

## **PROGRESS REPORT**

### **Progress on the Development of a Final Agreement for the Klamath Hydroelectric Project and Implementation Status of Interim Measures**

**June 16, 2009**

The purpose of this progress report is to update the State Water Resources Control Board, stakeholders, and interested parties on the status of settlement discussions, progress on the development of a final settlement agreement and progress on pertinent legislation relating to the Klamath Hydroelectric Project (FERC Project No. 2082). This progress report also provides an update on the status of interim measures contained in the Agreement in Principle and Interim Conservation Plan for which implementation has already begun.

#### **Introduction**

On November 13, 2008, the United States Department of Interior, the States of California and Oregon, and PacifiCorp executed an Agreement in Principle (AIP) describing the framework for an approach to possible removal of four dams on the Klamath River associated with PacifiCorp's Klamath Hydroelectric Project (Project). Since that time, parties in support of the AIP have been actively engaged in developing the Final Agreement consistent with the AIP. The Final Agreement will be a binding agreement among the parties pertaining to more completely carry out the AIP.

The AIP provides for, and the Final Agreement will contain, measures which will be implemented before dam removal to protect and improve water quality and fisheries in the Klamath River (referred to as AIP Interim Measures). It is anticipated that the AIP Interim Measures, as described in the AIP and more fully detailed in the Final Agreement, will support a comprehensive approach to addressing water quality and fisheries issues in the Klamath basin. It is the intent of the parties that these AIP Interim Measures will ensure compliance with all laws applicable to the Project, including without limitation load allocations that may be assigned to the Project through the Klamath River Total Maximum Daily Load (TMDL) process and other requirements of the Clean Water Act, the Endangered Species Act (ESA), and other applicable regulations, until the time of dam removal.

Also, in November 2008, PacifiCorp completed development of an Interim Conservation Plan (ICP) in consultation with the U.S. Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS), (together, the Services). The ICP identifies interim conservation measures or actions that PacifiCorp is implementing or plans to implement at the Project related to fisheries and water quality protection or enhancement (referred to as ICP Interim Measures). PacifiCorp developed the ICP in consultation with the Services to address the Services' concerns about potential effects of Project operations on listed Coho salmon and sucker species that could occur during the interim period, prior

to reestablishment of fish passage in or through the Project area. On November 12, 2008, the Services confirmed receipt of the ICP, and in doing so, noted that the ICP contains an important set of measures, which if fully implemented will reduce and help minimize the effects of interim Project operations on listed Coho salmon and sucker species (NMFS and FWS 2008).

Some of the AIP Interim Measures and ICP Interim Measures are now being implemented, others will be implemented upon execution of the Final Agreement, and other measures will go into effect upon a determination by the Secretary of the Interior in favor of dam removal.

### **Current Status of the Settlement Process and Final Agreement**

The parties to the AIP - the States of California and Oregon, the United States, and PacifiCorp - have been working diligently with an expanded settlement group including the Klamath, Karuk, and Yurok tribes, representatives of environmental organizations, fisherman's organizations, and the irrigation community to develop a Final agreement within the framework of the AIP. These negotiations are inherently complicated, but the change in federal administration has made the negotiations even more difficult because key appointments within the Department of Interior have only recently been confirmed.

Nevertheless, significant progress towards a Final Agreement has been made in the past few months, during which time the parties have met many times to work through the complex issues to be addressed in the Final Agreement. All parties are hopeful that all remaining issues will be resolved soon now that the new federal leadership is in place and can engage in and resolve the remaining policy issues in the Final Agreement.

### **Current Status of the Pertinent Legislative Process**

Oregon Governor Ted Kulongoski and the settlement parties have supported passage of Senate Bill 76, which would establish a \$200 million fund, paid for by PacifiCorp's Oregon and California customers, to cover the cost of removal of the Klamath Dams. The bill enables the Oregon Public Utility Commission to allow PacifiCorp to begin collecting these funds through a customer surcharge over the next ten years (which amounts to an average of \$1.50 per month from residential customers). Senate Bill 76 passed in the Senate on February 17 and was passed by the House on June 12. The Senate and House versions of the bill will be reconciled and sent to Governor Kulongoski, who is expected to sign the bill into law. Throughout the Oregon session, Governor Kulongoski's staff, PacifiCorp, and other settlement parties have worked to address concerns raised by stakeholders and lawmakers regarding potential liability to Oregon taxpayers, and the resulting amendments incorporated in the House version of the bill have strengthened the customer protections in the legislation.

