

KLAMATH BASIN COORDINATING COUNCIL

Fifth Annual Report

Klamath Basin Settlements

November 2015

The Klamath Basin Coordinating Council has prepared this Fifth Annual Report on the accomplishments implementing the Klamath Basin Settlements.

Fifth Annual Report Implementing the Klamath Basin Settlement Agreements

Prepared by the Klamath Basin Coordinating Council

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Summary

This is the Fifth Annual Report from the Klamath Basin Coordinating Council (KBCC) on the accomplishments in implementing the Klamath Basin Restoration Agreement (Restoration Agreement or KBRA) and the Klamath Hydroelectric Settlement Agreement (Hydroelectric Settlement or KHSA), referred to in this report, collectively, as the Klamath Basin Agreements. The report was prepared by the non-federal members of the KBCC.

The KBRA and KHSA were signed on February 18, 2010 and the KBRA was amended on December 29, 2012. There are currently 45 Parties to the KHSA and 42 Parties to the KBRA, representing Federal agencies, California and Oregon, three Indian tribes, two counties, irrigators, and conservation and fishing groups¹.

A third agreement, the Upper Klamath Basin Comprehensive Agreement (Upper Basin Agreement) was signed on April 18, 2014. There are sixteen parties to the Upper Basin Agreement, including the United States Department of the Interior, the State of Oregon, the Klamath Tribes, and a broad coalition of Upper Klamath Basin irrigators². The three agreements were developed to provide a comprehensive solution for water, fishery, and power issues in the Klamath Basin.

The major achievements in the last year are related to the introduction of Federal legislation to implement the three Klamath Basin agreements; the three agreements are referred to in this report and in the legislation as the Klamath Basin Settlements.

On May 21, 2014, Senators Wyden, Merkley, Feinstein and Boxer introduced S. 2379, the Klamath Basin Water Recovery and Economic Restoration Act of 2014. Enactment of the legislation would provide the authority needed to fully implement the Klamath Basin Settlements. The Federal legislation was passed by the Senate Energy and Natural Resources Committee in 2014, but did not pass the Senate or House of Representatives.

2015 is a critical year for the Klamath Basin Settlements. If the Federal Authorizing legislation is not enacted by December 31, 2015, the KBRA will terminate. The Klamath Basin also experienced a record drought that had devastating effects on farming and fishing communities and fishery populations. The Klamath Basin Settlements would provide important programs to address these conditions.

¹The Department of the Interior and National Oceanic and Atmospheric Administration signed the KHSA; the federal agency parties are not signatories to the KBRA. The KBRA includes provisions that these agencies will become parties when Federal authorizing legislation is enacted. PacifiCorp signed the KHSA; it is not a party to the KBRA.

² As with the KBRA, Federal agencies will become parties to the Upper Basin Agreement only after Federal authorizing legislation has been enacted.

The parties to the Klamath Basin Settlements have made good progress on implementing many of the activities that do not require Federal legislation. Those accomplishments are described in this report. Full implementation of a number of the Klamath Basin Settlements programs has been delayed because certain proposed activities are not currently authorized under existing law and funding has not been available.

This section summarized the status of implementing the Klamath Basin Settlements; the sections following the summary provide more detailed status reports on each of the programs. Copies and summaries of the three settlements and all the documents described in this report are available at: www.klamathcouncil.org.

Summary of Klamath Basin Restoration Agreement Accomplishments

- The Klamath Basin Coordinating Council (KBCC) is currently working on reductions to the Federal costs to implement the agreements based on the recommendations of the Klamath Basin Task Force.
- The Klamath Water and Power Agency completed the On-Project Plan to align water supply and demand on the Klamath Reclamation Project and Reclamation is conducting the necessary environmental review of the plan. Implementation will require passage of the Federal legislation.
- The parties have completed work on the Klamath Drought Plan to provide additional tools to address low-water years; implementation will require passage of the Federal legislation.
- Reclamation is developing a Comprehensive Agricultural Power Plan to provide information to the Klamath Basin Power Alliance (KBPA) for the engineering and financial plan as part of implementation of the Power for Water Management Program.
- Reclamation has completed studies of the potential for additional water storage in the Klamath Basin.
- The Fishery Managers have agreed on an outline and approach to develop the Klamath Basin Fisheries Restoration and Monitoring Plan. The Fish Managers will begin work on the Plan in 2015.
- The Parties completed a review of the KBRA and all parties approved amendments to the agreement in 2012.

Summary of Klamath Hydroelectric Settlement Agreement Accomplishments

- The State of California passed a water bond that would provide \$250 million to support the costs associated with removing the four PacifiCorp dams.

- As of October 31, 2015, the combined balance of the Oregon and California dam removal trust accounts was \$102.3 million. The public utility commissions in California and Oregon approved this collection of funds to pay for decommissioning of the four hydroelectric dams; the funds have been accumulating since 2010.
- The Department of the Interior issued the Klamath Dam Removal Overview Report in 2013.
- The Department of the Interior also released a final Environmental Impact Statement for a Secretarial Determination in 2013. The California Department of Fish and Wildlife has completed the draft Environmental Impact Report. These environmental reports were developed in coordination under the provisions of the Hydroelectric Settlement.
- The interim measures to improve environmental conditions within the Klamath Hydroelectric Project to benefit aquatic habitat and listed species, improve water quality, and improve hatchery operations are being implemented on the schedule called for in the Hydroelectric Settlement.

Summary of Upper Klamath Basin Comprehensive Agreement Accomplishments

Upper Klamath Basin irrigators, the Klamath Tribes, and officials from Oregon and several Federal agencies signed a final Upper Klamath Basin Comprehensive Agreement on April 18, 2014. The agreement includes:

- A Water Use Program that will increase inflows into Upper Klamath Lake at an annual average of at least 30,000 acre feet by reducing water use in key reaches of the tributaries above the lake, while also providing a stable, sustainable basis for the continuation of irrigated agriculture;
- A Riparian Program designed to permanently improve and protect riparian conditions;
- An Economic Development Program designed to create economic opportunities for the Klamath Tribes and its members, and including increased opportunities for the exercise of Tribal cultural rights; and
- A transition program while the permanent elements of the agreement are being put in place.

Since signing the agreement the parties have made significant progress on implementation:

- The Landowner Entity has been formed to work with landowners to implement the water use and riparian programs; it is comprised of irrigator representatives from each of the major basins above the lake.
- The parties have formed the Joint Management Entity (JME) to oversee implementation of the agreement. The JME is comprised of representatives from the Klamath Tribes, the Landowner Entity, and the state of Oregon (formal participation by federal entities requires passage of the Federal legislation). These parties have established bylaws and other administrative provisions.
- The Landowner Entity has developed a ledger for tracking acres and acre feet of participation in the Water Use Program (WUP). The initial 2014 target for participation was 5,000 acre feet of increased instream flows. The final WUP ledger recorded 5,278 acre feet participating in the WUP. The Landowner Entity has secured letters of interest for the riparian program from landowners representing 66 percent of the eligible river bank miles of habitat; the initial target was 50 percent.
- The Landowner Entity and the JME are working to develop the detailed permanent agreements for the water use and riparian programs.
- The parties are implementing the monthly specified instream flows (SIFs), and irrigators have been cooperating among themselves to rotate water use so that the monthly flow levels are met.
- Funding for the water use program comes from the Oregon Watershed Enhancement Board; the funding is sufficient to continue existing agreements through the 2016 water year. Passage of the Federal legislation and funding is needed to continue scaling up the program in 2017.
- Oregon, USGS, and the Klamath Tribes are working on the siting and installation of gauging stations to measure stream flow at the various SIF locations.
- Oregon has provided information on water right transfers and leasing since the baseline year of 2001 and is preparing to receive and process instream lease and transfer applications as part of the agreement.
- Oregon has adopted new groundwater rules that clarify when groundwater will be regulated to protect senior surface water rights.

A summary of the Upper Basin Agreement is in section 3.8 of this report.

Klamath Basin Water Recovery and Economic Restoration Act

The Senate Energy and Natural Resources Committee approved the Klamath Basin Water Recovery and Economic Restoration Act of 2014, S. 2379, on November 13, 2014 with

bipartisan amendments; the vote was 17 to 5. The legislation would provide the authority to fully implement the three Klamath Settlements. A copy of the committee report is available at: <https://www.congress.gov/113/crpt/srpt299/CRPT-113srpt299.pdf>.

Senators Wyden and Merkley of Oregon and Senators Boxer and Feinstein of California had introduced the legislation on May 21, 2014. The Senate Energy and Natural Resources Committee held a hearing on the legislation on June 3, 2014. The Committee also held a hearing on June 20, 2013 to receive testimony on water resource issues in the Klamath River Basin.

The legislation did not pass the full Senate or House of Representatives before the end of the 113th Congress. On January 8, 2015, Senators Wyden, Merkley, Feinstein and Boxer reintroduced the Klamath authorizing legislation. The 2015 legislation, S.133, was referred to the Senate Energy and Natural Resources Committee. For more detail on the legislation, please see section 1.2.

