



— BUREAU OF —
RECLAMATION

**Reassessment of U.S. Bureau of Reclamation
Klamath Project Operations
to Facilitate Compliance with
Section 7(a)(2) of the Endangered Species Act**

This Document is for Decision Purposes Only

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CHAPTER 1 - PURPOSE AND CONTENT

The U.S. Bureau of Reclamation, California-Great Basin Region (“Reclamation”) has performed, and documented herein, a reassessment of actions associated with its continuing operation of the Klamath Project (Project), in southern Oregon and northern California. These actions were thoroughly and critically evaluated for the purpose of informing and supporting future consultation with the U.S. Fish and Wildlife Service (“USFWS”) and National Marine Fisheries Service (“NMFS”; collectively the “Services”) under Section 7(a)(2) of the Endangered Species Act (“ESA”). This comprehensive reassessment permitted careful consideration of previously proposed Reclamation actions to:

1. verify compliance with law and regulation;
2. clearly define the scope of actions;
3. correctly attribute actions to the appropriate agency;
4. ensure that non-discretionary actions are excluded from consultation; and
5. properly characterize the environmental baseline.

This reassessment report provides the legal and technical bases for all determinations. It will serve to support Reclamation’s decisions and to provide guidance for future Reclamation staff. This report also serves as a record of agency determination to assist in the preparation of a biological assessment (BA) and the conduct of ensuing ESA consultation, as necessary.

This report does not evaluate or determine the actual effects of the various activities on listed species or their critical habitat. Reclamation will determine the effects of actions proposed for inclusion in ESA consultation during preparation of any subsequent BA(s), as warranted.

This report entails six primary topics. Chapter 2 summarizes the recent ESA consultation history and establishes the direction and need for this reassessment. Chapter 3 outlines the salient regulatory definitions and recent court opinions that provide context for the reassessment. Chapter 4 presents a brief description of Klamath Project operations. Chapter 5 assesses the need for ESA consultation on each pertinent aspect of Klamath Project operations. Chapter 6 applies the concept of environmental baseline to actions proposed in prior consultations. Chapter 7 summarizes the reassessment’s findings, and documents Reclamation’s decision regarding the need for and/or scope of ESA consultation in connection with the Klamath Project.

The structure and format of this reassessment is based on a similar product the U.S. Army Corps of Engineers prepared in June 2014, for their reservoir operations on the Middle Rio Grande Basin of New Mexico, and recently upheld by the U.S. Court of Appeals for the 10th Circuit in *WildEarth Guardians v. U.S. Army Corps of Engineers*, No. 18-2153 (2020).

CHAPTER 2 - BACKGROUND

Chapter 2 provides context and justification for this reassessment of actions associated with operation of the Klamath Project for purposes of consulting with the Services under Section 7(a)(2) of the ESA.

2.1 2018 BA, 2019 BIOPS, AND INTERIM OPERATIONS PLAN

Current ESA compliance for Reclamation's continued operation of the Klamath Project is addressed in separate biological opinions (BiOps) issued by the NMFS¹ in 2019 and USFWS² in 2020. These BiOps evaluated Reclamation's proposed actions described in a BA, dated December 21, 2018³, as modified by February and October 2019 amendments, and subsequently, a letter from Reclamation to the Services dated March 27, 2020.

The 2018 BA, as modified, constitutes the "Interim Operations Plan" for the Klamath Project, while Reclamation undertakes a more extensive consultation with the Services. Reclamation reinitiated consultation with the Services by letter dated November 13, 2019, after the agency became aware of erroneous data included in the 2018 BA and relied upon by NMFS in its analysis. The Interim Operations Plan deviates from the operations proposed in the 2018 BA by adding an additional 40,000 acre-feet (AF) to the Environmental Water Account in certain year types. The Interim Operations Plan is intended to remain in effect until Reclamation completes the ongoing consultation with the Services, expected to conclude in the fall of 2022.

This reassessment provides guidance for Reclamation's ongoing Section 7(a)(2) consultation; it does not alter or affect Reclamation's current ESA compliance, as encompassed in the Interim Operations Plan.

2.2 CONSULTATION, LITIGATION, AND SETTLEMENT HISTORY

This summary provides a general picture of ESA consultations by Reclamation over more than three decades, particularly with respect to the operation of Upper Klamath Lake and resulting flows in the Klamath River. See section 2 of the 2018 BA for a more comprehensive listing of prior ESA Section 7(a)(2) consultations in connection with the Klamath Project.⁴

In July 1988, USFWS listed Lost River sucker (*Deltistes luxatus*) and shortnose suckers (*Chasmistes brevirostris*) as endangered. Reclamation consulted with USFWS the following year on the effects of aquatic herbicide use within the Klamath Project on these species. This consultation concluded with USFWS issuing a BiOp determining that Reclamation's continued use of acrolein in Klamath

¹ *Endangered Species Act Section 7(a)(2) Biological Opinion, and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for Klamath Project Operations from April 1, 2019 through March 31, 2024*, National Marine Fisheries Serv. (Mar. 29, 2019).

² *Biological Opinion on the Effects of the Proposed Interim Klamath Project Operations Plan, effective April 1, 2020, through September 30, 2022, on the Lost River Sucker and the Shortnose Sucker*, USFWS (Apr. 10, 2020).

³ *Final Biological Assessment on the Effects of the Proposed Action to Operate the Klamath Project from April 1, 2019, through March 31, 2024*, U.S. Bur. of Reclamation (Dec. 21, 2018).

⁴ To briefly list notable examples, Reclamation consulted with USFWS, in some cases repeatedly, on operation of Clear Lake Reservoir, Gerber Reservoir, and the Tule Lake Sumps, including releases from Anderson-Rose Dam; replacement of Clear Lake Dam; use of pesticides and fertilizers on federal lease lands and federal rights-of-way; private algae harvesting operations on Upper Klamath Lake; Agency Lake-Barnes Ranch pumped storage operations; and modifications to the A Canal headworks and Link River Dam to reduce fish entrapment.

Project canals and drainage ditches, as traditionally applied, was likely to jeopardize the continued existence of Lost River and shortnose suckers and proposing a number of Reasonable and Prudent Alternatives (RPA) intended to avoid jeopardy.

In August 1991, Reclamation completed a consultation on the effects of overall Project operations on Lost River and shortnose suckers and bald eagles. USFWS determined that the proposed operations for 1991 would likely to jeopardize Lost River and shortnose suckers, but not bald eagles. USFWS' BiOp included an RPA requiring a minimum water surface elevation in Upper Klamath Lake of 4,142.1 feet between March 15 and May 5, and 4,242.4 feet between May 6 and June 15.⁵

Drought conditions in 1992 indicated that Reclamation would be unable to achieve the required elevation of 4,142.1 feet by March 15, triggering Reclamation to reinitiate consultation with USFWS on the effects of proposed 1992 operations. The consultation, completed in July 1992, found that Reclamation's proposed operation of the Klamath Project from April 1992 through March 2001 would likely jeopardize Lost River and shortnose suckers, but not bald eagles.

For Upper Klamath Lake, USFWS' 1992 BiOp required as an RPA that Reclamation maintain water surface elevations at not less than 4,141.0 feet and a maximum increase in elevation of one foot from March 1 through April 30 of each year, or until 80 percent of sucker spawning had occurred. Additionally, the BiOp required a water surface elevation of 4,141.0 feet by May 31 and at least 4,139.0 feet from June 1 through the end of February. To comply with the BiOp terms, these latter two elevations could be "compromised" no more than two consecutive years regardless of the time period, and in no more than four years during the ten-year term of the BiOp.

In March 1995, NMFS issued a proposed rule listing Klamath Mountains Province (KMP) steelhead (*Oncorhynchus mykiss irideus*) as a threatened species under the ESA. Reclamation consulted with NMFS on the effects of the 1995 operations plan on KMP steelhead, and in April 1995, NMFS concurred with Reclamation's conclusion that the proposed operations were unlikely to jeopardize the species.

In 1995 Reclamation began operating the Klamath Project in accordance with annual operations plans that specified designated water surface elevations in Upper Klamath Lake and flows in the Klamath River. As a starting point, the flows in the Klamath River were based on the requirements in PacifiCorp's 1956 license from the Federal Energy Regulatory Commission (FERC) for minimum releases from Iron Gate Dam, notwithstanding that it is a non-federal facility approximately 40 miles downstream the Klamath Project.

In July 1995, NMFS issued a proposed rule to list Southern Oregon-Northern California Coast (SONCC) coho salmon (*Oncorhynchus kisutch*) as threatened under the ESA.

Large fish mass-mortality (i.e., "die-off") events in Upper Klamath Lake in 1995 and 1996 in part led Reclamation to reconsider minimum water surface levels in the lake. Beginning in 1997 Reclamation agreed to manage Upper Klamath Lake to achieve a minimum September 30 water surface elevation of 4,139.0 feet. That same year NMFS also officially listed SONCC coho as threatened.

⁵ All water surface elevations identified in this report are with respect to the Bureau of Reclamation datum specific to the facility.

In March 1998 NMFS determined that listing KMP steelhead was unwarranted, based in part on evidence that the fish were at a lower risk of extinction than at the time of the proposed listing.⁶

In March 1999, Reclamation requested formal Section 7(a)(2) consultation under the ESA on the effects of Project operations on coho salmon. NMFS' resulting July 1999 BiOp determined that Reclamation's proposed annual operations plan would likely adversely affect, but not jeopardize the continued existence of SONCC coho or its critical habitat. NMFS determined, however, that more information was necessary in order to fully understand the relationship between Iron Gate Dam releases and available coho habitat and water quality in the Klamath River, particularly during the summer months. NMFS also relied on the fact that Reclamation had committed to obtain additional information and analyses to assist in developing future operations plans.