### **Current Status of the CEQA/401 Process**

On February 17, 2009, a diverse group of parties to the AIP, including the federal government and the States, several tribes and non-government organizations, and PacifiCorp made a presentation to the State Water Resources Control Board (SWRCB) on

the status of settlement negotiations. These parties also requested that the SWRCB hold the California Environmental Quality Act (CEQA) process for the California Section 401 water quality certification in abeyance to allow the parties to focus resources and attention on the Final Agreement. On February 21, 2009, SWRCB Executive Director Dorothy Rice responded to this request. In her response, Ms. Rice informed the parties that the SWRCB will accept comments on the SWRCB's CEQA Notice of Preparation (NOP) after the time specified in the NOP. At the same time, Ms. Rice advised the parties that the CEQA process would continue and that the SWRCB would evaluate options to fund the CEQA review process. On May 7, 2009, the SWRCB and PacifiCorp entered into an amendment to their existing CEQA Memorandum of Understanding (MOU) to provide up to \$200,000 to the CEQA consultant to continue CEQA work until execution of the Final Agreement. On May 27, 2009 PacifiCorp issued a task order to the consultant to commence that work.

In addition, on May 6, 2009 PacifiCorp presented to the North Coast Regional Water Quality Control Board its 2009 Plan for Water Quality Management Actions for Copco and Iron Gate Reservoirs. (See attached). This Plan describes a host of studies and measures that PacifiCorp plans to implement within the Project area in 2009 to improve water quality and to inform management decisions at the reservoirs. PacifiCorp is working with the North Coast Regional Water Quality Control Board and parties to the AIP and the Final Agreement to integrate the measures identified in this Plan into the Final Agreement.

### **Current Status of AIP Interim Measures and ICP Interim Measures Implementation**

The summaries below include descriptions of the AIP Interim Measures and ICP Interim Measures for which implementation has already begun pursuant to commitments in the AIP and/or ICP.

#### **J.C. Boyle Reservoir Water Quality (AIP Interim Measure 5)**

This measure provides that, upon signing a Final Agreement, PacifiCorp will study measures to improve water quality in J.C. Boyle reservoir, such as aeration or mixing to improve DO within the reservoir, or other measures such as wetlands development. Implementation of feasible enhancement measures would begin following the Federal Determination<sup>1</sup> as described in the AIP.

Activities conducted on this measure include:

- A feasibility assessment of an aeration or mixing system in J.C. Boyle reservoir is now near completion. The results of the assessment are being documented in a technical report to be issued in later summer 2009.
- Three other study and planning efforts are being conducted in 2009 that are pertinent to J.C. Boyle reservoir water quality, including:

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<sup>1</sup> The Federal Determination means the determination by the United States whether the benefits of Project facilities removal justify the risks, costs, and liabilities associated with facilities removal. The Federal Determination will be made no later than March 31, 2012.

- Basin Water Quality Credit Trading Process
- Constructed Treatment Wetland Pilot Study
- Constructed Treatment Wetland Technical Meetings

These three other activities are being conducted as a part of AIP Interim Measure 11 (Nutrient Reduction Measures) as summarized below. The water quality credit trading and constructed treatment wetland activities are aimed primarily at watershed and inflow management of the large, inflowing loads of nutrients and organic matter to J.C. Boyle reservoir, as well as Copco and Iron Gate reservoirs. These large, inflowing loads are beyond the control of PacifiCorp's Project operations. However, given that water quality conditions in the Project vicinity are largely driven by these large inflowing loads, improvements in watershed and upstream water quality (such as will be expected from implementing TMDLs that are currently being developed by ODEQ) will be essential to achieve water quality improvements in J.C. Boyle reservoir and elsewhere in the Project vicinity.