Potential Termination of the KBRA

The 2012 amendments to the KBRA changed the termination provisions. The amendments extended the deadline for passage of the Federal authorizing legislation to December 31, 2014 and set up a process if Congress did not pass the legislation by that date. Under the process, any KBRA Party that believed the bargained-for benefits cannot be achieved could issue a dispute initiation notice and the KBRA Parties would use the dispute resolution procedures to work to address the issues raised.

Congress did not pass the legislation by the end of 2014 and the Karuk, Yurok, and Klamath tribes have filed dispute initiation notices under Section 7.6.2 of the KBRA. Under the KBRA procedures, the Parties could amend the KBRA, the tribes that initiated the process could withdraw their formal notices, or Congress could pass the authorizing legislation. If none of those actions occur, the KBRA will terminate on December 31, 2015.

2015 Drought Year

The Klamath Basin is experiencing another severe drought and communities and fisheries throughout the basin are suffering serious impacts. Federal and state agencies are providing assistance under existing programs. Implementation of the Klamath Basin Settlements would provide additional tools to deal with drought years.

As of early September precipitation in the Klamath Basin was 92 percent of average for the current water year; however, much of it fell as rain rather than snow. Much of the precipitation since October 1st 2014 occurred during three major storm events which resulted in rapid runoff and flooding, helping to increase storage in Upper Klamath Lake. Precipitation usually falls over a much longer period allowing for percolation into the ground, thereby recharging the ground water aquifer which feed springs and seeps. The

combination of winter runoff and low snow pack resulted in streamflows much below average and in some cases at or near record lows for the date.

Effects on agriculture: : The Oregon Water Resources Department began regulating water on April 1, 2015 with a call for water on Sand Creek to satisfy a senior right of 1864. This was an early start for regulation; calls for water in 2013 and 2014 did not start until late May or early June. On April 21st, the Klamath Tribes called for regulation of water for the Wood, Williamson, and Sprague River drainages for times when the Specified Instream Flows under the Upper Klamath Basin Comprehensive Agreement are not met. Larkin Creek, a tributary to the Williamson River, the upper Williamson River above Upper Klamath Marsh and associated tributaries, and Whisky Creek (a tributary to the Sprague River) are currently regulated off to meet the time immemorial instream tribal water rights.

A series of storms passing through during the latter half of May temporarily raised stream flows and kept regulation where it was through the end of the month. The increased flows delayed the ability for the Klamath Project to make a call on water rights in connection with the Project. However, irrigation demands increased and inflows to UKL declined such that Reclamation, U.S. Fish and Wildlife Service and Project irrigators were able to make a call on Project water rights on June 16, 2015.

At the time of this report, diversions from Upper Klamath Lake, the Wood River and its tributaries, the Lower Williamson River, and the Sprague River have been regulated to a priority date of 1905, based on the calls for both the Specified Instream Flows and the Klamath Project. The result of this regulation has been a significant reduction in out-of-stream water use for agriculture in the Upper Klamath Basin.

As this report was being developed, water deliveries to the Klamath Reclamation Project were projected to be in the 240 to 250 thousand acre feet range. Full Project demand is about 400 thousand acre feet.

Effects on Upper Basin Fisheries: The parties to the Klamath Basin Settlements are closely monitoring conditions in Upper Klamath Lake to try to maintain the lake-level thresholds for ESA listed suckers. Conditions are very serious in Clear Lake where June water levels had already fallen to the end of September minimum levels. Shallow water was creating very warm temperatures for sucker populations. USGS will monitor sucker populations in Clear Lake in October 2015.

Drought can affect all life stages of the endangered sucker populations within the Upper Klamath Lake drainage. The U.S. Geological Survey recently showed that during extreme drought the unique population that spawns at the springs along the eastern shoreline of Upper Klamath Lake becomes restricted. Substantially fewer individuals participate in the spawn, and those that do arrive to spawn spend nearly 30 percent less time on the spawning grounds. Similarly, reduced flows within the river potentially place spawning adults at greater risk of predation from Bald Eagles, particularly because of

shallower depths across spawning sites, and potentially alter the amount of suitable hatching and nursery habitat.

Similar effects occur within the lake itself. Lower lake levels due to drought reduce access to important nursery (wetland) habitats for larvae and juveniles and may also lead to increased risk of predation.

Clear Lake has had significant impacts as a result of the recent drought. There has been no spawning in the last two years. In 2014, only six tagged fish made it to the spawning grounds, and in 2015, only two dozen. In 2011, which had better water conditions, there were more than 2,000 tagged suckers detected in Willow Creek, a tributary to Clear Lake that is the primary spawning location for these fish. The lower lake levels greatly increase the risk of bird predation in Clear Lake.

Effects on Klamath River Fisheries: Drought conditions in the Klamath Basin have resulted in very low flows into the Klamath and Trinity rivers. The resulting effects to water quality and water quantity conditions in 2014 and 2015 have adversely affected all life history stages of native fishes in the Klamath River basin.

In the spring periods of 2014 and 2015, juvenile salmon exhibited high infection rates of *Ceratomyxa shasta* and other forms of disease. Opportunities to offset disease infection were limited due to low-water conditions. As a result, fish managers expect that the outmigrating populations of juvenile Chinook salmon experienced poor survival in 2014 and 2015.

In 2014, poor water quality and low flow conditions extended through the summer period into fall, and returning fall Chinook experienced high infection rates of *Ichthyophthirius multifiliis* (commonly referred to as Ich). Ich was determined as the major causative factor resulting in the mortality of at least 35,000 Klamath River adult fall Chinook salmon in 2002.

To offset disease impacts to adult Chinook salmon, Bureau of Reclamation, in coordination with Federal and state resource agencies, tribes, and PacifiCorp implemented significant releases of water from both the Klamath and Trinity rivers. This release occurred in September and October of 2014. Despite high Ich infection rates (both prevalence and intensity), adult salmon did not exhibit a diseased state and did not result in a fish die-off.

Summer 2015 water quality and water quantity conditions are similar to 2014, raising concerns that a large-scale disease outbreak of adult salmon may occur this fall in the lower river. In July of 2015, Ich was observed in adult Chinook salmon in the cold water refugia near Blue Creek. Ich infection rates fell in August with cooler temperatures, but some adult salmon did show signs of severe Ich infections (more than 600 ich/gill arch). After coordinating with Klamath River stakeholders and referencing the 2015 Lower Klamath River Late Summer Flow Augmentation from Lewiston Dam EIS, additional flows were released from the Trinity River to dilute and flush Ich from the system during

the peak of the adult salmon spawning migration. Subsequent monitoring in September has indicated Ich infection prevalence and intensity has declined. The augmented flows the Trinity River are scheduled to continue through September 20, 2015.

The Klamath Basin Settlements: Passage of the Federal legislation and implementation of the Klamath Basin Settlements would provide the following tools to deal with drought years:

- Full implementation of the water assurances would provide a block of water for each interest to manage, creating more certainty for irrigators, wildlife refuges, and fisheries.
- Full implementation of the Water Use Program would provide funding to off-project irrigators for voluntary water-use reductions in the upper basin; the goal of this program is to provide an annual average of at least 30,000 acre feet of additional water for Upper Klamath Lake and its tributaries, and the Klamath River.
- The KBRA On-Project Plan also would provide further tools, such as voluntary land set asides and sustainable groundwater pumping programs, to align Klamath Reclamation Project demand with available supplies of water. These tools would reduce Project surface water demand by up to 100,000 acre feet in the driest years.
- The Lower Klamath National Wildlife Refuge would receive 48,000 acre feet between March and October. It would receive an additional 35,000 acre feet between November and February in dry years.
- The KBRA Power for Water Management Program would provide capital development resources targeted to lower the electricity costs for pumping, thus allowing for greater efficiency and reuse of irrigation water.
- Under extreme circumstances, the KBRA Drought Plan would provide additional tools to reduce water use and assist irrigators.
- Fish habitat restoration, expansion of fish habitat into the upper basin, and other fishery programs would increase the resilience of fish populations to survive droughts.

Klamath Basin Restoration Agreement

The KBRA is intended to result in effective and durable solutions which will: 1) restore and sustain natural fish production and provide for full participation in ocean and river harvest opportunities of fish species throughout the Klamath Basin; 2) establish reliable water and power supplies which sustain agricultural uses, communities, and National Wildlife Refuges; and 3) contribute to the public welfare and the sustainability of all Klamath Basin communities.

The sections below summarize the actions taken during the past five years to implement the KBRA.

1. General Provisions

1.1 The Klamath Basin Coordinating Council

A key feature of the KBRA is a commitment by the parties to cooperate fully in its implementation. The KBRA Parties established the Klamath Basin Coordinating Council (KBCC) in 2010 to facilitate coordination, cooperation, collaboration, and accountability by the KBRA Parties and to ensure that the commitments in the KBRA are carried out effectively. However, the KBRA does not create any new governmental entities, nor does it supersede, change or modify any existing governments' legal authorities (see KBRA Section 2).

The KBCC provides for general implementation oversight, including activity and program coordination, information sharing, priority setting, fund seeking, and dispute resolution related to implementation of the KBRA. It also serves as the primary forum for informing the public and for public involvement (See KBRA Appendix D).