In August 1999, a Department of Interior-commissioned scientific assessment of the flow needs of anadromous species in the Klamath River basin – known as Phase I of the “Hardy Report” – provided interim recommendations on minimum monthly flow levels for the mainstem of the Klamath River needed to support aquatic life.⁷

In 2000, Reclamation issued an annual operations plan providing for certain flows at Iron Gate Dam, but Reclamation did not consult with NMFS about the effects due primarily to delays in obtaining the information necessary to inform the consultation. The Pacific Coast Federation of Fishermen's Associations (PCFFA) filed suit in the U.S. District Court for the Northern District of California, and in an April 2001 opinion, the court ultimately granted PCFFA's motion for summary judgment, finding that Reclamation had failed to comply with ESA before implementing the 2000 operations plan.⁸

At the time, Reclamation also had to reconsult over the effect to endangered Lost River and shortnose suckers, with expiration of USFWS' 1992 BiOp. In February 2001, Reclamation issued a BA proposing to operate the Project consistent with historical operations, including for Upper Klamath Lake, thereby meeting or exceeding minimum levels that occurred during the period from 1960 to 1998.

In March 2001, USFWS issued a jeopardy BiOp, with an RPA requiring, among other conditions, that water not be diverted from Upper Klamath Lake for irrigation purposes if surface elevations were anticipated to go below certain designated water surface elevations, ranging between 4,141.0 feet and 4,142.5 feet at nine separate dates throughout the year (January 1, February 15, March 15, April 15, June 1, July 15, August 15, September 15, and October 15), regardless of inflow year type.

USFWS' 2001 BiOp recognized that there would be circumstances in which Reclamation could not meet both the RPA for specific lake levels and NMFS' anticipated RPA for river flows. The BiOp established a process for how these situations would be addressed. An appendix specified that, for 2001, Upper Klamath Lake water surface elevations were not to fall below 4,139.0 feet on September 30.

The April 2001 opinion from the district court also enjoined Reclamation from making irrigation deliveries that year if flows in the Klamath River dropped below the minimum flows recommended in the Phase I Hardy Report until the consultation process with NMFS was complete.⁹ Three days later, NMFS issued a jeopardy BiOp on Reclamation's February 2001 BA. NMFS' BiOp included an RPA that

⁶ This decision was subsequently overturned by the U.S. District Court for the Northern District of California in October 2000, but the agency nevertheless again determined in April 2001 that the species did not warrant listing.

⁷ Thomas B. Hardy, *Evaluation of Interim Instream Flow Needs in the Klamath River – Phase I*, Utah State Univ. (1999).

⁸ *PCFFA v. U.S.*, 138 F. Supp. 2d 1228 (2001).

⁹ *Id.*

provided for flows of 1,850 cubic feet per second (cfs) between April 1 and June 30, followed by 1,000 cfs through September. To comply with this RPA and USFWS' RPA, Reclamation could not make any water available from Upper Klamath Lake for delivery to Project irrigators at the start of the irrigation season.

Phase II of the "Hardy Report" was released in November 2001.¹⁰ The report used site-specific habitat modeling and estimates of the unimpaired flows in the main stem to arrive at a recommendation for flows for each river reach.

Following 2001, the National Research Council (NRC) was asked by the Departments of Interior and Commerce to independently review the scientific and technical validity of the government's BiOps. NRC's interim report was released in February 2002.¹¹

Among other findings, NRC's report found no scientific support for the flow recommendations in the NMFS's BiOp.¹² But the report also found that no justification for the proposed action in Reclamation's 2001 BA, concluding that it "could lead to more extreme suppression of flows than has been seen in the past..."¹³ Overall, the report concluded that "there is no convincing scientific justification at present for deviating from flows derived from operational practices in place between 1990 and 2000."¹⁴

With regard to Upper Klamath Lake, the report found that there was no clear empirical evidence for a relationship between water levels and mass-mortality events for fish. At the same time, with regard to Reclamation's 2001 BA, NRC found "no scientific basis for operating the lake at mean minimum levels below the recent historical ones (1990-2000)", and that these operations "would require acceptance of undocumented risk to the suckers."¹⁵

In February 2002, Reclamation issued a new BA, which proposed, for April 2002 through March 2012, in addition to numerous conservation measures, varying both river flows and lake levels by "water year type." For each type of water year, Reclamation used the historical average flow and lake levels over the previous ten-year period (1990 to 1999) to set its operational targets. In addition, Reclamation proposed to establish a "water bank" to make up to 100,000 total AF of water available to meet river flows. These conditions resulted in levels in Upper Klamath Lake in "critically dry" years between 4,137.1 feet (September) and 4,142.0 feet (March), and an overall mean lake level, across all year types of approximately 4,139.0 feet.

In May 2002 both USFWS and NMFS issued jeopardy opinions on Reclamation's proposed action.

USFWS' RPA did not prescribe specific alternative water levels in the lake, but rather that Reclamation, among other conditions: 1) use the 50-percent, instead of 70-percent, exceedance forecast for seasonal inflows; 2) reduce entrainment of suckers at Link River Dam; and 3) evaluate factors

¹⁰ Thomas B. Hardy and R.C. Addley, *Evaluation of Interim Instream Flow Needs in the Klamath River – Phase II*, Utah State Univ. (2001).

¹¹ National Research Council, *Scientific Evaluation of Biological Opinions on Endangered and Threatened Fishes in the Klamath River Basin* (2002).

¹² *Id.* at p. 27. NMFS later attributed NRC's conclusions to "lack of information on distribution and abundance of coho ... and the lack of studies focused on coho and factors limiting its population in the Klamath River Basin." In its 2002 BiOp, NMFS did not dismiss the NRC report, but did not adopt its conclusions in full.

¹³ *Id.*

¹⁴ *Id.*

¹⁵ *Id.* at p. 4.

affecting water quality in Upper Klamath Lake, potential actions to reduce fish die-offs, and ongoing sucker population monitoring.

NMFS' RPA was broken into three phases, gradually leading (by 2010 and 2011) to minimum flows in the Klamath River varying between 1,000 cfs (July-September) and 1,500 cfs (April-May), based in part on the Phase II Hardy Report. The RPA was based around the principle that Reclamation should bear responsibility for only the share of water losses attributable to the Klamath Project. Because the Project represented approximately 57 percent of the irrigated land in the basin, the RPA provided for Reclamation to provide 57 percent of the water needed for coho and to establish an intergovernmental workgroup to "develop" the other 43 percent. The RPA permitted Reclamation to use its "water bank" to provide its share of the water. These flows increased based on the water year type (i.e., dry, below average, average, above average, wet).

In September 2002, a large fish mass-mortality event occurred in the lower Klamath River, resulting in over 34,000 dead fish, mostly adult Chinook salmon. PCFFA subsequently sued NMFS over its 2002 BiOp.

In July 2003, the U.S. District Court for the Northern District of California overturned part of the RPA, finding the requirement that Reclamation provide only 57 percent of the long-term flows to be arbitrary and capricious.¹⁶ The court concluded that the NMFS had considered the effects of actions that were not "reasonably certain to occur" when it determined that the coho would receive 100 percent of the flows through a collaborative process.¹⁷ However, the court determined that the short-term measures – phases 1 and 2 – were not arbitrary and capricious. The court ordered NMFS to revise its BiOp with respect to Phase III of the RPA, but provided that the interim measures, phases 1 and 2, would remain in effect pending a revised BiOp.¹⁸

The Ninth Circuit, in October 2005, overturned the district court's ruling, finding that NMFS's decision to delay the provision of the full quantity of water for eight years was not supported by the record.¹⁹ The BiOp contained no analysis of the effect on coho during the first eight years of the RPA, despite the species' three-year life cycle. On remand, in March 2006, the U.S. District Court for the Northern District of California ordered Reclamation to comply with 100-percent of the RPA's Phase III flows until completion of a Section 7(a)(2) consultation.²⁰

Beginning in 2005, stakeholders in the Klamath Basin began a settlement process to address the conflicts over water that had emerged since the 1990s. These settlement discussions involved all major water user communities and Klamath Basin Tribes and covered a broad number of topics that were included in several documents, including the Klamath Basin Restoration Agreement (KBRA) and the Klamath Hydroelectric Settlement Agreement (KHSA).

With respect to the management of Klamath Project features by Reclamation, the settlement negotiations began to form around certainty in allocations for irrigation purposes, accompanied by a designated plan to reduce irrigation demands in years when the available supply would be inadequate.

In October 2007 Reclamation issued a new BA on proposed operations from April 2008 through March 2018. Reclamation was not at the time required to reconsult with USFWS, but it elected to because

¹⁶ *PCFFA v. U.S.*, No. 02-2006 SBA (N.D. Cal. Jul. 15, 2003).

¹⁷ *See PCFFA v. U.S.*, 426 F.3d 1082, 1089 (9th Cir. 2005).

¹⁸ *Id.* at 1090.

¹⁹ *Id.* at 1091.

²⁰ *PCFFA v. U.S.*, No. 02-2006 SBA (N.D. Cal. May 24, 2006).

Reclamation had encountered difficulties in implementing the proposed action described in the 2002 BA. One reason was because seasonal inflows to Upper Klamath Lake between 2002 and 2007 were different from those that occurred in the 1990s, being generally drier and this made it difficult for Reclamation to operate to an annual UKL elevation curve that closely fit the period of record.

The other problem was with the use of year types and the fact that monthly inflows could vary, regardless of overall net inflow. As a result, there were times that actual monthly inflows were less than what was needed to meet Upper Klamath Lake elevations despite the projection that lake elevations would be met based on the forecast net annual inflow. Additionally, the forecasted net annual inflow did not always accurately represent the actual net inflow.

