to determine if there are any issues associated with the Bear River Project regarding compliance with the FERC license, the Settlement Agreement conditions, or other recommendations you believe were made at the time of license renewal or during your involvement on the Environmental Coordinating Committee. I would like to get your perspective on their stewardship policies, timeliness of their actions, etc. related to those issues/resources for which your organization is most interested in seeing protected.

I have tried to reach you several times at 208-334-4180 but unfortunately have not been able to reach you. I would appreciate the opportunity to discuss the project with you. If you believe that you have no specific issues, concerns or comments you wish to share with him, please feel free to let me know that by email if that better suits your needs.

I look forward to hearing from you. I can be reached at 207-798-3785 from 8am to 4pm East Coast time.

Thank you

Pat

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**Pat McIlvaine | Project Manager**

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**Patricia B. McIlvaine**

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**From:** Patricia B. McIlvaine [pbm@wright-pierce.com]  
**Sent:** Tuesday, May 11, 2010 2:53 PM  
**To:** 'ngreenwald@biologicaldiversity.org'  
**Subject:** Follow-up on Status of Canada Lynx Recovery Plan

Mr. Greenwald

I thought I'd try reaching you again regarding the status of the Recovery Plan for the Canada Lynx. From what I can see from your website, it does not appear that a Recovery Plan has yet been adopted. However, I was hoping to confirm that with you. My initial email has been attached below for your reference.

Thanks for your help on this issue.

Pat McIlvaine

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**From:** Patricia B. McIlvaine [mailto:pbm@wright-pierce.com]  
**Sent:** Wednesday, April 28, 2010 2:45 PM  
**To:** 'ngreenwald@biologicaldiversity.org'  
**Subject:** Status of Canada Lynx Recovery Plan

Mr. Greenwald

I am reviewing the environmental issues and compliance requirements for a hydropower project located on the Bear River in Idaho. My review is for the Low Impact Hydropower Institute from which PacifiCorp is seeking certification as a low-impact facility. Could you please confirm for me whether or not a Recovery Plan for the Canada Lynx has been adopted yet...or is it still in draft form? Review of the Biologicaldiversity website suggests that such a plan is not yet finalized.

Thanks for your help. Please feel free to respond by email or telephone. My direct dial number is 207-798-3785.

Pat McIlvaine

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**Pat McIlvaine | Project Manager**

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**Patricia B. McIlvaine**

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**From:** Patricia B. McIlvaine [pbm@wright-pierce.com]  
**Sent:** Tuesday, May 11, 2010 2:55 PM  
**To:** 'lori\_nordstrom@fws.gov'  
**Subject:** Follow-up on the Canada Lynx Recovery Plan

Ms. Nordstrom

I thought I'd try reaching you again regarding the status of the Recovery Plan for the Canada Lynx. From what I can see from your website, it does not appear that a Recovery Plan has yet been adopted. However, I was hoping to confirm that with you. My initial email has been attached below for your reference.

Thanks for your help on this issue.

Pat McIlvaine

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**From:** Patricia B. McIlvaine [mailto:pbm@wright-pierce.com]  
**Sent:** Wednesday, April 28, 2010 2:43 PM  
**To:** 'lori\_nordstrom@fws.gov'  
**Subject:** Canada Lynx Recovery Plan

Ms. Nordstrom

I am reviewing the environmental issues and compliance requirements for a hydropower project located on the Bear River in Idaho. My review is for the Low Impact Hydropower Institute from which PacifiCorp is seeking certification as a low-impact facility. Could you please confirm for me whether or not a Recovery Plan for the Canada Lynx has been adopted yet...or is it still in draft form? There is a current timetable for when the plan may be adopted? Information on the internet indicates you are the contact for this species for the USFWS.

Thanks for your help. Please feel free to respond by email or telephone. My direct dial number is 207-798-3785.

Pat McIlvaine

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**Pat McIlvaine | Project Manager**

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