The KBCC has also formed the Interim Klamath Basin Advisory Council and the Interim Technical Advisory Team pursuant to KBRA Appendix D. The Department of the Interior is reviewing charters for these entities under the Federal Advisory Committee Act.

Meetings and Public Involvement: KBCC meetings have rotated between Klamath Falls and Ashland/Medford areas of Oregon, the Arcata and Eureka areas in California, and Redding, California. A listing of the meetings and all of the materials from the meetings are posted on the website.

The KBCC has adopted internal operating protocols and a communications plan. All KBCC meetings are open to the public. The KBCC agendas provide public comment periods at each meeting for people to make general comments or to comment on specific issues before the KBCC.

Dispute Resolution Procedures: The KBRA also established procedures to resolve disputes regarding the implementation of the Agreement. As noted above, the Karuk, Klamath, and Yurok tribes have filed notices under Section 7.6.2 because the Federal authorizing legislation was not enacted in 2014. If the legislation is not enacted by December 31, 2015, the KBRA will terminate. (See KBRA Sections 6.5 and 7.6)

In September, the Yurok Tribe notified other KBRA parties that it was withdrawing from the Klamath Agreements because Congress had not enacted the legislation and the Tribe and the Department of the Interior had not been able to reach agreement to address the Tribe's bargained-for benefits. The Tribe referred the dispute to the KBCC pursuant to section 6.5.3 and requested the KBRA to expedite any attempt to resolve the dispute.

1.2 Federal Legislation

The Senate Energy and Natural Resources Committee approved the Klamath Basin Water Recovery and Economic Restoration Act of 2014, S. 2379, on November 13, 2014 with bipartisan amendments; the vote was 17 to 5. The legislation would provide the authority to fully implement the three Klamath Settlements. A copy of the committee report is available at: <https://www.congress.gov/113/crpt/srpt299/CRPT-113srpt299.pdf>.

Senators Wyden and Merkley of Oregon and Senators Boxer and Feinstein of California had introduced the legislation on May 21, 2014. The Senate Energy and Natural Resources Committee held a hearing on the legislation on June 3, 2014. The Committee also held a hearing on June 20, 2013 to receive testimony on water resource issues in the Klamath River Basin.

The legislation did not pass the full Senate or House of Representatives before the end of the 113th Congress. On January 8, 2015, Senators Wyden, Merkley, Feinstein and Boxer reintroduced the Klamath authorizing legislation. The 2015 legislation, S.133, was referred to the Senate Energy and Natural Resources Committee.

Section 3 of S.133 authorizes, executes and implements the three Klamath agreements including the most recent Upper Basin Agreement, the KBRA, and the KHSAs.

Section 4 of S. 133 updates the authorized purposes of the Klamath Reclamation Project to include irrigation, reclamation, flood control, municipal uses, industrial uses, power, and fish and wildlife purposes, including serving the National Wildlife Refuges.

Section 5 authorizes the resolution and settlement of water rights for the Klamath Tribes in the Klamath Basin Adjudication as established in the Upper Basin Agreement and KBRA. The Party tribes to the Agreements agree to relinquish certain claims regarding their water as long as the terms of the Agreements are met by the other parties to the Agreements.

Section 6 amends the Klamath Basin Water Supply Enhancement Act of 2000 to implement the water, power and ecosystem restoration programs agreed upon in the

Settlements. This includes a water program to help irrigators align water supply and demand and reduce water consumption by the irrigators, a program to limit the total cost of power to irrigators by delivering Federal power and assisting in the development of a renewable power program, and various programs to restore the ecosystems in the Klamath Basin in order to support recovery of endangered fish species.

Section 7 establishes a fund, as agreed upon in the Upper Basin Agreement, to provide for improved economic development for the Klamath Tribes.

Section 8 sets out the terms for the removal of four dam facilities on the Klamath River. The governors of California and Oregon and the Secretary of the Interior are to jointly make a determination on whether to proceed with removal based on whether it would advance salmon fisheries restoration and is in the public interest, including potential impacts on local communities and the federally recognized tribes. That determination must comply with NEPA and only happens when certain conditions stipulated in the KHSAs have been met.

The governors and secretary would prepare a report to Senate Committee on Energy and Natural Resources, the House Committee on Natural Resources, and the Federal Energy Regulatory Commission describing the basis for the determination, the goals and performance measures, plans to address any costs above the state cost cap, how any liability concerns will be addressed, the factors that are unique to the Klamath Basin, and that the Federal role sets no precedent for future Federal action.

The report will also describe plans for addressing impacts on local communities and land owners. The costs of dam removal includes compensation for property owners whose property or property value is damaged by removal of the dams.

The legislation also requires a report within three years of the removal of the facilities detailing the results, including the status of achieving the performance measures and goals. The language further provides that neither PacifiCorp nor any other entity contributing funds to pay for facilities removal will be liable for any damages resulting from facilities removal.

Section 9 authorizes the Secretaries to enter into appropriate agreements with State, tribal and local governments and private individuals in order to implement the Act and the Settlements. It also establishes accounts to manage appropriated and non-Federal funds for the implementation of the Settlements. It also requires that the President's budget include requests for amounts necessary to carry out the Settlements as well as an annual report to Congress on the state of implementation of the Settlements.

The Senate Energy and Natural Resources Committee held a hearing on the legislation on June 3, 2014. The hearing focused on the Upper Basin Agreement. Testimony from the hearing and an archive of the webcast are available at:

<http://www.energy.senate.gov/public/index.cfm/hearings-and-business-meetings?ID=8d5191fa-0a81-465d-bb3c-80f4fc4c9982>

The Committee also held a hearing on June 20, 2013 to receive testimony on water resource issues in the Klamath River Basin. A list of the hearing witnesses, copies of the testimony, and a webcast of the hearing are available at:

<http://www.energy.senate.gov/public/index.cfm/hearings-and-business-meetings?ID=2140d7f0-ca76-4a7e-99b3-cd053c3ec9ac>

1.3 Klamath Basin Task Force

The Klamath Basin Task Force Report and Recommendations were sent to Senators Wyden and Merkley, Congressman Walden, and Governor Kitzhaber in February of 2014. The report addressed the efforts to resolve the remaining water management issues in the upper Klamath Basin, the outstanding power issues for the Klamath Reclamation Project and the upper basin irrigators, and recommendations to reduce the Federal costs of achieving long-term sustainability in the Klamath Basin.

The Task Force laid the groundwork for the Upper Klamath Basin Comprehensive Agreement that was signed on April 18, 2014; see section 3.8 of this report for more details. The status of the work to address the power issues is in section 3.9. The recommendations of reducing costs are summarized in section 1.4. A copy of the final Task Force Report is available at

<http://www.oregon.gov/gov/policy/environment/taskforce/Pages/Klamath-Basin-Task-Force.aspx>.

1.4 Reducing the Federal Cost to Implement the KBRA

Reducing Federal Costs

The Klamath Basin Task Force focused on two efforts: 1) recommendations to the congressional delegation on the new authorizations for appropriations that would be needed to implement the Klamath agreements; and 2) identification of additional opportunities to reduce the Federal costs of implementing the Klamath agreements.

Authorizations for Appropriations

After consultation with congressional staffs and others, the Task Force recommended that the Federal legislation should focus on the new authorities that are needed to implement the Klamath agreements. The Federal agencies identified existing laws that authorize most of the programs and activities in the Klamath agreements. The Federal agencies also identified Klamath programs that require new authority. Although legislation is required to authorize certain actions under the KHSRA, potential dam removal would be funded from non-federal sources.

Based on information provided by the Federal agencies, the programs that require new authorizations for Federal appropriations are the On-Project Plan, remedy for ground

water impacts associated with On-Project Plan, development and implementation of the Water Use Retirement Program, the Interim Power Sustainability Program, the Energy Efficiency and Renewable Resources Program, authority for Reclamation to serve Off-Project irrigators with the Federal Power Program, authority for Reclamation to include Off-Project irrigators in the Energy Efficiency and Renewable Resources Program, the Klamath Restoration Agreement Drought Fund, the Off-Project Reliance Program, and the Off-Project portion of the Interim Flow and Lake Level Program. The cost of currently unauthorized activities totals approximately \$250 million over fifteen years in 2014 dollars, based on current estimates.

Reducing Federal Costs

The Task Force also reviewed all of the Klamath programs to identify cost reductions and alternative funding that could reduce the need for new Federal funding. The Task Force began by reviewing the cost reductions adopted by the KBCC in 2011. In that effort, the KBCC reduced the cost estimate for implementing the KBRA from \$970 million to \$799 million for 2012 through 2026; this was an 18 percent reduction from the cost estimates in the 2010 KBRA. The 2011 revisions lowered the ten-year cost estimate for implementing the KBRA to \$647 million; this was a 33 percent reduction for this ten-year period compared to the 2010 KBRA Appendix C-2. The 2011 review also identified \$550 million in matching funds from the states of California and Oregon and customers of PacifiCorp. These non-federally funded activities are in addition to the cost estimates for Federal funding of the KBRA. A copy of a report on those cost reductions and non-federal funding is on the KBCC website. The cost reductions and additional funding to reduce Federal funding in 2013 were in addition to those made in 2011.