The 2007 BA proposed minimum Upper Klamath Lake elevations as low as 4,137.5 feet (September). No minimums were specified for October through January. A model indicated that lake levels would remain above 4,138.9 feet in 70 percent of the years. The BA also included an “Interactive Management” process to distribute “surplus water” between the Klamath River and Upper Klamath Lake. For the Klamath River, the BA proposed minimum flows ranging between 1,000 cfs (July-September) and 1,500 cfs (April-May), increasing under wetter conditions.

In April 2008, USFWS issued a non-jeopardy opinion on Reclamation’s proposed action. In June 2008, NMFS issued a draft jeopardy opinion with no RPA. A later version of the draft BiOp included an RPA that Reclamation deemed unacceptable in terms of shortages to the Project. After further discussion, a revised RPA was developed that reduced the shortages to the Project, but which Reclamation still felt was unsupported by the science and would conflict with Reclamation’s proposed action with respect to Upper Klamath Lake water surface elevations specified in USFWS’ 2008 BiOp. In October 2008 Reclamation notified NMFS it was suspending the consultation. Reclamation decided to operate the Project under USFWS’ 2008 BiOp and NMFS’ 2002 BiOp (Phase III flows).

In February 2010, the non-federal parties, including the Klamath Tribes and the Yurok Tribe, signed the KBRA. As negotiated, the KBRA provided for an annual fixed irrigation supply for the Klamath Project from Upper Klamath Lake and the Klamath River, and a commitment by the respective tribes, subject to certain conditions and considerations, to not exercise their senior water rights to curtail agreed-upon diversions by the Klamath Project.

Shortly after execution of the KBRA, Reclamation requested that NMFS finalize its opinion on Project operations from 2008 to 2010, consistent with the same RPA proposed when the 2008 consultation was suspended. Five days later, NMFS issued a jeopardy BiOp with a two-part RPA, providing for fall-winter flow variability and increased spring flows in average and wetter years. Additionally, the RPA specified minimum flows anticipated to be observed at Iron Gate Dam from March through September, ranging from 805 cfs (July) to 1,325 cfs (April), increasing under wetter conditions. Reclamation conditionally accepted NMFS’ BiOp, based in part on its determination that compliance with the RPA could cause water levels in Upper Klamath Lake to be lower than those analyzed in USFWS’ 2008 BiOp.

Reclamation deliberated on various paths forward, ultimately arriving at the plan to develop a “coordinated proposed action” in collaboration with the Services, the tribes, and Klamath Project water users. This collaborative process, which began in 2010, was largely facilitated by existing working relationships established during negotiation of the KBRA. In December 2012, following three years of

collaborative technical discussions, Reclamation released a BA, to which USFWS and NMFS responded in May 2013 with a “joint” non-jeopardy BiOp.²¹

The 2012 BA and 2013 BiOp incorporated a novel operational regime that included an “Environmental Water Account” for the Klamath River, a “UKL Reserve” for Upper Klamath Lake, and a fixed “Project Supply” for irrigation. These operational rules had been coded into the programming logic of a hydrologic model, called the Klamath Basin Planning Model (KBPM). The KBPM was developed by a technical team that included hydrologists and scientists who represented Reclamation, the Services, the tribes, and Project water users.

The central purpose of the KBPM was to test new operational concepts in the context of historical hydrology, and to facilitate agreement on operations that would produce acceptable outcomes among the multiple parties. Notably, each of the parties that contributed to development of the KBPM and its novel operational regime set aside several legal considerations that were anticipated at the time to eventually be resolved through the enactment of the KBRA into federal law, including state water law, water supply contracts, federal authorizations, federal tribal trust obligations, and necessary refuge water supplies.

Reclamation had previously developed and used models to evaluate the effects of different proposed actions in response to various hydrologic conditions, and thus impacts to listed species. The major difference was that the KBPM presented a proposed action that departed from basic actions required for serving the Klamath Project, as defined by Congress and embedded in contracts between Reclamation and water users within the Project.

The 2012 BA (as elaborated in the logic code of the KBPM) contained various formulaic means of governing the operation of water storage in, and outflows from, Upper Klamath Lake, which were crafted to achieve mutually agreeable, or at least acceptable, hydrologic outcomes among the parties involved. Therefore, beyond simply being used as a predictive model for evaluating operational alternatives, the KBPM established formulaic rules for operating the Project intended to achieve agreed-upon outcomes, including various frequencies of monthly lake levels (to the hundredth of an inch), daily river flows at Iron Gate Dam (to the cfs), and a water supply for the Project, including the refuges, that was “locked in” (to the AF), at the beginning of the agricultural season.

In practice, attempting to manage the Klamath Project – really the entire upper Klamath Basin – on a daily basis based on a series of set formulas has proven to be operationally challenging, and in some cases impossible, in addition to being unsatisfactory to many affected stakeholders, including Klamath Basin Tribes and water users. In short, the KBPM has proven unworkable because factors that are beyond Reclamation’s control influence hydrology, the status of the listed species, and their critical habitat, including fish disease dynamics in the Klamath River and water quality in Upper Klamath Lake.

The novel approach to operating the Project contained in the 2012 BA was predicated in part on the assumption that the formulaic logic of KBPM would eventually be replaced with an operational regime governed by the KBRA.²² While the proposed action in the 2012 BA did not represent the KBRA, it was intended as a step in transitioning toward operations anticipated to occur under the KBRA.

²¹ In addition to coho salmon, the 2013 BiOp also analyzed the effects of project operations on the southern Distinct Population Segment (DPS) of green sturgeon (*Acipenser medirostris*) and the southern DPS of Pacific eulachon (*Thaleichthys pacificus*).

²² The 2012 BA also expressly acknowledged that project operations would likely also need to change following the State of Oregon’s issuance of the Findings of Fact and Order of Determination in the Klamath Basin Adjudication.

In January 2016, without any action by Congress to authorize the agreement, the KBRA expired on its own terms. In July and November 2016, the Hoopa Valley and the Yurok tribes respectively, along with other parties, filed litigation against the United States in the U.S. District Court for the Northern District of California. The plaintiffs alleged that Reclamation had failed to reinitiate consultation after the amount of “incidental take” of coho – as measured by disease rates in Chinook salmon – in both 2014 and 2015 exceeded the take limit in NMFS’ portion of the 2013 BiOp.

In January 2017, Reclamation reinitiated consultation with the Services. In February 2017, the court ordered that, pending completion of Section 7(a)(2) consultation, Reclamation provide two types of pulse flows (“surface and deep flushing flows” and “emergency dilution flows”) in the Klamath River intended to mitigate a disease affecting juvenile salmon, while otherwise complying with the 2013 BiOp, including conditions necessary to protect suckers in Upper Klamath Lake.²³ This was a noteworthy development, in that the 2012 BA was based in part on an anticipated settlement and were now being used as a starting point for defining additional measures. From this point further, the balance achieved through negotiations was no longer possible and any improvement in supply for one party necessitated actions that would be perceived as reductions for others.

The pulse flows the court directed were based on four technical memoranda prepared by USFWS, and a resulting guidance document prepared by the Yurok, Karuk, and Hoopa Valley tribes in January 2017, which provided measures intended to mitigate the effects of *Ceratanova shasta* infection rates in coho salmon and Chinook salmon below Iron Gate Dam.

In December 2018, Reclamation issued a new BA for the proposed period of April 2019 through March 2024, which built off the KBPM, but that included approximately 50,000 AF of additional water designated for release to the Klamath River during the spring-summer period, for use in producing, at the very least, a “surface flushing flow” at Iron Gate Dam of 6,030 cfs for 72 hours.²⁴ The proposed action also included a “UKL control logic”, intended to result in end-of-season elevations that cause Upper Klamath Lake to refill the subsequent year, in order to allow both a flushing flow and provide adequate water surface elevations in the lake for suckers. In March 2019, NMFS and USFWS issued separate non-jeopardy opinions on the 2018 BA.²⁵

In July 2019, the Yurok Tribe and other parties filed litigation in the U.S. District Court of Northern California challenging NMFS’ 2019 BiOp and Reclamation’s compliance with the National Environmental Protection Act. In September 2019, the plaintiffs amended their complaint, further alleging that Reclamation and NMFS’ analysis was based on erroneous technical data (on available coho habitat), derived from the Phase II Hardy Report.

In response to the erroneous data related to available coho habitat, in November 2019, Reclamation formally requested reconsultation with NMFS and USFWS on Klamath Project operations.

In February 2020, Reclamation transmitted a final BA on project operations from April 2020 through March 2024, requesting completion of the consultation by the end of March, though acknowledging that additional time for the consultation would benefit all interested parties.

²³ *Yurok Tribe v. U.S.*, 231 F.Supp.3d 450, 490 (N.D. Cal. Feb. 8, 2017).

²⁴ Reclamation clarified and amended the proposed action multiple times during the consultation, as further described in 2.1.

²⁵ In addition to suckers, coho salmon, the southern DPS of North American green sturgeon, and the southern DPS of Pacific eulachon, NMFS 2019 BiOp also considered the effects of project operations on the southern resident DPS of killer whales (*Orcinus orca*).

After further discussions among the parties, in March 2020, Reclamation, NMFS, the Yurok Tribe, Klamath Project water users, among other parties agreed to a stipulated stay in the litigation, which was approved by the district court, based on Reclamation following the Interim Operations Plan pending completion of ongoing consultation. The Interim Operations Plan adds approximately 40,000 AF to the volume of water from Upper Klamath Lake designated for release to the Klamath River during the spring and summer period to the 2018 BA, as amended. Based on the agreed upon extended reconsultation, Reclamation also withdrew its February 2020 BA.

The practical result for 2020 was that Reclamation made 155,000 AF of water available from Upper Klamath Lake for irrigation purposes within the Project during the spring-summer season (approximately one-third the historical demand), while simultaneously releasing approximately 407,000 AF to the Klamath River to achieve designated flows at Iron Gate Dam, amidst inflows to the lake of approximately 360,000 AF.