**Coho Enhancement Fund (AIP Interim Measure 9 and ICP Interim Measure II.F)**

PacifiCorp will provide \$510,000 annually into the Coho Enhancement fund beginning in 2009, for the term of the interim period. NMFS and California Department of Fish and Game (CDFG) will jointly select projects that comply with applicable agency policies, regulations and planning documents relating to salmonid conservation in the Klamath River Basin (i.e., Magnuson-Stevens Reauthorization Act Klamath River Coho Salmon Recovery Plan, NMFS' impending SONCC Coho Salmon Recovery Plan, and CDFG's Recovery strategy for California Coho salmon). PacifiCorp will evaluate and approve the selected projects to insure consistency with applicable license conditions, project selection criteria established between CDFG, NMFS and, and PacifiCorp, and other regulatory requirements. The original AIP and ICP funding commitment was for \$500, 000. NMFS, CDFG, and PacifiCorp recognized that ICP Measure IID, Gravel Augmentation below Iron Gate, was also a Coho Enhancement measure, and would be better served being part of the Coho Enhancement Fund program. Therefore, NMFS, CDFG, and PacifiCorp mutually agreed to increase the fund to \$510,000 and include gravel augmentation in the criteria of prospective project selection,

Activities conducted on this measure include:

- PacifiCorp, NMFS, and the CDFG have executed a letter agreement setting forth the terms for the use and administration of the Coho Enhancement Fund.
- PacifiCorp, NMFS and CDFG have determined that the National Fish and Wildlife Foundation (NFWF) will serve as the Administering Party for the Coho Enhancement Fund. NFWF was selected based on its depth of experience administering similar funds and their recent determination to include the Lower Klamath Basin in their Fresh Water Fish Conservation Keystone Initiative program. NFWF administration of the Coho Fund also creates the potential for additional NFWF matching funds for enhancement projects while also establishing a comprehensive approach to addressing the needs in the lower Klamath basin.

- PacifiCorp and NFWF have executed a final agreement outlining the terms for NFWF's role as the Administering Party. The Coho Enhancement Fund is expected to be fully funded in June 2009 so that projects will be underway this year.
- NMFS and CDFG have identified and prioritized a list of 2009 potential projects that meet Coho Enhancement Fund objectives and selection criteria. CDFG and NMFS are completing the project scope and completing a description of the benefits to Coho salmon. Potential 2009 projects include channel reconstruction, a fish screen, diversion reconstruction, and rearing habitat improvements. These projects will then be funded through NFWF.

### **Iron Gate Turbine Venting (AIP Interim Measure 10 and ICP Interim Measure II.A)**

This measure provides that PacifiCorp will test turbine venting at Iron Gate dam and, if determined to be a successful and viable tool for improving dissolved oxygen (DO) concentrations downstream of Iron Gate dam, shall implement turbine venting on an ongoing basis.

Activities conducted on this measure include:

- In summer-early fall 2008, turbine venting tests at the Iron Gate powerhouse and DO monitoring downstream of Iron Gate dam were conducted. The tests showed that turbine venting resulted in beneficial increases in DO of up to 2 mg/L and 20 percent saturation while still keeping Total Dissolved Gases (TDG) levels below the EPA criterion of 110 percent.
- During 2009, PacifiCorp will implement turbine venting operations and is also planning to install and test a forced air blower at the Iron Gate powerhouse to introduce additional air into the turbine draft tube. Installation of the system should be completed by August 2008. During this test, DO and TDG monitoring downstream of Iron Gate dam also will be conducted.
- During 2009, PacifiCorp plans to develop a standard operating procedure (SOP) for on-going implementation of turbine venting.
- Turbine venting operations for 2009 began on June 11, 2009 when DO monitoring below the Iron Gate powerhouse indicated that DO levels were below 87 percent saturation.

### **Nutrient Reduction Measures (AIP Interim Measure 11)**

This measure provides for PacifiCorp's implementation under a Final Agreement of nutrient reduction measures to improve water quality within Copco and Iron Gate reservoirs, and to address implementation of the Water Quality Control Plan for the North Coast Region (Basin Plan), including Total Maximum Daily Loads (TMDLs).

The large, inflowing loads of nutrients and organic matter from upstream sources (particularly Upper Klamath Lake) are a principal driver of water quality conditions in the Project reservoirs, the Klamath River between the reservoirs, and downstream of Iron Gate dam. These large loads create eutrophic conditions that include blue-green algae (cyanobacteria) blooms in the reservoirs, and extensive periphyton growth in the

river. Therefore, this measure includes activities that address reductions in nutrients and resultant algae production.