The Task Force started by adjusting all of the KBRA costs to 2014 dollars. This increased the total 2011 estimates from \$647 million to \$750 million for 2015 through 2024. The Task Force focused on ten years of costs because this is the time frame used by the Congressional Budget Office.

The details of the reductions are in the Task Force Report. In summary, cost reductions made in 2011 reduced the ten-year total spending for Klamath restoration to \$750 million. The additional recommended cost reductions, spending already incurred or anticipated as part of base programs, together with additional funding described above will reduce the amount of new Federal funding to \$505 million in 2014 dollars; this is an additional reduction of \$245 million, or 33 percent.

The Task Force recommendations did not propose to alter the bargained-for benefits in the KBRA, including amendments adopted in 2012 that provide for additional reviews for changes that affect the Fisheries or Water Management Programs, and that clarify the roles of the tribes and other fish managers in implementing the Fisheries Program. The Task Force recommended that the KBCC incorporate these changes in a revision to the cost estimates to implement the Klamath agreements. In addition, it is recognized that the KBCC will continue to refine cost estimates on an ongoing basis, as provided in the

KBRA. This may result in a degree of adjustment, up or down, in estimates of costs needed to complete any individual element, based on increased knowledge.

1.5 Monitoring implementation of Klamath Basin Restoration Agreement

The KBCC has developed a process to track implementation the commitments in the KBRA. The facilitator prepares a status report on all these actions and it is reviewed at KBCC meetings and copies are posted on the website. The status of the implementation of these actions is summarized in this report. The KBCC also reviews the status of the implementation of the KHSAs as each meeting.

1.6 Public Information and Involvement Plan

The KBCC was established to “promote continued collaboration, cooperation, coordination, and consultation among Parties and others as elements of the KBRA are implemented. The KBCC will provide for general oversight and administration, including activity and program coordination, information sharing, priority setting, fund seeking, and dispute resolution related to implementation of the Agreement...The KBCC will serve as the primary forum for public involvement in implementation of the Agreement.” (KBRA Appendix D-1, page D.3)

The KBCC has established communication objectives, developed tools for meeting these objectives, and defined the scope of its communications responsibilities. That scope, however, relates to official KBCC communications, and does not limit the communications efforts of any of its member Parties.

The KBCC provides public notice of upcoming meetings through general notices to local media outlets, emails to individuals requesting information, and on the KBCC website that lists meetings, meeting materials, and official documents. Each KBCC meeting provides an opportunity for general public comment and comment on any agenda item.

2. Fisheries Program

The goals of the Fisheries Program are to: 1) restore and maintain ecological functionality and connectivity of historic fish habitats; 2) re-establish and maintain naturally sustainable and viable populations of fish to the full capacity of restored habitats; and 3) provide for full participation in harvest opportunities for fish species.

The Fisheries Program will: 1) provide for reintroduction of anadromous species above the current site of Iron Gate Dam, including tributaries to Upper Klamath Lake; 2) establish conditions that, combined with effective implementation of the Water Resources Program and the Hydroelectric Settlement will contribute to the natural sustainability of fisheries and full participation in harvest opportunities, as well as the overall ecosystem health of the Klamath River Basin; 3) monitor the status and trends of

fish and their habitats; and 4) assess the effectiveness of actions and provides for adaptive management.

2.1 Fisheries Restoration and Monitoring Program

Under Sections 10.1 and 12 of the KBRA, the Klamath Fish Managers are working to prepare a Fisheries Restoration Plan and a Monitoring Plan. This section describes the progress to date.

Fish Managers prepared a draft *KBRA Phase I Fisheries Restoration and Monitoring Plan: Proposed Outline and Approach* on November 29, 2010 and made a presentation to the KBCC on December 15, 2010 and sought comments from KBCC members.

The *KBRA Phase I Fisheries Restoration and Monitoring Plan: Proposed Outline and Approach* was finalized on February 4, 2011 and was the culmination of a series of meetings among Fish Managers. The purpose of the document was to outline the initial steps and general approach toward achieving the KBRA directive to develop a monitoring plan and a restoration plan.

The document expressed the group's general consensus to integrate the restoration and monitoring plans into a single "Phase I Fisheries Restoration and Monitoring Plan" using a multiple-scale approach and to base restoration and monitoring actions on basin-scale ecological goals. Integrating the plans in this manner ensures that science is connected with decision making, that Fish Managers make good use of existing knowledge, and that goals and objectives are defined early so as to serve as the basis for prioritization of methods and actions.

In 2015, the Fish Managers are expected to begin work to develop the Phase I Fisheries Restoration and Monitoring Plan. The project will be conducted using an open and collaborative approach involving Basin partners and reliance on the best available science.

This effort will be split into two distinct tasks. Task 1 will involve the acquisition and synthesis of existing information and existing plans, followed by production of a timeline, approach, and series of specified sub-tasks that outline the approach the contractor will utilize to develop the final Restoration and Monitoring Plan for the Klamath (herein: the Plan). The deliverables for Task 1 will include a report summarizing existing information and synthesizing previously developed plans for the basin, and a task-specific, line-item government cost estimate for each sub-task and for the completion of the entire Plan.

Task 2 will involve producing the final Plan, based on the information and approach developed in Task 1. The deliverables for Task 2 will be a prioritized list of restoration actions, a determination of available funding, a prioritized list of cost estimates for restoration actions, and the final Plan.

The Klamath Fish Managers are comprised of: the California Department of Fish and Wildlife, the Karuk Tribe, the Klamath Tribes, the Yurok Tribe, the National Marine Fisheries Service, the Oregon Department of Fish and Wildlife, the U.S. Bureau of Land Management, the U.S. Fish and Wildlife Service, and the U.S. Forest Service.

2.2 Fisheries Reintroduction Plan

Oregon Plan

The Oregon Fish and Wildlife Commission adopted an amendment to the Klamath River Basin Fish Management Plan on July 18, 2008. The 2008 Amendment (OAR 635-500-3890 *et seq.*) provides policy direction for the Oregon Department of Fish and Wildlife's (ODFW) participation in the implementation of this section of the KBRA. (See KBRA Section 11.3)

General Policy: Oregon's Wildlife Policy (ORS 496.012) recognizes that the Oregon Fish and Wildlife Commission represents "the public interest of the State of Oregon" and further will implement the goal "to develop and manage the lands and waters of the state in a manner that will enhance the production and public enjoyment of wildlife." By statutory definition, wildlife includes fish. Nothing in the KBRA modifies or abrogates the Oregon Fish and Wildlife Commission's statutory responsibilities.

Amended Klamath Policy: Oregon's goal is to re-establish in Oregon self-sustaining, naturally-produced populations of Chinook, steelhead, Coho, and lamprey that were historically present in the Upper Klamath Basin, into historic habitats currently vacant of anadromy.

The 2008 Amendment to the Klamath River Basin Fish Management Plan (1997) directs ODFW to develop a Reintroduction Implementation Plan and an Anadromous Fish Conservation Plan for the Oregon portions of the Klamath River Basin. The Reintroduction Implementation Plan corresponds with the Phase I Plan described in KBRA Section 11.2 and 11.3.1. The Anadromous Fish Conservation Plan corresponds with the Phase II Plan described in KBRA Section 11.3.2.

The 2008 Amendment to the Klamath River Basin Fish Management Plan (1997) provides policies that direct ODFW to: develop a Reintroduction Implementation Plan prior to release of any Chinook above Upper Klamath Lake; monitor the volitional re-colonization of the Oregon portion of the Klamath River and tributaries by Chinook salmon, steelhead, Coho salmon, and Pacific lamprey, and not release anadromous fish into the Oregon portion of the Klamath River and tributaries below Upper Klamath Lake unless re-colonization is proceeding too slowly according to criteria developed in the Reintroduction Plan; and develop a Reintroduction Implementation Plan prior to release of any Chinook above Upper Klamath Lake.

Under KBRA Section 11.3, ODFW and Klamath Tribes, in collaboration with other tribes and Fish Managers will initiate plan development when funding is available, but no

later than State Concurrence of an Affirmative Declaration by the Secretary of the Interior under KHSA Section 3.3. In preparing the plan, these agencies will seek input from interested KBRA Parties and others with technical expertise. The schedule calls for completing the Phase I Plan within 12 months.

California Plan

The schedule for the California Reintroduction Plan is linked to the timing of decisions by the governors of California and Oregon and the Secretary of the Interior on whether to proceed with removal of the four dams on the Klamath River. If such a decision is made, the California Department of Fish and Wildlife (CDFW), in collaboration with other Fish Managers will initiate the plan. CDFW will seek input from other Parties and public and complete the plan within 24 months. (See KBRA Section 11.4)

3. Water Resources

The KBRA contains a number of measures to provide water supply certainty. The KBRA also includes a number of actions to increase the amount of water to improve instream flows in the Klamath River and tributaries, maintain the elevation of Upper Klamath Lake, and provide specific allocations and delivery obligations for water for the Lower Klamath and Tule Lake National Wildlife Refuges.

3.1 File validation actions

The KBRA called for the Klamath Reclamation Project water entities to file actions seeking validation or confirmation of the KBRA. Those actions are complete.