2.3 DIRECTION FROM THE SECRETARY OF THE INTERIOR

In July 2020, Secretary of the Interior David Bernhardt, accompanied by Reclamation's Commissioner Brenda Burman, traveled to Klamath Falls, to meet with Klamath Project water users, tribal leaders, elected officials, and staff from Reclamation, USFWS, and the U.S. Geological Survey. During their visit, Secretary Bernhardt and Commissioner Burman committed to begin implementing long-term solutions that more reliably meet the water needs of the Klamath Basin.

Following the Secretary and Commissioner's visit to Klamath Falls, legal counsel for the Klamath Water Users Association and Klamath Irrigation District separately wrote the Secretary, requesting that the Department of Interior's Office of the Solicitor review various legal issues related to Reclamation's operation of the Klamath Project. In response, the Secretary directed the Office of the Solicitor to review certain legal issues surrounding the Project.

In identical letters sent to Klamath Water Users Association and Klamath Irrigation District, dated November 12, 2020, the Secretary furnished a copy of the Office of Solicitor's preliminary findings, indicating that Reclamation's discretion in operating the Klamath Project is likely constrained by the contracts providing water to districts and individuals within the Project. Based on this initial review, the Secretary directed Reclamation, in coordination with the Office of the Solicitor, to review the contracts and other legal authorities governing the Project. Further, the Secretary directed Reclamation to "determine what portion of water in the Project is segregable, and thus set aside for irrigation purposes and unavailable for other purposes." Such analysis, presented herein, requires proper contextualization of the ESA among and along with all federal responsibilities and obligations.

CHAPTER 3 - LEGAL CONTEXT OF REASSESSMENT

Chapter 3 summarizes pertinent legal principles, regulatory definitions, and judicial decisions that provide the context for this reassessment.

3.1 DEFINING THE AGENCY ACTION

An agency's proposed actions are the subject of any BA. Within the context of ESA Section 7(a)(2) consultation, the term "action" is defined as all activities or programs of any kind authorized, funded or carried out, in whole or in part, by a federal agency.²⁶ It is Reclamation, not the Services, that defines the proposed action at issue for consultation²⁷, and those actions should be defined precisely. It is the action agency that first evaluates the potential effects of its actions on listed species and their habitat, and provides this, and other information, to the Services.²⁸ The Services then conduct their own analyses and provide their opinion as to whether the agency's proposed action is likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat.²⁹

3.2 NON-DISCRETIONARY ACTIONS NOT SUBJECT TO CONSULTATION

A federal agency must have discretion over an "action" for ESA Section 7(a)(2) to apply to agency actions.³⁰ Not all agency actions are discretionary. Discretion may not only be constrained or limited in some manner by legal authorities, but also, as a practical matter, by physical conditions beyond the agency's control (e.g., rainfall).

Where there is no discretion, an agency has no duty to consult.³¹ An agency may still exercise independent judgment, but lack some degree of discretion.³² For example, Reclamation has a responsibility to prevent civil works from damage and destruction, whatever the cause, so that they continue to serve their congressionally authorized purposes. Those actions, albeit subject to independent judgment (i.e., the exact manner to which they occur), are nonetheless non-discretionary.

The authorized purposes of the facilities and the project can further limit Reclamation's discretion in some respects. Congress establishes the purposes for which federal reclamation projects may be used.

Overall, ESA Section 7(a)(2) cannot serve to override a federal statute or contract mandating agency action by subjecting such action to further conditions.³³ Nor does ESA Section 7(a)(2) require an agency to consult on non-federal actions for which the agency has no means of control or discretion over.

²⁶ 50 CFR §402.02.

²⁷ 50 CFR §402.14(c)(l).

²⁸ *Id.*

²⁹ 16 U.S.C. §1536(b); 50 CFR §402.14(g).

³⁰ 50 CFR §402.03; *Nat'l Assoc. of Home Builders v. Defenders of Wildlife*, 551 U.S. 644 (2007).

³¹ *Id.* at 665 ("the ESA's requirements would come into play only when an action results from the exercise of agency discretion"); see also *Department of Transportation v. Public Citizen*, 541 U.S. 752, 770 (2004) ("where an agency has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions, the agency cannot be considered a legally relevant 'cause' of the effect.") Further, the Supreme Court has recognized that the legal causation argument in *Public Citizen* supports "the reasonableness of the FWS's interpretation of §7(a)(2) as reaching only discretionary agency actions." *Nat'l Assoc. of Home Builders*, 551 U.S. at 665.

³² *Id.* at 668 ("while [an agency] may exercise some judgment in determining [an agency action], the statute does not grant it discretion ...").

³³ See *Platte River Whooping Crane Critical Habitat Maintenance Trust v. FERC*, 962 F.2d 27, 33-34 (D.C. Cir. 1992).

3.3 ANALYTICAL FRAMEWORK – LEGAL AUTHORITIES AND CONSTRAINTS

Reclamation derives authority for operation of the Klamath Project from the Act of February 9, 1905, which authorized Reclamation to raise and lower water levels in Lower Klamath and Tule lakes, and any waterbodies connected therewith, in carrying out a federal reclamation project in accordance with the Reclamation Act of 1902.³⁴ In their natural condition, these lakes and the connected waterbodies were interstate navigable waterways, over which Congress has the exclusive right to regulate under the Commerce Clause of the U.S. Constitution.

Congress did not place any requirements, conditions, or other express constraints on this authority over changing water levels, except as generally exist under the Reclamation Act of 1902. From an operational standpoint, the Reclamation Act of 1902 includes two substantive conditions on Reclamation’s authority. First, Section 6 provides in part that “title to and the management and operation of the reservoirs and works necessary for their protection and operation shall remain in the Government until otherwise provided by Congress”.³⁵ Second, Section 8 provides that Reclamation, in developing federal reclamation projects, “shall proceed in conformity with” “the laws of any State or Territory relating to the control, appropriation, use, or distribution of water used in irrigation”.³⁶ Section 8 also protects pre-existing water rights, including reserved water rights.³⁷ Reclamation’s discretion in operating the Klamath Project is constrained by these express congressional directives.

In accordance with Section 6 of the Reclamation Act of 1902, Reclamation must operate the Klamath Project consistent with other federal laws, including, for example, the ESA.³⁸ Under Section 8, Reclamation must also comply with state law on the control, appropriation, use, and distribution of water in connection with the Klamath Project, provided such state laws are consistent with directives of Congress. Both these mandates confine Reclamation’s discretion in operating the Klamath Project. Reclamation has no discretion – except as otherwise directed by Congress – to comply with state law in acquiring and exercising water rights in connection with a federal reclamation project.³⁹ Lastly, as the Klamath River is an interstate stream, Congress’ directive in Section 8 regarding protecting vested rights necessarily pertains to Reclamation’s administration of the Klamath Project.

Reclamation’s discretion may further be limited by the United States’ contracts with non-federal entities for water from the Klamath Project, as well as contracts for transfer of operation and maintenance of federal facilities to non-federal entities. Reclamation has a legal obligation to water users within the Klamath Project to operate the Project consistent with the contracts between the United States and them. These contracts generally furnish a water supply from the Project and provide for operation and maintenance of Project facilities by non-federal entities, subject to certain terms and conditions that vary by contract. There are also a limited number of contracts between the United States and water users with rights predating the Klamath Project, which Reclamation is also obligated to operate in accordance with.

³⁴ 33 Stat. 714.

³⁵ 32 Stat. 389, 43 U.S.C. §498.

³⁶ 32 Stat. 390; 43 U.S.C. §383.

³⁷ *Id.* (“nothing herein shall in any way affect any right of any State or of the Federal government or of any landowner, appropriator, or user of water in, to, or from any interstate stream or the waters thereof”); *United States v. Truckee-Carson Irrig. Dist.*, 649 F.2d 1286, 1298 (9th Cir. 1981), *modified*, 666 F.2d 351 (9th Cir. 1982), *aff’d in part and rev’d in part on other grounds sub nom.*

³⁸ Section 10 of the 1902 Act, 43 U.S.C. § 373, also directs the Secretary “to perform any and all acts and to make such rules and regulations as may be necessary and proper” to ensure that Project operations conform to applicable laws. *See United States v. Alpine Land & Reservoir Co.*, 887 F.2d 207, 212 (9th Cir. 1989); *Truckee-Carson Irr. Dist. v. Secretary*, 742 F.2d 527 (9th Cir. 1984), *cert. denied*, 472 U.S. 1007 (1985).

³⁹ *Ivanhoe Irr. Dist. v. McCracken*, 357 U.S. 275, 291-2 (1958). *Also see Hennings v. Oregon*, 50 Ore. App. 121 (Or. Ct. App. 1981) (water must be used for the purpose set out in the permit or certificate).