Activities conducted on this measure include:

- In January 2009, a document titled "Draft Recommendations for AIP Interim Measure 11: Nutrient Reduction Measures in the Klamath River" was distributed to settlement parties for technical consideration. The document is currently being revised with a focus on:
  - Water quality improvement accounting and tracking program
  - Partnering with other entities on wetland demonstration projects
  - Potential measures to address water quality in the Project reservoirs
  - Potential projects in the lower basin
- PacifiCorp provided comments on the draft TMDL "Implementation Plan" put forth by the Regional Board.
- PacifiCorp met with the Regional Board, EPA, and ODEQ in May to discuss TMDL Implementation plans, a water quality accounting program for nutrient reduction and potential links with these actions and AIP Measure No. 11.
- A series of pertinent study and planning efforts are being conducted in 2009, including:
  - Basin Water Quality Improvement Accounting and Tracking Program
  - Constructed Treatment Wetland Pilot Study
  - Constructed Treatment Wetland Technical Meetings
  - Potential Testing of High-Energy Circulators in Copco Reservoir
  - Curtain Deployment in Iron Gate Reservoir
  - Mechanical Removal of Algae Biomatter from Copco and Iron Gate Reservoirs
  - Tests of Select Treatments for Algae Control

The water quality credit trading and constructed treatment wetland activities are aimed primarily at watershed and inflow management of the large, inflowing loads of nutrients and organic matter to Project reservoirs. These large, inflowing loads are beyond the control of PacifiCorp's Project operations. However, given that water quality conditions in the Project vicinity are mainly driven by these large inflowing loads, improvements in watershed and upstream water quality (such as will be expected from implementing TMDLs that are currently being developed by ODEQ) will be essential to achieve water quality improvements in the Project reservoirs, the Klamath River between the reservoirs, and downstream of Iron Gate dam.

### **Water Quality Monitoring (AIP Interim Measure 12)**

This measure provides that PacifiCorp will fund a water quality monitoring program, including on-going monitoring of cyanobacteria (blue-green algae) and associated toxin. Funding of \$500,000 per year will be provided for this monitoring.

Activities conducted on this measure include:

- A draft water quality monitoring plan was developed in December 2008 and was shared widely among diverse stakeholders including basin Tribes, the U.S. Environmental Protection Agency, the Oregon Department of Environmental Quality, the North Coast Regional Water Quality Control Board.
- Through a collaborative process, federal, state, tribal, and other entities have produced – within a short time frame – a robust and useful plan that will contribute to further understanding of Klamath basin water quality issues and public health monitoring. The Regional Board is currently finalizing the monitoring plan, which should be released shortly.
- The Basic Water Quality Monitoring component includes 24 sampling locations from Link River dam to the Klamath River estuary. Parameters to be measured include temperature, DO, pH, conductivity, phytoplankton, and a suite of nutrients. This sampling began this May and will continue through the remainder of the year.
- The Public Health Monitoring component of the monitoring program began in June and includes 13 public access locations in Copco and Iron Gate reservoirs and the Klamath River for both microcystis and microcystin. Sampling will occur weekly during the peak of the bloom season from June through October (depending on location). In addition, fish tissue samples will be collected in both reservoirs during the peak bloom conditions and mussel samples will be collected below Iron Gate dam during 4 sampling events at 6 Klamath River locations.
- Sampling entities that will implement the 2009 water quality monitoring plan include the Yurok and Karuk tribes, PacifiCorp, and the Bureau of Reclamation.

### **Hatchery Genetics Management Plan (AIP Interim Measure 16 and ICP Interim Measure II.C)**

Under this measure, PacifiCorp will fund the development and implementation of a Hatchery Genetics Management Plan for the Iron Gate Hatchery. CDFG, NMFS, and PacifiCorp have held multiple work sessions (calls and meetings) to establish a common understanding of the HGMP process as it applies to the Iron Gate Hatchery.

### **Hatchery: 25 Percent Fractional Marking (AIP Interim Measure 17)**

Under this measure, PacifiCorp will fund 25 percent fractional marking at Iron Gate Hatchery facilities. Funding will include purchase of necessary equipment (e.g., automatic fish marking trailer and tags) as well as personnel costs. For 2009, CDFG and PacifiCorp have worked cooperatively to make necessary infrastructure improvements to Iron Gate Hatchery to allow 25 percent fractional marking to proceed. Marking activities were completed in early June using an automated marking trailer made available by CDFG. As part of this measure, PacifiCorp will purchase a marking trailer

to continue the fractional marking program when equipment from CDFG is no longer available in 2011.