3.2 Collaboration to Benefit Agriculture and Wildlife Refuges.

The U.S. Fish and Wildlife Service (FWS) and Klamath Project Water Users have agreed to work on interim actions under KBRA Section 15.1.2.J to resolve outstanding issues related to water rights for the Refuges. Other provisions will be implemented on a schedule that will allow implementation when the diversion limits in Appendix E-1 become effective. (See KBRA Section 15.1.2.C)

3.3 On-Project Plan

The Klamath Water and Power Agency (KWAPA) completed development of the On Project Plan (OPP) provided under section 15.2 of the KBRA on February 25, 2014. KWAPA is coordinating with the U.S. Bureau of Reclamation (Reclamation) in the preparation of a joint Environmental Impact Statement / Environmental Impact Report (EIS/EIR) to support Reclamation and KWAPA's consideration of formal approval of the plan. Assuming the necessary approvals and enactment of federal authorizing legislation,

KWAPA will then commence implementation and ultimate administration of the OPP as provided in the KBRA.

Background: Under the KBRA, once certain events have occurred, there will be a permanent limitation on the amount of water that can be diverted at the “Settlement Points of Diversion” from the Klamath system for use in the Klamath Project. The limitation on diversion is expressed on a sliding scale that is a function of the hydrology in a given year. Also, firm water delivery commitments for the National Wildlife Refuges that can receive water through Klamath Project facilities will occur; particularly with regard to the Lower Klamath National Wildlife Refuge, this represents a change in current circumstances—the refuges currently have no formal allocation of water other than contractual delivery commitments for their agricultural lands.

Section 15.2 of the KBRA requires KWAPA to develop the OPP, the purpose of which is to align water supply and demand in the “On Project Plan Area” (OPPA) in light of the diversion limitations, the refuge delivery commitments, and other factors. The area comprising the OPPA is essentially the area of Klamath Reclamation Project agricultural lands that use Klamath River water. The KBRA identifies three “phases” for the OPP, consisting of: development and adoption; implementation of the adopted plan; and year-to-year administration after the plan has been implemented.

OPP Development Process: KWAPA conducted an open process to select a consultant team. The KWAPA Board of Directors established an OPP Advisory Committee (OPPAC), which guided and responded to work conducted by KWAPA staff and consultants. That committee met twelve times, in noticed meetings open to the public. KWAPA also conducted outreach in six advertised public meetings and by distribution of a newsletter.

The OPP was developed through a series of seven technical memorandums. The technical memoranda and other information were posted on the KWAPA website.

The KWAPA Board of Directors approved the following goals and objectives for OPP:

- Meet commitments specified in the KBRA.
- Maintain long term sustainability of Klamath Reclamation Project agriculture.
- Minimize reductions in irrigated agriculture in the OPPA and avoid any uncompensated reduction in irrigated agriculture.
- Ensure equitable treatment among districts, avoid impacts on district operations, and seek opportunities for improved water management operations within and across districts.
- Develop fair, equitable, and transparent strategies for aligning water supply and demand.

- Consider cost effectiveness of alternatives to the overall Klamath Basin economy and minimize third party impacts.
- Avoid “Adverse Impacts” on groundwater as a result of OPP implementation or administration, as specified in KBRA Sections 15.2.1.A and 15.2.4.A.
- Use groundwater in a long-term and sustainable manner, and address all relevant in-basin groundwater management objectives, including identifying and addressing potential impacts on areas directly adjacent to the OPPA.

The Proposed On-Project Plan includes the following components:

- Pursue certain water conservation and efficiency projects to reduce demand. These permanent measures are estimated to provide up to 20,000 acre-feet of water.
- Facilitate the use of groundwater in a sustainable manner as necessary to meet the supplemental water need. These intermittent actions are estimated to provide as much as 50,000 to 75,000 acre-feet of water when supplemental water is needed.
- As a last resort and as KWAPA determines necessary to ensure groundwater sustainability, compensate landowners to reduce demand through demand management activities (temporary cropland idling). These intermittent actions are estimated to provide up to 30,000 acre-feet of water.
- Implement activities on a willing participant basis. The OPP will not require any landowner to take/not take any action unless they choose to do so.

A copy of the final summary report is available at: <http://www.kwapa.org/assets/OPP-Summary-Report-FINAL.pdf> . Copies of the technical reports and information about the public meetings are also available at <http://www.kwapa.org>

3.4 Groundwater Technical Investigations

USGS, in cooperation with OWRD, completed the groundwater studies pursuant to the workplan in Appendix E-2. (See KBRA Section 15.2.4.B).

KWAPA has met and communicated with OWRD and other interested Parties regarding the development of On-Project Plan and groundwater use under the Plan and taken all the actions required under KBRA Section 15.2.4.B.iv with respect to coordination with other Parties related to the avoidance of “Adverse Impacts” to groundwater (as defined in the KBRA) that could result from the On-Project Plan.

3.5 D Pumping Plant Costs

Reclamation, TID, and LKNWR have reviewed cost allocation in KBRA Section 15.4.2.A. These parties agreed to maintain the allocation stated in this section.

3.6 Klamath Reclamation Project operations

The Secretary of the Interior is working with Project contractors to establish a process to analyze the Klamath Reclamation Project costs (KBRA Section 15.4.7).

3.7 Klamath Basin Adjudication Process

On March 7, 2013, the Oregon Water Resources Department (OWRD) delivered a Final Order of Determination to the Klamath County Circuit Court. With this delivery, OWRD completed the administrative phase of the Klamath River Basin Adjudication.

The Final Order of Determination in the Klamath River Basin Adjudication represents the culmination of 38 years of work to determine the validity of 730 claims to the use of surface water in the Klamath River Basin. Since 1975, the OWRD systematically reviewed and determined these claims. It also received and resolved 5,660 contests to these claims.

During this phase, administrative law judges from Oregon's Office of Administrative Hearings issued proposed orders for certain contested claims, making recommendations about the validity of those claims. With the OWRD's issuance of the Final Order of Determination, the administrative phase of the Klamath River Basin Adjudication was complete.

The most senior determined claims in the Klamath River Basin Adjudication are claims held by the United States in trust for the Klamath Tribes. These claims carry a priority date of "time immemorial." The tribal claims were recognized for certain reaches of the major tributaries to Upper Klamath Lake, and for Upper Klamath Lake itself.

During the second phase of the Klamath River Basin Adjudication claimants or contestants who dispute the OWRD's determinations will have an opportunity to file exceptions with the Klamath County Circuit Court. The Court will review those exceptions, and issue a water rights decree, either affirming or modifying the Final Order of Determination. (Technical corrections were included in an "amended and corrected" Order of Determination filed with the Court in early 2014.)

Oregon follows the "prior appropriation" doctrine of water use, like most western states. When there is not enough water to satisfy all the water rights, water users with senior priority dates will receive water, while water users with relatively junior rights will not. Simply stated, water users who are "first in time" are "first in right."

The completion of the Final Order of Determination meant that the recognized claims are provisionally a part of Oregon’s “first in time, first in right” prior appropriation system. Water users with recognized claims could make calls for regulation of junior water users if doing so will result in additional water being available to the senior user. These calls began in 2013 and have continued in 2014 and 2015.

3.8 Upper Klamath Basin Comprehensive Agreement

Section 16 of the KBRA called for an Off-Project Water Settlement between off-project irrigators and the Klamath Tribes and provided a framework supported by the KBRA Parties; however, there was not much progress on such a settlement until Upper Basin irrigators, the Klamath Tribes, and officials from Oregon and several Federal agencies began meeting in the summer of 2013. These parties signed an Agreement in Principle on December 5, 2013 and a final Upper Klamath Basin Comprehensive Agreement on April 18, 2014. The description of the Off-Project Water Settlement below relies on the summary prepared by the parties to that settlement, some of whom are KBRA/KBCC parties. The agreement includes:

- A Water Use Program that will increase inflows into Upper Klamath Lake by at least 30,000 acre feet by reducing water use in key reaches of the tributaries above the lake, while also providing a stable, sustainable basis for the continuation of irrigated agriculture;
- A Riparian Program designed to permanently improve and protect riparian conditions; and
- An Economic Development Program designed to create economic opportunities for the Klamath Tribes and its members, including increased opportunities for the exercise of Tribal cultural rights.

Water Use Program (WUP): The WUP does two things. First, it permanently increases the flows into Upper Klamath Lake an annual average of at least 30,000 acre-feet by decreasing the net consumptive use of water. Participation in the WUP is voluntary. The agreement includes limits on how much land may be retired from irrigation (18,000 acres) in order to share the effects of the program fairly among the areas of the Upper Basin. The WUP will reduce water use through permanent water right retirement and also through other ongoing measures that will reduce net consumptive use of water in a predictable, quantifiable manner. These measures may include:

- Water right leasing, including split season leasing;
- Water conservation and efficiency measures;
- Agreements to rotate water use among water right holders;

- Management of water to meet flows during low flow periods;
- Upland management (including juniper removal, crop rotations, improved soil conditions and management).

The second thing the WUP does is to set specific instream flows at various locations that consider hydrologic conditions when determining if and when irrigation water regulation will be required to protect Tribal water rights.. The specified flows are based on equitable contributions towards the 30,000 acre-feet from each of the six WUP regions.