Reclamation, as an agency of the United States, serves as trustee for tribal and individual Indian lands, assets, resources, and treaty and similarly recognized rights. This trust responsibility extends to three federally recognized tribes in the Klamath Basin – the Klamath, Yurok, and Hoopa Valley tribes – and further limits Reclamation’s discretion in operating the Klamath Project.⁴⁰

Pursuant to *Winters v. United States* and subsequent case law applying it (the “*Winters Doctrine*”), the establishment of Indian reservations such as those of the Klamath, Yurok, and Hoopa Valley tribes (or other federal reservations such as national parks or national wildlife refuges) implicitly reserves sufficient water to accomplish the purposes of those reservations.⁴¹ These tribal water rights, although unadjudicated in certain respects, are nonetheless senior in priority to the water rights associated with the Klamath Project.⁴² Reclamation has an obligation to operate the Klamath Project and manage water resources (including storage and diversions) consistent with the tribes’ senior water rights.⁴³

3.4 ENVIRONMENTAL BASELINE

The environmental baseline includes the past and present impacts of all federal actions or other human activities in the action area.⁴⁴ The environmental baseline also includes the anticipated impact of all proposed federal projects in the action area that have already undergone ESA consultation.⁴⁵ Finally, the ESA’s consultation requirements are not retroactive to facilities constructed or under construction prior to its enactment.⁴⁶ The statutory definition of environmental baseline also includes present impacts, meaning ongoing impacts, of state, tribal, local and private actions affecting the species at the same time as the consultation in progress.⁴⁷

The fact that Reclamation maintains a federal facility that was constructed prior to the ESA for its congressionally authorized purpose is not an action subject to consultation. The continued presence of a dam, canal, drain, or other civil works structure cannot reasonably be said to cause modification to the land, water, or air within the meaning of Section 7(a)(2) of the ESA. Similarly, federal contracts that existed prior to enactment of the ESA, which limit or otherwise do not provide Reclamation some degree of discretion, are part of the environmental baseline.⁴⁸

Impacts attributable to environmental baseline may affect the species, but the effects of environmental baseline are not attributable to an agency’s proposed action. However, the environmental baseline, cumulative effects, and the effects of the proposed action are all considered by the Services when they conduct their jeopardy and adverse modification analyses under Section 7(a)(2).⁴⁹

⁴⁰ *Patterson*, 204 F.3d at 1214.

⁴¹ 207 U.S. 564, 576-77 (1908); *see also Cappaert v. U.S.*, 426 U.S. 128, 139 (1976) (*Cappaert*); *Arizona v. California*, 373 U.S. 546, 597-602 (1963).

⁴² *Baley*, No. 18-1323 at 51.

⁴³ *Patterson*, 204 F.3d at 1214; *Kandra v. U.S.*, 145 F. Supp. 2d 1192 (D. Or. 2001). *See also* Secretary of the Interior, Order No. 3335, “Reaffirmation of the Federal Trust Responsibility to Federally Recognized Indian Tribes and Individual Indian Beneficiaries” (Aug. 20, 2014).

⁴⁴ 50 CFR §402.02.

⁴⁵ *Id.*

⁴⁶ 6 U.S.C. §1536(c)(1). The date for this exemption is November 10, 1978, the date of the ESA amendments.

⁴⁷ USFWS, *Endangered Species Consultation Handbook*, p. 4-22 (1998) (describing environmental baseline as “an analysis of the effects of past and ongoing human and natural factors leading to the current status of the species, its habitat (including designated critical habitat) and ecosystem... The baseline includes State, tribal, local and private actions already affecting the species or that will occur contemporaneously with the consultation in progress.”)

⁴⁸ *See e.g., id.* at p. 4-26 (“ongoing effects of the existing dam are already included in the Environmental Baseline and would not be considered an effect of the proposed action under consultation”).

⁴⁹ 50 CFR. 402.14(g)(4).

CHAPTER 4 - BRIEF DESCRIPTION OF THE KLAMATH PROJECT

Chapter 4 provides a brief description of the Klamath Project in the Klamath Basin of southern Oregon and northern California.

Pursuant to Section 2 of the Reclamation Act of 1902, Reclamation initiated surveys of the Klamath Basin beginning in October 1903.⁵⁰ In a report dated November 2, 1903, Reclamation's engineer, John T. Whistler, identified the potential feasibility of an irrigation project serving approximately 200,000 acres. Additional surveys were conducted during the summer of 1904, and based on that information, the Secretary of the Interior subsequently withdrew over 1.1 million acres of public lands in late 1904.

On February 9, 1905, Congress passed an act, subsequently signed into law by President Theodore Roosevelt, providing that:

*The Secretary of the Interior is hereby authorized in carrying out any irrigation project that may be undertaken by him under the terms and conditions of the national reclamation act and which may involve the changing of the levels of Lower or Little Klamath Lake, Tule or Rhett Lake, and Goose Lake, or any other body of water connected therewith, in the States of Oregon and California, to raise or lower the level of said lakes as may be necessary to dispose of any lands which may come into the possession of the United States as a result thereof by cession of any State or otherwise under the terms and conditions of the national reclamation act.*⁵¹

Following enactment of this law, a board of consulting engineers convened in Klamath Falls to inspect the proposed works. This board ultimately produced a report to Reclamation's Chief Engineer, dated May 1, 1905, recommending authorization of a project for reclamation and irrigation of 236,401 acres – approximately 180,000 acres of which was then inundated by Tule and Lower Klamath lakes – at an estimated cost of \$4.4 million.

The Director of the U.S. Geologic Survey referred the board's report to Secretary of the Interior, who subsequently authorized the Project on May 15, 1905. Accordingly, the authorized purpose of the Klamath Project is to provide a water supply for approximately 230,000 acres of irrigable land and to reclaim lands within the former beds of Tule and Lower Klamath lakes. Accomplishment of this purpose includes the authorized incidental purposes of power and flood control.⁵²

Four days after the project's authorization, on May 19, 1905, Reclamation filed a notice with the State of Oregon, pursuant to state law, of its intentions to appropriate and utilize "all the waters of the Klamath Basin, constituting the entire drainage basins of the Klamath River and Lost River, and all of the lakes, streams and rivers supplying water thereto or receiving water therefrom..."⁵³ This notice forms the basis for all water rights in the State of Oregon in connection with the Klamath Project. Similar water right notices were also filed in California, in accordance with California law.

⁵⁰ 32 Stat. 388; 43 U.S.C. §411.

⁵¹ 33 Stat. 714.

⁵² Regarding flood control, see "Authority for Construction of Works to Protect Tulelake Area, including Coppock Bay Lands, from Flooding – Tulelake Division, Klamath Project", Leland O. Graham, Reg. Counsel, U.S. Bur. of Reclamation (Sept. 18, 1947); "Authorization of Construction of Certain Flood Protection Works, Klamath Project", Leland O. Graham, Reg. Counsel, U.S. Bur. of Reclamation (Oct. 8, 1948). Regarding the incidental authorization for power development, see "Klamath Power Determination", Michael L. Connor, Comm., U.S. Bur. of Reclamation (May 17, 2013).

⁵³ Act of Feb. 22, 1905, Or. Gen. Laws, 1905, Ch. 228.

After letting contracts in late 1905, Reclamation began construction on the project's "Main Canal" (i.e., A Canal) in March 1906, and the first deliveries to a small portion of the project began in May 1907. Work proceeded slowly in the first few years due to unexpectedly high construction costs, scarcity of local labor and materials, and limited funds available from the Reclamation Fund.

In the fall of 1910, in accordance with the Act of June 25, 1910⁵⁴, a board of engineers of the U.S. Army examined and reported on the Klamath Project. Based on the board's recommendation, President William Howard Taft approved the project as feasible and practicable on January 5, 1911.

Reclamation continued construction of the Klamath Project over the subsequent decades, adding new facilities and extending the service area as engineering obstacles were resolved. Land was gradually uncovered and drained of water. By the early 1960s, construction of the Project was largely complete with facilities to serve the current service area of approximately 230,000 acres, including 47,000 acres within two national wildlife refuges.

In its entirety, the Klamath Project now consists of a complex network of storage and conveyance works including three large dams and associated reservoirs, four smaller diversion dams, 675 miles of canals and laterals, 545 miles of drains, and over 50 separate pumping plants.

The Project's three storage reservoirs – Upper Klamath Lake, Clear Lake, and Gerber – have a combined active storage capacity of approximately 1,180,000 AF. Under the 2018 BA, Reclamation manages the storage and release of water from these reservoirs according to a number of considerations, as described in Chapter 3.3.

Upper Klamath Lake is the Project's primary water source, with over 560,000 AF of storage capacity and a tributary area of over 3,700 square miles. Regulation of storage and releases from the lake is controlled by Link River Dam. There is no volume of storage in Upper Klamath Lake designated exclusively for storing flood flows, although there are specific "flood control elevations" under the 2018 BA, which vary according to current and projected hydrologic conditions and the specific time of year.

Similar in size, Clear Lake Reservoir has a storage capacity of approximately 527,000 AF and a drainage area of approximately 700 square miles. Reclamation has designated 153,000 AF of this capacity exclusively for flood control purposes at all times, meaning the reservoir's storage capacity for irrigation purposes cannot exceed 374,000 AF. Between October 1 and the end of February, exclusive flood control storage increases to 177,000 AF, reducing the space available for storing water for irrigation purposes to 350,000 AF or less.

Lastly, constructed by Reclamation in 1925, Gerber Dam, on Miller Creek, tributary to the Lost River, forms a reservoir with 94,270 AF of active storage capacity for a tributary area of 230 square miles. Under current operating procedures, there is no storage capacity in Gerber Reservoir designated exclusively for flood control purposes; however, stored water is periodically released as necessary to avoid flooding the Tule Lake area.

Reclamation has contractually assigned operation and maintenance responsibility for most of the Project's works to three separate irrigation districts, while retaining responsibility for seven facilities – Link River Dam, Clear Lake Dam, Gerber Dam, the Lost River Diversion Channel, the Lost River Improved Channel, the P Canal, and the Klamath Straits Drain.

Reclamation has also entered into contracts with 150 separate entities (e.g., ditch companies, irrigation districts, drainage districts, improvement districts) and individuals to use water from the Klamath Project. These contracts differ in the source, quantity, time period, and other conditions on the use of the project water. Certain contracts afford Reclamation some degree of discretion over the use of

⁵⁴ 36 Stat. 835.

water by the entity or individual party to the contract; however, this discretion is often limited or confined, as more fully discussed in Chapter 5, below.

CHAPTER 5 - SPECIFIC OPERATION ACTIONS AND ASSESSMENT OF CONSULTATION REQUIREMENT

Chapter 5 presents the findings of the reassessment relative to the need for ESA Section 7(a)(2) consultation for operational actions associated with the Klamath Project, with particular regard to agency discretion. The technical and legal bases for these determinations are presented individually for thirteen “actions” that are either identified for ESA Section 7(a)(2) consultation by Reclamation, or for inclusion in Reclamation BA’s Environmental Baseline. A specific recommendation is presented for each action considered.