#### **Fish Disease Relationship and Control Studies (AIP Interim Measure 20 and ICP Interim Measure II.B)**

Under this measure, PacifiCorp will fund the study of fish disease relationships downstream of Iron Gate dam (estimated at \$500,000 total cost). Research will be performed by an entity agreed upon by the Parties, and will include recommendations for control measures as appropriate.

Activities conducted on this measure include:

- PacifiCorp has executed an agreement with the National Fish and Wildlife Foundation to set forth its role as the Administering Party for the fish disease relationship and control study funding.
- A letter agreement has been executed between NMFS and PacifiCorp to govern distribution of funds for studies covering study selection guidelines, reporting, etc.
- NMFS and PacifiCorp met with members of the Klamath Fish Disease Work Group in March 2009. A request for research proposals was released by PacifiCorp and NMFS on June 15. Research proposals are due on July 10 and it is expected that study funding will occur this summer following evaluation of the research proposals submitted.

#### **Water Quality Technical Conference (AIP Interim Measure 22)**

This measure provides that PacifiCorp will fund a basin-wide technical conference on water quality. The intent of this measure is to improve understanding of basin-wide water quality impairment and explore solutions to improve water quality through technical, regulatory, or other means.

Activities conducted on this measure include:

- In a document dated January 16, 2009, the parties provided a draft plan with recommendations for planning and scheduling the conference intended to focus on Nutrient Enrichment and Nutrient Reduction Strategies.
- A committee established by the signatories to the Final Agreement will use the \$100,000 provided by PacifiCorp to convene a group of scientists and technical experts to inform them on the development of future monitoring plans and nutrient management strategies.

#### **Eastside/Westside Seasonal Restrictions (ICP Interim Measure I.A)**

Under this measure, PacifiCorp will not operate turbines at the East Side/West Side facilities from July 15 to November 15 each year to avoid entrainment mortality of sucker species residing above these facilities. In developing the proposed action, the Services and PacifiCorp recognized that the majority of potential sucker entrainment occurs at the East Side/West Side facilities during the period from July 15 to November

15 (FWS 2007). Ceasing East Side/West Side operations from July 15 to November 15 will eliminate any potential for entrainment-related mortality during this key period.

Activities conducted on this measure include:

- PacifiCorp has been operating the East and West Side facilities within the terms of this Agreement.

#### **Sucker Enhancement Fund (ICP Interim Measure I.B)**

Under this measure, PacifiCorp will make annual payments (based on a yearly cost formulation as stipulated in the ICP) into the Sucker Enhancement Fund to be used exclusively to fund project designed to enhance the survival and recovery of listed suckers, including, but not limited to, habitat restoration and acquisition. The fund will be administered in consultation with USFWS and Oregon Wild.

Activities conducted on this measure include:

- Approximately \$68,000 has been made available to date under the Sucker Enhancement Fund. Oregon Wild is administering this fund and is currently soliciting project proposals, with selection anticipated in September 2009.

#### **Flows Below Link River Dam (ICP Interim Measure I.C)**

Under this measure, PacifiCorp will implement a protocol to reduce potential stranding of suckers below Link River dam during low flow periods. Specifically, during periods of operation of the East Side/West Side facilities, if flow in the Link River between Link River dam and the East Side and West Side powerhouse returns is anticipated to be less than 300 cfs as a result of operational conditions within PacifiCorp's control (and not outside its control due to Bureau of Reclamation operations), PacifiCorp will promptly notify FWS after becoming aware of such a condition, and meet and confer with the Reclamation and the FWS to (1) evaluate potential for impacts to listed fish in that reach, and (2) agree upon implementation of feasible measures (that may include salvage or increased flows) intended to minimize impacts to listed suckers in that reach. By conferring with the FWS, and cooperatively implementing feasible measures when this situation arises due to operational conditions within PacifiCorp's control, potential stranding of suckers in the Link River will be reduced.

Activities conducted on this measure include:

- PacifiCorp, USFWS, and Bureau of Reclamation met in the spring of 2009 to begin establishing a protocol for coordinating flow related actions between the parties. The parties continue to develop a better understanding of operational elements that create flow changes which is being incorporated into the protocol. The protocol will emphasize the need for regular communication on operational issues to best avoid potential impacts to the species. A written coordination protocol is anticipated by fall of 2009.

## **Contacts**

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