The WUP is carried out by the “Landowner Entity” made up of irrigator representatives from each of the major basins above the lake who are participating in the program. The WUP, along with other parts of the agreement, is overseen by a “Joint Management Entity” directed by the Klamath Tribes, the Landowner Entity, and state representatives (a federal representative will be added when the Federal legislation authorizes participation). The Landowner Entity takes the lead in negotiating agreements with willing irrigators to reduce water use. The agreements are implemented following approval by the JME. Funding for the agreements comes from a variety of sources, including the KBRA.

Groundwater: The agreement includes details on how groundwater wells will be regulated in years when stream flows are not met. These details are designed to provide predictability to water users, while recognizing the role of groundwater in the hydrology of the Upper Basin.

Riparian Program: The Riparian Program is re-establishing and/or maintaining a healthy and sustainable riparian plant community to improve and maintain water quality and fish habit. The program is designed to maintain viable ranching operations, including irrigation infrastructure compatible with riparian restoration. As with the water program, the Riparian Program is being carried out through agreements between the Landowner Entity and willing landowners. Landowners who enter into riparian agreements are committing to participate in riparian management strategies designed to improve conditions through tools such as flash grazing, fencing, reseeding, vegetation management, and other restoration actions. The goal of the Riparian Program is to enroll at least eighty percent of the eligible river bank miles into this program. Eligible river bank miles are defined as riparian lands that are in private ownership with an irrigation water right and zoned as agriculture or forest/range use.

Economic Development: The agreement establishes a Tribal Economic Development Fund and reflects the Klamath Tribes’ commitment to restore their homeland and build a viable Tribal economy.

Transition Period: Success of this agreement depends on acceptance by a wide number of landowners, as well as the Klamath Tribes and other governmental bodies. Recognizing that it will take time to fully develop and implement the Water Use Program and the Riparian Program, the parties designed a five-year Transition Period. During this

time, the Landowner Entity will be negotiating agreements with landowners and the Klamath Tribes will be implementing the Economic Development Program. If interim performance standards for both the Riparian Program and the Water Use Program are met, water regulation will be based on flow levels that vary based on stream flow conditions and compliance with the agreement.

Funding and Authorization: A key element of program success (for all of the program elements) is continued funding for the Economic Development Program, Water Use Agreements, and the Riparian Management Agreements. The agreement will not become permanent until long-term funding is provided to fully implement these programs. That funding, and other elements of the agreement, will require Federal legislation, including legislation and appropriations implementing the KBRA and the KHSAs. This agreement implements several foundational elements of the KBRA.

Other Elements of the Agreement

Regulatory Assurances: The agreement also provides an efficient way for irrigators to comply with the Endangered Species Act. Participation is voluntary.

Klamath Basin Adjudication: The agreement resolves many of the contests remaining in the Klamath Basin Water Rights Adjudication. By avoiding further litigation, the agreement increases predictability and reduces costs to all of the parties.

Accomplishments in Implementing the Agreement

- The Landowner Entity has been formed to work with landowners to implement the water use and riparian programs; it is comprised of irrigator representatives from each of the major basins above the lake.
- The parties have formed the Joint Management Entity to oversee implementation of the agreement. The JME is comprised of representatives from the Klamath Tribes, the Landowner Entity, and the state of Oregon (formal participation by federal entities requires passage of the legislation). These parties have established bylaws and other administrative provisions.
- The Landowner Entity has developed a ledger for tracking acres and acre feet of participation in the Water Use Program (WUP). The initial 2014 target for participation was 5,000 acre feet of increased instream flows. The final WUP ledger recorded 5,278 acre feet participating in the WUP.
- The Landowner Entity has secured letters of interest for the riparian program from landowners representing 66 percent of the eligible river bank miles of habitat; the initial target was 50 percent.
- The Landowner Entity and the JME are working to develop the detailed permanent agreements for the water use and riparian programs.

- The parties are implementing the monthly specified instream flows (SIFs), and irrigators have been cooperating among themselves to rotate water use so that the monthly flow levels are met.
- Funding for the water use program comes from the Oregon Watershed Enhancement Board; the funding is sufficient through the 2016 water year. Passage of the federal legislation and federal funding is needed to continue the program in 2017.
- Oregon, USGS, and the Klamath Tribes are working on the siting and installation of gauging stations to measure stream flow at the various SIF locations.
- Oregon has provided information on water right transfers and leasing since the baseline year of 2001 and is preparing to receive and process instream lease and transfer applications as part of the agreement.
- Oregon has adopted new groundwater rules that clarify when groundwater will be regulated to protect senior surface water rights.

A copy of the Agreement is available at

http://www.oregon.gov/gov/policy/environment/taskforce/Documents/docs/Exhibits%20to%20the%20Proposed%20Upper%20Klamath%20Basin%20Comprehensive%20Agreement/upper_klamath_basin_comprehensive_agreement_final.pdf.

The exhibits are available at:

http://www.oregon.gov/gov/policy/environment/taskforce/Pages/Proposed_Upper_Klamath_Basin.aspx

3.9 Power for Water Management Program

After the expiration of long-term, fixed-price contracts that provided lower-cost power to On-Project and Off-Project irrigators, the costs of electricity to pump water in the Upper Klamath Basin to farms, the wildlife refuges, and the Klamath River have increased significantly and are affecting the viability of irrigated agriculture operations. The KBRA Power for Water Management Program identifies various elements to reduce power costs including an interim power program, Federal power delivery, and efficiency and renewable energy development. These various elements are expected to reduce power costs in order to reach the power cost target for eligible On and Off-Project power users of “at or below the average cost for similarly situated irrigation and drainage projects in the surrounding area.” Reclamation has contracted with the Technical Services Center in Denver to conduct a survey of comparable power rates in other areas.

Federal legislation is needed for the Bureau of Reclamation to provide Federal power to Off-Project irrigators. Federal legislation is also needed to authorize implementation of

other elements in the KBRA including the interim program and efficiency and renewable resources development needed to provide long-term affordable power.

Some actions could potentially be taken without new Federal legislation. The Klamath Basin Task Force's Federal Power Delivery Workgroup, Reclamation, and KWAPA have done extensive analysis on the delivery of Federal power to Reclamation for use in pumps in the Klamath Reclamation Project's service area.

Based on analysis conducted in 2014, purchase of Bonneville Power Administration electricity could reduce the electricity costs for large irrigation loads (over 17,000 kilowatt hours a year) in Oregon by 7 to 10 percent. There are also a number of uncertainties associated with the estimates, including a possible transition charge for those opting to take Federal power. The potential savings, at least in the near term, may be similar for the delivery of market power through the Western Area Power Administration to Reclamation Project loads in California. KWAPA and Reclamation have continued to review whether to pursue the purchase of Federal power but there has been little to no activity on this issue within the last twelve months.

Potential savings through Federal power, if any, are less than the estimates made during the development of the KBRA and the potential benefit would only affect about half the irrigators that the KBRA Power for Water Management Program is intended to address. The limits and uncertainties associated with the Federal Power Program reinforce the need to pass Federal legislation to meet the power cost targets in the KBRA for both On and Off-Project irrigators.

Reclamation is working on the Klamath Comprehensive Agricultural Power Plan (CAPP). This project is reviewing opportunities for renewable energy generation and efficiency improvements that may offset power consumption or reduce power costs. Reclamation is working with a Technical Work Group that has met six times over the past year to define and prioritize alternatives. Reclamation has held two stakeholder meetings in the Klamath Falls area to update irrigators and the public on the project and seek comments.

The Klamath Water and Power Agency (KWAPA) and the Upper Klamath Water Users Association (UKWUA) have formed the Management Entity known as the Klamath Basin Power Alliance (KBPA) and developed operating protocols and guidelines. KBPA will make the final decisions on the renewable resources and efficiency actions and adopt a financial and engineering plan (see KBRA Section 17.7.2).

As part of the CAPP process, Reclamation will consult with KBPA to determine whether the alternatives being analyzed in the CAPP would be used in completing the financial and engineering plan. If so, Reclamation would complete the environmental review of the potential technologies that might be developed as part of the plan. Completing this environmental review would mean that this program could be implemented once Federal legislation has passed and funding is available.

3.10 Williamson River Delta

The Nature Conservancy (TNC) completed the breaching of the levies in November 2007 to restore approximately 28,800 acre-feet (gross) of lake storage capacity when Upper Klamath Lake elevations are between 4143.3 and 4136.0 feet. Funding was provided by Reclamation, PacifiCorp, Natural Resource Conservation Service, and the U.S. Fish and Wildlife Service (FWS). The KBRA Parties have agreed to support efforts to monitor the effects on fish populations and water quality associated with this restoration project. (See KBRA Section 18.2.1)

3.11 Agency Lake and Barnes Ranch

To achieve water management outcomes consistent with the KBRA, the diked and drained areas of Agency Lake and Barnes Ranches that once were part of Agency Lake may be operated as pumped storage within existing dikes subject to KBRA Section 18.2.2.D, with the goal of reconnecting to Agency Lake by breaching existing dikes.