Notably, inclusion of a given action in the BA environmental baseline only means that the federal government has no discretion to consult under ESA Section 7(a)(2) and does not necessarily assert that related non-federal actions are compliant with the ESA (e.g., Section 9 of the ESA), nor does it resolve all of Reclamation’s legal obligations in connection with operating the Klamath Project.

5.1 STORING TRIBUTARY INFLOW

The act of storing water, at the most basic level, entails regulating outflow from a reservoir to a rate less than instantaneous tributary inflow. When outflow is less than inflow, the surface elevation on a reservoir will increase as water is actively stored. The act of storing water is always evidenced by increasing water surface elevations.⁵⁵

Reclamation’s authorization from Congress is to vary water levels in Upper Klamath Lake and connected waterbodies “as may be necessary to dispose of any lands which may come into the possession of the United States as a result thereof by cession of any State or otherwise under the terms and conditions of the national reclamation act”.⁵⁶ As storing water involves raising the water level in Upper Klamath Lake, this act is within Reclamation’s discretionary authority. However, the *purpose* of storing water is non-discretionary, in that Congress expressly provided the purpose this act is to serve (i.e., an “irrigation project” undertaken by the Secretary “under the terms and conditions of the national reclamation act”).

Reclamation’s discretion in storing water in Upper Klamath Lake is further confined by state law. As Upper Klamath Lake lies exclusively within the State of Oregon, in accordance with both the Act of February 9, 1905 and Section 8 of the Reclamation Act of 1902, Reclamation must follow Oregon law in acquiring and exercising water rights in connection with storing water in Upper Klamath Lake, to the extent not inconsistent with federal law.⁵⁷

The United States’ water rights for storing water in Upper Klamath Lake are part of the Klamath Basin Adjudication, which is an ongoing process in accordance with Oregon law to determine federally reserved and pre-1909 (state-based) water rights to water from the Klamath River and Upper Klamath Lake and its tributary streams.⁵⁸ The United States waived its sovereign immunity under the McCarran Amendment and the State of Oregon had jurisdiction to compel the United States to participate in these still-ongoing proceedings.⁵⁹ Reclamation accordingly submitted its claims in regard to storing water in

⁵⁵ When the water surface elevation of a reservoir remains constant (i.e., unchanged), inflow is equal to outflow. In this situation, releases will necessarily consist entirely of tributary inflow and reflect the remainder of whatever amount of inflow is not otherwise being consumed and/or diverted. These allocations are a simple mass-balancing exercise, and therefore non-discretionary.

⁵⁶ 33 Stat. 714.

⁵⁷ *Id.*; 32 Stat. 390, 43 U.S.C. §383. See also *Ivanhoe Irr. Dist. v. McCracken*, 357 U.S. 275, 291-2 (1958).

⁵⁸ See Or. Rev. Stat. §539.021; *U.S. v. Oregon*, 774 F.Supp. 1568 (D. Or. 1991), *aff’d*, 44 F.3d 758 (9th Cir. 1994).

⁵⁹ 43 U.S.C. §666; *U.S. v. Oregon*, 774 F.Supp. at 1578 (“The system of adjudicating water rights used by the State of Oregon results in the ultimate adjudication of all claims and a characterization of the priority of those claims relative to one another, and is therefore comprehensive within the meaning of the McCarran Amendment”).

Upper Klamath Lake, and these claims have been administratively determined, as set forth in the State of Oregon's 2014 Amended and Corrected Findings of Fact and Order of Determination (ACFFOD).

Although still subject to ongoing judicial review – and notwithstanding and necessarily reserving the United States' rights to make exceptions to the ACFFOD and duly litigate these issues – the ACFFOD is legally enforceable absent a court-ordered stay.⁶⁰ Having waived its sovereign immunity in participating in the Klamath Basin Adjudication, the United States is legally bound by the ACFFOD and its determinations with respect to the United States' relative rights to store water in Upper Klamath Lake to the extent not inconsistent with federal law, including federal reserved water rights.

The ACFFOD places operational and volumetric constraints on the storage of water in Upper Klamath Lake, limiting active storage to between the water surface elevations of 4,136 feet and 4,143.3 feet above sea level, equating to a total volume of 486,830 AF based on Reclamation's 1998 bathymetry.⁶¹ To the extent Reclamation stores water in Upper Klamath Lake it must do so in a manner consistent with the ACFFOD.

Reclamation's discretion in storing water in Upper Klamath Lake is subject to the United States' trust obligations to and reserved water rights of the Klamath Tribes.⁶² The Bureau of Indian Affairs, on behalf of the Klamath Tribes, claimed in the Klamath Basin Adjudication various water rights in the upper basin, including for lake levels in Upper Klamath Lake, based on the Klamath Tribes' reserved water rights recognized in the Tribes' 1864 treaty with the United States. The priority date of these rights is time immemorial.⁶³ These water rights are determined and quantified in the ACFFOD.⁶⁴ Exercise of the Klamath Tribes' right to certain water levels in Upper Klamath Lake at various times of the year is the subject of stipulated agreement between the United States, the Klamath Tribes, and water users within the Project, which remains in effect and currently prevents the Tribes' right from being exercised so as to curtail Klamath Project diversions.⁶⁵

Reclamation's discretion in diverting and storing water in Upper Klamath Lake is further subject to the United States' trust obligation to the Yurok and Hoopa Valley tribes.⁶⁶ These tribes have rights, reserved by a series of nineteenth century executive orders, to take fish within their reservations in California.⁶⁷ These reservations encompass the right to water in the Klamath River sufficient to protect the purposes of the reservation – e.g., the right to harvest fish for ceremonial, subsistence, and commercial purposes in order to support a moderate standard of living.⁶⁸

Reclamation has a legal obligation to protect the federal reserved rights of the Yurok and Hoopa Valley tribes, even if unquantified, to the extent of its discretion to do so.⁶⁹ As noted previously, these non-consumptive instream flow rights are senior to the water rights of the Klamath Project.⁷⁰ Given the interstate nature of the Klamath River, these rights necessarily encompass water in the mainstem of the Klamath River, including water flowing from the State of Oregon into the State of California, comprised

⁶⁰ Or. Rev. Stat. §539.130(4).

⁶¹ KBA ACFFOD 07060 and 07117.

⁶² *Patterson*, 204 F.3d at 1214. *See also U.S. v. Adair*, 723 F.2d 1394, 1415 (9th Cir. 1983).

⁶³ *U.S. v. Adair*, 478 F. Supp. 336, 350 (D.Or. 1979); *U.S. v. Adair*, 723 F.2d 1394, 1414-15 (9th Cir. 1983)

⁶⁴ *See* KBA ACFFOD 04938 through 04946. *See also Baley*, No. 18-1323 at 48 (affirming the Court of Federal Claims' holding that the Klamath Tribes' implied water rights include water in Upper Klamath Lake).

⁶⁵ *See* KBA ACFFOD 04982 through 04990. Notwithstanding this stipulated agreement, Reclamation recognizes its legal obligation to protect the treaty rights of the Klamath Tribes to the extent of its discretion to do so. *Patterson*, 204 F.3d at 1214. *See also Adair*, 723 F.2d at 1411.

⁶⁶ *Patterson*, 204 F.3d at 1214.

⁶⁷ U.S. Department of the Interior, Office of the Solicitor, Opinion of Oct. 4, 1993, M-36979.

⁶⁸ *Id.* *See also U.S. v. Eberhardt*, 789 F.2d 1354, 1359 (9th Cir. 1986).

⁶⁹ *Baley*, No. 18-1323 at 53.

⁷⁰ *Id.*

in part of natural outflow from Upper Klamath Lake.⁷¹ In diverting and storing tributary inflow into Upper Klamath Lake, Reclamation must account for the senior rights of the Yurok and Hoopa Valley tribes.⁷²

Reclamation's discretion over the act of storing water in Upper Klamath Lake is also influenced by the contracts between the United States and Klamath Project water users. To the extent Reclamation otherwise has discretion, its contracts appear, subject to varying terms and conditions, to obligate Reclamation to store water to make it available for later irrigation use.

Lastly, Reclamation's discretion over storing water is limited by physical conditions. Reclamation has no control over the actual amount of tributary inflow to Upper Klamath Lake. This condition is dependent upon both natural factors (e.g., precipitation) and the actions of other non-federal entities and individuals (e.g., upstream water users). Likewise, Reclamation has no control on all the sources of outflow from the lake, both natural and human-caused. This includes not only evaporation and seepage, as well as diversions over which Reclamation has no control.

Given these physical conditions, it is critical to properly define the scope of this action. While there is always some level of inflow to Upper Klamath Lake, there is not always inflow available to store. The only tributary inflow available to store is water subject to appropriation. When tributary inflow is diverted to beneficial use under valid existing rights or otherwise consumed, it is not available for appropriation. In this case, there is no action by Reclamation to store or not store water, since water is not physically available.

As a simple example, if 1,000 cfs of water is flowing into Upper Klamath Lake at any given time, and 500 cfs is simultaneously being consumed and/or diverted for beneficial use under valid existing rights, Reclamation's discretion with respect to storing water is limited to the remaining 500 cfs. Reclamation can either store all, some, or none of the 500 cfs of water but has no discretion over the other 500 cfs consumed and/or diverted outside the agency's control.

Likewise, the scope of Reclamation's action is diverting all, some, or none of that remaining 500 cfs into storage, or conversely releasing (i.e., bypassing) it to the Klamath River. The only options are either to store or release tributary inflow.

Taking this example one final step further, if 1,000 cfs is flowing into Upper Klamath Lake at any given time, while 500 cfs is simultaneously being consumed and/or diverted for beneficial use, and 1,000 cfs is being released from Link River Dam, Reclamation's action with respect to storing or not storing water is still limited to the same 500 cfs of tributary inflow that is subject to appropriation. The other 500 cfs being released from Link River Dam in this scenario must necessarily be coming from water previously stored. Storing water is distinct from the act of releasing stored water (*see* 5.1.2).

Consult on this action. Although Reclamation's discretion is confined in a number of substantive legal and physical respects, the agency nevertheless has discretion over the act of storing water in Upper Klamath Lake. Given the presence of listed species in Upper Klamath Lake and the Klamath River, Reclamation can likely exercise its discretion over storing water in Upper Klamath Lake

⁷¹ *Id.* at 49-50 (acknowledging that Iron Gate Dam "controls the water of the Klamath River that flows to it from Upper Klamath Lake" and holding that the Yurok and Hoopa Valley tribes "have an implied water right that includes the Klamath River and the flows therein as controlled by the Iron Gate Dam"). *See also* 43 U.S.C. §398 (providing that nothing in the Reclamation Act of 1902, 32 Stat. 388, "shall in any way affect any right of any State or of the Federal Government or of any landowner, appropriator, or user of water in, to, or from any interstate stream or waters thereof").

⁷² *See* 43 U.S.C. §398. Note that Upper Klamath Lake was, in its natural condition, a settling basin, which filled with water before overflowing down the Klamath River. This water constituted part of the flows in the river in California, which existed at the time of the establishment of their respective reservations, to which the Yurok and Hoopa's rights are necessarily appurtenant to.

in a manner that benefits listed species. Consultation on this action should be confined to the act of either storing or not storing (i.e., bypassing) tributary inflow that is otherwise subject to appropriation, consistent with the constraints on Reclamation’s discretion.

5.1.1 Releasing Stored Water

The act of releasing stored water from Upper Klamath Lake – that is, tributary inflow previously diverted and stored in priority – is physically and legally distinct from the act of storing water.⁷³ Releasing stored water entails releasing more water than is simultaneously flowing into a reservoir. When outflow is more than inflow, the surface elevation on the reservoir will decrease as stored water is actively released. Decreasing water surface elevations in a reservoir is always indicative of stored water being released.

Reclamation’s general authorization from Congress is to vary water levels in Upper Klamath Lake in connection with carrying out a federal irrigation project.⁷⁴ As releasing stored water involves lowering the water level in Upper Klamath Lake, this act is within Reclamation’s authority. Operation of Upper Klamath Lake as a storage reservoir is also within Reclamation’s express authority under Section 6 of the Reclamation Act of 1902.⁷⁵

Congress confined Reclamation’s discretion in carrying out this authority, expressly requiring that the agency comply with state law in the “control, use, appropriation, or distribution of water used in irrigation”.⁷⁶ As Upper Klamath Lake lies exclusively within the State of Oregon, Reclamation must follow Oregon law when releasing stored water from the lake to the extent not inconsistent with the purposes of the Klamath Project and other applicable federal law.

The United States waived its sovereign immunity under the McCarran Amendment based on the stated scope of the Klamath Basin Adjudication as described by the Ninth Circuit Court of Appeals in *United States v. Oregon*, 44 F.3d 758 (1994). Accordingly, the United States filed claims in the Klamath Basin Adjudication to its rights with respect to the use of stored water in Upper Klamath Lake, as well as, claims for other rights.⁷⁷ While the Klamath Basin Adjudication necessarily did not encompass rights to live flow and stored water appropriated and used in California, including federally reserved tribal rights to water in the Klamath River, water diverted and stored in Upper Klamath Lake occurs solely in the State of Oregon.

Under the ACFFOD, Reclamation holds the right to store water in Upper Klamath Lake; however, the ACFFOD recognizes a difference between the right to store water and the right to use stored water from the lake.⁷⁸ Specifically, “the United States is the owner of a right to store water in Upper Klamath Lake to benefit the separate irrigation rights recognized for the Klamath Reclamation Project”.⁷⁹ The ACFFOD finds that, except for federally owned lands, the districts and individual landowners that are party to the Klamath Basin Adjudication hold the legal interest in the water rights associated with the

⁷³ See KBA ACFFOD 07083 to 07084.

⁷⁴ 33 Stat. 714.

⁷⁵ 32 Stat. 389, 43 U.S.C. §498.

⁷⁶ 43 U.S.C. §383. Note, however, that Section 6 of the Reclamation Act of 1902, 32 Stat. 389, 43 U.S.C. §498 serves as a limitation on Section 8, in the event state law conflicts with federal law.

⁷⁷ As a McCarran Amendment proceeding, the Klamath Basin Adjudication is necessarily a comprehensive, general stream adjudication in which the rights of all competing claimants are adjudicated. See *U.S. v. Or. Water Resources Dept.*, 774 F.Supp. at 1578 (“The system of adjudicating water rights used by the State of Oregon results in the ultimate adjudication of all claims and a characterization of the priority of those claims relative to one another, and is therefore comprehensive within the meaning of the McCarran Amendment. If the United States is dissatisfied with the outcome of this adjudication, it has resort to the appellate courts of the State of Oregon and the United States Supreme Court if its objections are properly preserved.”).

⁷⁸ KBA ACFFOD 07083 to 07085.

⁷⁹ *Id.* at 07084.

Klamath Project for applying water appropriated from the Klamath River (in Oregon) and Upper Klamath Lake to beneficial use.⁸⁰ This includes the right to use both “live flow” (i.e., tributary inflow) and stored water.⁸¹

To the extent Reclamation releases water previously appropriated and stored in priority from Upper Klamath Lake for a beneficial use, including in the State of California, the use must be consistent with the ACFFOD or applicable federal law. The authorized use for stored water in Upper Klamath Lake under the ACFFOD is designated as irrigation and related purposes, on certain specified places of use within the Klamath Project.⁸²

Using stored water that is otherwise subject to the beneficial use by Klamath Project beneficiaries to augment or otherwise produce instream flows in the Klamath River, either in Oregon or California, is not authorized under the ACFFOD. Reclamation therefore cannot release water previously stored in priority and otherwise required for beneficial use by Klamath Project beneficiaries from Upper Klamath Lake for the specific purposes of producing instream flows in the Klamath River either in Oregon or California.

This is not to say that Reclamation is barred from releasing stored water for anything other than beneficial use within the Klamath Project. A clear example is flood control operations. When observed or anticipated inflows to Upper Klamath Lake may cause water surface elevations to exceed designated maximum operating levels, Reclamation must release stored water to make space available to ensure public safety and integrity of Project facilities. This act, however, is non-discretionary, since Reclamation has a responsibility to maintain civil works so they continue to serve their congressionally authorized purposes.⁸³

Reclamation may also have discretion to release stored water not otherwise needed for beneficial use within the Klamath Project. For example, even if there is no risk of flooding, there are situations and circumstances when Upper Klamath Lake is effectively full (i.e., water surface elevation near 4,143.3 feet), with a stored water supply in excess of the anticipated beneficial needs within the Klamath Project. As the owner and operator of the reservoir, in accordance with Section 6 of the Reclamation Act of 1902, Reclamation has the discretion to release excess or surplus stored water.⁸⁴ This discretion is a function of managing storage levels in Upper Klamath Lake.

Reclamation’s contracts with water users within the Klamath Project also to some extent limit the agency’s discretion to determine when and in what amounts there is stored water in excess or surplus to their potential beneficial use. Likewise, Reclamation’s trust obligations to the Klamath Tribes may limit Reclamation’s discretion to release stored water that is otherwise surplus to the needs to Klamath Project, in order to maintain certain hydrologic conditions in Upper Klamath Lake.

However, Reclamation’s discretion over the act of releasing water *previously stored in priority* is unaffected by the United States’ trust obligation to the Yurok and Hoopa Valley tribes.⁸⁵ Again, the act of

⁸⁰ KBA ACFFOD 07075 to 07082 (“The beneficial users of water appropriated pursuant to the May 19, 1905 Notice hold a legal interest in rights recognized based on this appropriation for the purpose of beneficial use”); 07085 (regarding the United States’ interest in beneficial use within LKNWR and TLNWR).

⁸¹ KBA ACFFOD 07061. “Live flow”, as described in the ACFFOD and used herein in characterizing water in the Klamath River and Upper Klamath Lake within the State of Oregon, is water in a natural waterbody that is not being stored or otherwise used for beneficial purposes (e.g., instream flows) and is therefore subject to appropriation under any valid water right (regardless of priority, unless a water rights “call” is in effect).

⁸² See KBA ACFFOD 07057 to 07059, and 07062 to 07066.

⁸³ 43 U.S.C. §498.

⁸⁴ *Id.*

⁸⁵ See *infra* n. 72. This statement is not to suggest that the Klamath Basin Adjudication altered or affected the reserved rights of the Yurok and Hoopa Valley tribes in any manner. See *Baley*, No. 18-1323 at 53-54. The tribes’

storing tributary inflow is distinct from the act of releasing previously stored water, and the Yurok and Hoopa Valley tribe appear to have a right to water from the Klamath River, including water flowing from Oregon into California, including water that flows into and then out of Upper Klamath Lake. But that water is different than water previously stored in priority through the operation of a dam constructed after the establishment of the tribes' reservations. There is a tribal trust obligation to the Yurok and Hoopa with respect to the former, but not the latter, discretionary action. This interpretation of federal and state law has been provided to Reclamation by the Department of Interior's Office of the Solicitor.⁸⁶

These circumstances preclude releases of water previously stored in priority in Upper Klamath Lake for satisfying the Yurok and Hoopa Tribes' federally reserved water right. Absent a specific federal law, water previously stored in priority for the Klamath Project is bound by ACFFOD and must be released in accordance with its terms.