Reclamation and FWS completed a transfer of the lands, including the related data and documentation under KBRA Section 18.2.2.B. FWS is working to complete a study on options identified in KBRA Section 18.2.2.C.

3.12 Wood River Wetland

To achieve water management outcomes consistent with the KBRA, the Parties' ultimate goal is to reconnect Wood River Wetland to Agency Lake when physical and biotic conditions are sufficient to provide the wetland restoration benefits for which the property was acquired.

BLM currently manages the Wood River Wetland to restore wetlands adjacent to Agency Lake. In furtherance of the KBRA and the ultimate goal, BLM, in collaboration with the KBAC and TAT is preparing a study that evaluates options for enhancing water management flexibility in providing benefits for water storage, fish, wildlife, and wetlands habitat. This study will consider options including, among others, whether diked and drained areas of Wood River Wetland that once comprised Agency Lake should be operated as pumped storage within existing dikes, or fully reconnected to Agency Lake by breaching dikes. Either option would result in a total water volume of approximately 16,000 acre-feet of gross storage between elevations 4143.3 and 4136.0 feet.

3.13 Future Storage

Reclamation has completed the *Initial Alternatives Information Report Upper Klamath Basin Offstream Storage Investigations Oregon and California*. (See KBRA Section 18.3.1). A copy of the Upper Klamath Basin Off-Stream Storage report is available at:

http://www.usbr.gov/mp/kbao/projects/Upper_Klamath_Basin_Offstream_Storage_Investigation.pdf

3.14 Drought Plan

The KBRA includes a number of programs related to water diversion and use, and improvements for fish habitat and passage. The Parties to the Agreement recognized that additional measures would be needed in certain low-water years and committed to developing a Drought Plan under Section 19.2 of the Agreement. The Drought Plan's purpose and use is limited exclusively to implementation of the applicable terms of the KBRA.

In the instances of Drought and Extreme Drought, the Parties intended that water and resource management actions be taken such that no Klamath Basin interest would bear an unreasonable portion of burdens imposed or the risk of loss or injury.

The Klamath Basin experienced extremely low-water conditions this year. Full implementation of the water resource measures in the KBRA, including the Drought Plan would have provided coordinated and effective plans and operations to make water available for fishery resources and wildlife refuges and provide greater certainty for irrigators.

The Drought Plan was developed by the Drought Plan Lead Entity identified in the KBRA. The Lead Entity is comprised of: Klamath Tribes, Karuk Tribe, Yurok Tribe, Upper Klamath Water Users Association, the Klamath Water and Power Agency, the Klamath Basin National Wildlife Refuges, Oregon Water Resources Department, California Department of Fish and Wildlife, and Trout Unlimited, as the representative of the conservation and non-tribal fishing Parties to the KBRA.

The Drought Plan Lead Entity completed a final plan on July 11, 2011. That plan is currently being reviewed by the Department of the Interior for approval and funding; this review will also include environmental and any other procedures required by law. Implementation of the Drought Plan will require passage of the Federal legislation and funding. A summary and copy of the Drought Plan are available on the KBCC website.

3.15 Climate Change Assessment

The KBRA Parties are working to determine how long-term climate change may affect the fisheries and communities of the Klamath Basin. The parties would then re-convene to negotiate any supplemental terms to the KBRA which may be necessary to address changes in the climate in order to achieve the parties' goal of maintaining sustainable fisheries and communities (see Section 19.4)

The Oregon Water Resources Department (OWRD) and California Department of Fish and Wildlife (CDFW), in coordination with Water Managers and Fish Managers are co-

lead parties for this assessment. These agencies initiated the assessment process in February, 2012. OWRD and CDFW are currently reviewing existing and planned climate change studies to determine whether they will be adequate for the assessment called for in KBRA Section 19.4. OWRD and CDFW then plan to develop a process and schedule for the assessment and meet with the KBCC to seek comments. OWRD and CDFW expect to coordinate the assessment with the work being conducted by Reclamation under the Secure Water Act.

Since Congress passed the Secure Water Act, Reclamation has been working toward completing two phases of the Act. The first phase is the West Wide Climate Risk Assessment which broadly looks at the risks to water supplies, power and the ecosystem throughout Reclamations facilities in the west but with emphasis on eight critical basins including the Klamath. The second phase is being referred to as the Basin Studies, which will look at the entire Klamath River water shed from the headwaters to Upper Klamath Lake to the estuary.

3.16 Interim Flow and Lake Level Program

Under this program, the Secretary of the Interior would plan and implement, or provide for, a water leasing and purchase program under KBRA Section 20.4 to provide additional flows and maintain lake levels for fish species until the other water programs are fully implemented. The Parties understand that Reclamation must have new or additional authority in order to fully administer the Interim Flow and Lake Level program provided in the KBRA.

4. Regulatory Assurances

The KBRA includes commitments by the parties to take every reasonable and legally-permissible step consistent with environmental laws and regulations to avoid or minimize any adverse impact, in the form of new regulation or other legal or funding obligation, that might occur to users of water or land upstream of Iron Gate Dam from introduction or reintroduction of aquatic species to currently unoccupied habitats or areas.

The KBRA also establishes steps designed to comply with the Endangered Species Act, including the preparation of biological opinions on specific Federal actions called for in the agreement. The agreement also establishes a process to develop general conservation plans or habitat conservation plans that would be designed to assist non-federal parties to comply with the ESA. Participation in these plans would be voluntary.

4.1 Fish Entrainment Alleviation

Reclamation will evaluate methods, locations, and potential need to construct facilities to prevent fish entrainment at key upper basin water diversion points (KBRA Section 21.1.3.A). Reclamation will work with its Denver engineering office to develop

strategies. This program would be implemented prior to the removal of PacifiCorp's hydroelectric dams, if there is an affirmative determination under the KHSA, so reintroduced salmon and other aquatic species are not entrained in Klamath Reclamation Project diversions.

4.2 California Laws

CDFW will evaluate the necessity for incidental take coverage following a decision by the California and Oregon governors and Secretaries of Interior and Commerce on the potential removal of the four lower Klamath River dams. Within 90 days of such decision, CDFW will advise the KHSA Parties of its determination and recommend specific procedures for obtaining any necessary coverage.

CDFW would also evaluate the necessity for revisions to existing Fish and Game Code sections 5515(b) and 3511(b) and would provide the parties with draft legislation proposing any necessary modifications to these statutes. (See KBRA Section 24)

4.3 Oregon Laws

ODFW will determine schedules for any environmental reviews in coordination with potential facilities removal. (See KBRA Section 25)

5. Counties Program

Under the KBRA, the non-federal parties will seek funding for a Klamath County Program that would identify projects for economic development associated with the restoration of the Klamath River and reintroduction of anadromous fisheries into Klamath County and the headwaters of the Klamath River in Lake County, Oregon. (See KBRA Sections 27.2 and 27.3.1). On May 8, 2012, Klamath County requested an extension of the schedule to develop and adopt.

The KBRA non-federal parties will support funding for mitigation for property tax impacts associated with the KBRA. (See KBRA Section 27.3.2).

On March 12, 2013 the Klamath County Board of Commissioners passed a resolution to withdraw from participation in the KBRA and KHSA.

6. Tribal Program

6.1 Tribal Participation in Fisheries and Other Programs

The non-federal parties support funding for the KBRA signatory tribes to build the capability to participate in the implementation of the fisheries and conservation

management programs (See KBRA Section 32). Funding is not yet available for these activities.

6.2 Economic Revitalization

The non-federal parties support funding for the Klamath Tribes, Karuk Tribe, and Yurok Tribe to develop plans to promote economic development. Each tribe will develop plans to promote long-term, sustainable growth and development. These plans will enable the Tribes to establish long term, sustainable economic growth and development within their communities, and to plan long term economic revitalization projects and strategies advancing efforts to provide a sustainable and achievable approach to lifting tribal communities out of generational poverty. Funding is not yet available for these activities.

The Klamath Tribes have been working with the Department of the Interior, the U.S. Forest Service, and others to identify a substitute for the Mazama Forest Project that will provide similar benefits to those identified in the KBRA.

6.3 Klamath Tribes' Interim Fishing Site

The Klamath Tribes had an interim fishery in 2012. CDFW, the Klamath Tribes and relevant Federal agencies of have developed a process for joint petition to California Fish and Wildlife Commission for an interim fishing site. (See KBRA Section 34).

Klamath Hydroelectric Settlement Agreement

The KHSA lays out the process for additional studies, environmental review, and a decision by the Secretary of the Interior and the governors of California and Oregon regarding whether removal of four dams owned by PacifiCorp: 1) will advance restoration of the salmonid fisheries of the Klamath Basin; and 2) is in the public interest, which includes but is not limited to consideration of potential impacts on affected local communities and tribes. The four dams are Iron Gate, J.C. Boyle, Copco 1 and Copco 2 dams on the Klamath River. The KHSA includes provisions for the interim operation of the dams and if a decision is made to remove the dams, the KHSA defines the process for transfer, decommissioning, and removal.

7. Studies, Environmental Review, and Secretarial Determination

Under the Hydroelectric Settlement, the Secretary of the Interior, in cooperation with the Secretary of Commerce and other Federal agencies, has conducted extensive studies on the effect of removing the four dams. These studies were conducted in coordination with the parties to the KHSA and the public. This section summarizes those studies.

7.1 Studies and Environmental Review

Federal agencies have completed all the studies called for in the KHSA and published final reports. Many of these reports were peer reviewed. Four public meetings were held throughout the Klamath Basin to describe the studies, discuss findings, and take public comment. The Federal Technical Management Team also sought comment and input from the individual KHSA Parties. The reports are available at KlamathRestoration.gov.

7.2 Klamath Dam Removal Overview Report

On February 1, 2013, the Department of the Interior released the final *Klamath Dam Removal Overview Report for the Secretary of the Interior: An Assessment of Science and Technical Information*. A summary of the report was in the Third Annual Report. A copy of the executive summary and the full report are available at KlamathRestoration.gov.

7.3 Environmental Review Process

Environmental review under the National Environmental Policy Act (NEPA), the California Environmental Quality Act (CEQA), and other applicable laws has been coordinated by the Federal agencies and California to prepare a single, joint environmental document.

The NEPA and CEQA processes were led by the U.S. Department of the Interior (DOI) and the California Department of Fish and Wildlife (CDFW), respectively. The Bureau of Reclamation managed environmental compliance on behalf of the U.S. Department of Interior. Reclamation awarded a contract to CDM Federal Programs for assistance in the preparation of both NEPA and CEQA environmental compliance documents.

The State of Oregon, and more specifically the “Klamath Team”, consisting of Oregon Water Resources, Oregon Department of Fish and Wildlife, and Oregon Department of Environmental Quality will follow a distinct process for the decision by the governor of Oregon (as defined pursuant to Executive Order No. 10-10).

Both NEPA and CEQA require public involvement opportunities. The DOI and the CDFW conducted seven public scoping meeting in July of 2010. In addition, many state, local and tribal governments, as well as federal agencies, were invited to participate as cooperating agencies under NEPA. Cooperating agencies had opportunities to provide input on the Environmental Impact Statement/Environmental Impact Report prior to public review of these documents.

On September 21, 2011, the Department of the Interior and California Department of Fish and Wildlife released a draft Environmental Impact Statement/Environmental Impact Report for public comment. This draft analyzed in detail five alternatives, including the proposed action of full dam removal and implementation of KBRA. Over 4,000 individual public comments were received on the draft EIS/EIR, either in writing or during a series of six public hearings throughout the area in October 2011. These public comments, and responses to these public comments, are contained in Volume III of the final EIS. Many of the public comments resulted in clarifying or expanded language in the final EIS/EIR.

The final EIS was publicly released in April 2013 and is available at www.KlamathRestoration.gov; the final EIR has not been officially released.

7.4 Response to Scientific Inquiries

Since the publication of the 50 final reports, the Overview Report, and the Final Environmental Impact Statement, the Federal Technical Management Team has responded to, or assisted in responding to, many inquiries regarding the published results. These inquiries have come from members of Congress, state agencies, tribal representatives, county supervisors/commissioners, non-governmental organizations, and the public. Responses to these inquiries typically lead to a clarification of findings as well as opportunities to provide additional detail on a scientific topic. The Federal Technical Management Team continues to respond to inquiries, many of which relate to scientific issues as the legislative process proceeds.

8. Implementation of Other KHSA Provisions

The Hydroelectric Settlement includes detailed actions for the operation of the dams and mitigation activities prior to removal of the dams. The KBCC has reviewed the status of these actions at each of its meetings. PacifiCorp has prepared annual reports on the progress of implementing these measures; a copy of the 2014 Implementation Report is available at www.klamathcouncil.org.

PacifiCorp and the KHSA Parties have made good progress in implementing the interim measures called for in the KHSA. Progress includes:

- PacifiCorp has provided over \$3.5 million in funding for the Coho Enhancement Fund; the projects that are being implemented are described in the Implementation Report.
- In February 2012, the National Marine Fisheries Service approved PacifiCorp's Habitat Conservation Plan for Coho Salmon (Coho HCP).
- In February 2014, the U.S. Fish and Wildlife Service approved PacifiCorp's Habitat Conservation Plan for Lost River and Shortnose Suckers.
- In August 2014, PacifiCorp placed 1,500 cubic yards of spawning gravel below Iron Gate dam pursuant to the Coho HCP to benefit coho salmon and other salmonids.
- In October 2014, the National Marine Fisheries Service approved the Hatchery and Genetics Management Plan developed by the California Department of Fish and Wildlife and PacifiCorp for the Iron Gate Hatchery coho salmon program.
- PacifiCorp is operating a new turbine venting blower resulting in increased dissolved oxygen below Iron Gate Dam.
- PacifiCorp is implementing variable flow releases from Iron Gate dam.
- PacifiCorp is continuing to fund fish disease studies.
- PacifiCorp has placed more than 2,000 cubic yards of spawning gravel below J.C. Boyle dam to enhance fish habitat.
- KHSA Parties and water quality agencies have worked to convene a water quality conference.
- PacifiCorp in consultation with the Interim Measures Implementation Committee (IMIC) is implementing a series of water quality improvement studies and pilot projects.
- PacifiCorp installed gages for Spencer Creek and J.C. Boyle bypass reach.
- PacifiCorp is funding ongoing basin-wide water quality monitoring.

- PacifiCorp is continuing to fund the Iron Gate Hatchery at higher levels than under the FERC license.
- BLM is implementing projects with funding from PacifiCorp for cultural resources, road maintenance, and invasive weed management.

Dam Removal Surcharge Approval

As of October 31, 2015, the combined balance of the Oregon and California dam removal trust accounts was \$102.3 million.

Background: On March 18, 2010, PacifiCorp filed applications with the California and Oregon public utility commissions requesting authorization to begin collecting dam removal surcharges from customers in those states. Regulatory orders from both the California and Oregon public utility commissions approving the collection of dam removal surcharges have since been issued, consistent with the framework for the Customer Contribution towards dam removal costs established in Section 4.1.1 of the Klamath Hydroelectric Settlement Agreement (KHSA).

The Oregon customer surcharges, with accrued interest, are designed to provide approximately \$184 million in funding for dam removal in 2020. The California customer surcharges, with accrued interest, are designed to provide approximately \$16 million in funding for dam removal in 2020. The surcharges on Oregon customers have been collected since March 18, 2010 while the surcharges on California customers began in January 2012.

Habitat Conservation Plans

On February 23, 2012, the National Marine Fisheries Service (“NMFS”) issued a federal Endangered Species Act Incidental Take Permit to PacifiCorp Energy for the Company’s ongoing operations of its Klamath Hydroelectric Project (“Project”) under a Habitat Conservation Plan for Coho Salmon. On February 20, 2014, the U.S. Fish and Wildlife Service (USFWS) issued a federal Endangered Species Act Incidental Take Permit to PacifiCorp Energy for the Company’s ongoing operations of its Klamath Hydroelectric Project (“Project”) under a Habitat Conservation Plan to benefit Lost River and shortnose suckers.

The Habitat Conservation Plans and associated Incidental Take Permits (“Permits”) were under development for several years and were subject to environmental review and public comment. Issuance of the Permits by NMFS and USFWS authorizes potential incidental take of listed coho salmon and suckers that may occur as a result of ongoing Project operations on the basis that implementation of the Habitat Conservation Plans will meet applicable statutory and regulatory criteria, including that PacifiCorp will minimize and mitigate to the maximum extent practicable effects of such incidental take of listed coho salmon and suckers during the Permit term. The Permits authorize the incidental take for

a 10-year period until establishment of anadromous fish passage is expected either through transfer and removal of Klamath Hydroelectric Project facilities under the terms of the Klamath Hydroelectric Settlement Agreement or through construction of volitional fish passage facilities required if transfer and removal of Project facilities do not occur.

Under the terms of the coho salmon Permit, PacifiCorp will fund projects to enhance coho conservation in the Klamath River below Iron Gate dam – the lowermost dam on the mainstem Klamath River. PacifiCorp will work with NMFS, the California Department of Fish and Wildlife, and the National Fish and Wildlife Foundation to identify, select, and implement conservation projects that will benefit coho salmon in the Klamath River.

In addition to funding and implementing habitat conservation actions, PacifiCorp will work closely with the U.S. Bureau of Reclamation, NMFS, and other stakeholders to implement flow regimes in the Klamath River to benefit listed species. PacifiCorp will also implement turbine venting at Iron Gate Dam to enhance dissolved oxygen concentrations, fund fish disease studies, and retrieve large woody debris trapped at Project dams and release it to the river channel downstream of Iron Gate Dam.

Under the terms of the sucker Incidental Take Permit, PacifiCorp has discontinued routine operations at the East Side and West Side hydroelectric developments. PacifiCorp will also support activities to enhance the survival and recovery of listed sucker species by funding additional sucker recovery initiatives during the period extending from shut down of the East Side and West Side developments until the end of the Permit term. Recommendations for projects to be funded by the Sucker Conservation Fund will be provided by the Klamath Sucker Recovery Program. PacifiCorp also will extend its significant funding support of The Nature Conservancy's Williamson River Delta Restoration project, which is one of the basin's most important sucker recovery and habitat restoration actions.