This interpretation is logically consistent because the act of storing water reduces the live flow of the Klamath River in California, to which the Yurok and Hoopa Valley tribes have reserved rights. But the act of releasing water that was stored previously and in priority from Upper Klamath Lake does not *reduce* the live flow otherwise available to meet the rights of the Yurok and Hoopa Valley tribes. Therefore, releasing previously stored water does not generally adversely affect these tribes' rights, though the act of storing tributary inflow obviously may.

Consult on this action. Although Reclamation's discretion is limited in regard to releasing stored water from Upper Klamath Lake – limited by federal and state law, contractual obligations, and trust obligations – this authority can be exercised in a manner that benefits listed species in the Klamath River, Upper Klamath Lake, or possibly both, and should therefore be consulted on.

5.1.2 Establishing Target Lake Levels

Designating and operating Upper Klamath Lake to target water surface elevations is an inherent part of Reclamation's authority to vary lake levels under the Act of February 9, 1905.⁸⁷ As discussed in sections 5.1.1 and 5.1.2, raising or lowering Upper Klamath Lake is a function of either storing water or releasing stored water. To the extent Reclamation has discretion over those two acts, the agency likewise has discretion to establish and attempt to operate to target lake levels, subject to all the legal and physical constraints discussed previously.

The limitations on Reclamation's discretion over storing water and releasing stored water in Upper Klamath Lake indicate that Reclamation will not be able to predetermine and operate to exact water surface elevations in the lake (i.e., to the hundredth of an inch on a given day). Reclamation may be able to indirectly influence that value, for example by either storing more or less tributary inflow, to the extent it is available, but Reclamation cannot control all the conditions that determine how much water is stored at any given time. Reclamation can use forecasts to make assumptions about inflows to the lake, and make management decisions accordingly, but actual inflows and consumptive losses will influence storage operations and thus lake levels. Reclamation likewise lacks absolute control over how much water is diverted from the lake for beneficial use. Reclamation's various contracts and other legal interests may give Reclamation the ability to influence this value on an individual basis, but such a right does not exist across the entire Project, or for non-Project diversions from Upper Klamath Lake, as a matter of either

rights were not subject to the Klamath Basin Adjudication and the Yurok and Hoopa Valley tribes did not forfeit their reserved water rights by not participating in the adjudication. *Id.* However, having not presented any claim to a right to store and use stored water from a reservoir that lies solely in Oregon, the United States, including Reclamation, cannot now maintain that such a right exists, at least under Oregon law.

⁸⁶ See memo. from Daniel Jorjani, Principal Dep. Solicitor, Dept. of the Interior, to David Bernhardt, Sec., Dept. of the Interior, "Use of Water Previously Stored in Priority for Satisfaction of Downstream Rights" (January 14, 2021).

⁸⁷ 33 Stat. 714.

federal or state law.⁸⁸ These factors beyond Reclamation’s control will necessarily influence the lake’s water surface level to some degree.

Consult on this action. Reclamation, as the owner of the right to store water in Upper Klamath Lake, has the right and discretion to establish predetermined levels that it then attempts to operate the lake to. However, Reclamation’s rights, along with its physical capacities, do not afford the agency discretion to cause absolute fixed water surface elevations in Upper Klamath Lake. Reclamation can influence the lake’s water surface elevation, through the acts of storing water, bypassing tributary inflow, releasing stored water, and exercising any discretion that it may have under contract or otherwise over the beneficial use of water from the lake. But the agency cannot *guarantee* exact lake levels.

Despite these constraints, assuming that designating and attempting to operate to target water surface elevations in Upper Klamath Lake can potentially benefit listed species in the lake and/or the Klamath River, Reclamation has an obligation to consult on this action.

5.1.3 Establishing Minimum Release Rates

Reclamation’s authority in connection with the Klamath Project includes varying water levels in both Upper Klamath Lake and the Klamath River, among other waterbodies.⁸⁹ There is no express congressional directive providing for minimum release rates from Upper Klamath Lake to the Klamath River; nevertheless establishing such minimums may be incidental to varying water levels in the lake and/or river. Establishing minimum releases from Upper Klamath Lake is therefore within Reclamation’s authority, but whether it is in the agency’s discretion will depend on the circumstances.

Depending on what the minimum levels are, actually providing these releases from Upper Klamath Lake over the course of a year will be a function of releasing either tributary inflow or, to the extent the former is unavailable, stored water.

Reclamation’s discretion to establish minimum release rates from Upper Klamath Lake to the Klamath River is confined in the same manner and to the same degree that Reclamation’s discretion to store water and release stored water is confined. There are times when the limitations on Reclamation’s discretion to do either such action will limit Reclamation’s ability to provide minimum releases from Upper Klamath Lake.

Do not consult on this action. Reclamation has authority to establish minimum release rates from Upper Klamath Lake to the Klamath River, but it does not have discretion to provide minimum flows at all times. Reclamation can designate and attempt, within its discretion, to provide minimum releases – and to the extent it does so, this would be an action the agency must consult on. But Reclamation cannot *guarantee* certain minimum flows being released at all times from Upper Klamath Lake, at least not under existing water rights associated with the Klamath Project.

5.1.4 Coordinating Project Diversions

As previously noted, Reclamation’s authority in operating the Klamath Project is to vary water levels in Upper Klamath Lake (and connected waterbodies) “as may be necessary to dispose of any lands which may come into the possession of the United States as a result thereof by cession of any State or

⁸⁸ 43 U.S.C. §383; KBA ACFFOD 07083. Regarding the discretion afforded Reclamation under the various contracts between the United States and Klamath Project water users has been addressed by the Office of the Solicitor. See memo. from Daniel Jorjani, Principal Dep. Solicitor, Dept. of the Interior, to David Bernhard, Sec., Dept. of Interior “Analysis of Klamath Project contracts to determine discretionary authority in accordance with the November 12, 2020 Letter of the Secretary of the Interior, and Use of Water Previously Stored in Priority for Satisfaction of Downstream Federally Reserved Rights” (Jan. 14, 2021).

⁸⁹ 33 Stat. 714.

otherwise under the terms and conditions of the national reclamation act”.⁹⁰ Coordinating the delivery of live flow and stored water from Upper Klamath Lake for irrigation and other beneficial uses within the Klamath Project is clearly part of carrying out this authority.

Diversions to the Klamath Project of both live flow and stored water from Upper Klamath Lake, occurring solely in the State of Oregon, are subject to Oregon law, with which Reclamation must comply under Section 8 of the Reclamation Act of 1902 (even if the ultimate place of use is within California).⁹¹ Reclamation’s discretion in coordinating the diversion of live flow and stored water from Upper Klamath Lake for beneficial use within the Klamath Project is therefore limited by the ACFFOD.

The ACFFOD places certain limitations on the volume, rate, location and timing of diversions of live flow and stored water from Upper Klamath Lake.⁹² Reclamation’s discretion to coordinate deliveries is necessarily confined to these limitations specified in the ACFFOD.

In addition to these quantitative limits, the ACFFOD recognizes a difference in the ownership interests in Klamath Project water rights. Specifically, the ACFFOD finds that, except for federally owned lands, the districts and individual landowners hold the legal interest in the water rights associated with the Project for diverting and beneficially using both live flow and stored water from Upper Klamath Lake.⁹³ The United States’ interest is limited to using the water available from the Project for beneficial irrigation purposes within Tule Lake and Lower Klamath National Wildlife Refuges, as well as re-using return flows captured within Project boundaries for beneficial use.⁹⁴

Therefore, the water rights for the Klamath Project, by themselves, limit Reclamation’s discretion to determine the volume, rate, location and timing of diversions of live flow and stored water from Upper Klamath Lake for beneficial use within the Project. Water rights notwithstanding, specific contracts between the United States and water users within the Project may afford Reclamation some degree of discretion over the manner and extent to which water is beneficially used.⁹⁵ Likewise, contracts and other rights, such as the United States’ real property interests, may also provide Reclamation with some degree of control over the facilities used to divert and deliver water to beneficial users within the project.

Even with respect to federally owned lands within Lower Klamath National Wildlife Refuge (LKNWR) and Tule Lake National Wildlife Refuge (TLNWR; collectively the Refuges), the ACFFOD does not give Reclamation the discretion to determine the volume, rate, and timing of diversions from Upper Klamath Lake and the Klamath River to the Refuges. Under the ACFFOD, Reclamation owns and exercises the right to store water in Upper Klamath Lake to “benefit the separate irrigation rights recognized for the Klamath Reclamation Project...”⁹⁶ USFWS was the claimant and is designated by the ACFFOD as the holder of the rights to use the water from the Klamath Project, including both live flow in the Klamath River and stored water from Upper Klamath Lake, for irrigation of lands within both Refuges.⁹⁷ Reclamation’s role is essentially limited to providing space for storage of water in Upper Klamath Lake for the purpose of satisfying the separate rights of USFWS and other beneficial users within the Klamath Project.

In addition to the 1905 water right for irrigation purposes, the ACFFOD recognizes that USFWS holds separate federal reserved water rights for both LKNWR and TLNWR to divert live flow from the Klamath River for the purpose of waterfowl conservation.⁹⁸ These water rights vary in priority date,

⁹⁰ *Id.*

⁹¹ 43 U.S.C. §383.

⁹² See KBA ACFFOD 07155 to 07160, and 07284 to 07287.

⁹³ KBA ACFFOD 07061 and 07075.

⁹⁴ KBA ACFFOD 07083 to 07085.

⁹⁵ See *infra* n. 88.

⁹⁶ KBA ACFFOD 07084.

⁹⁷ KBA ACFFOD 07118 and 07127.

⁹⁸ See KBA ACFFOD 03715 to 03744 and 03786 to 03819.

ranging from December 31, 1925, to September 2, 1964.⁹⁹ Similar to the irrigation rights for the Project, the ACFFOD specifies the maximum volume that can be used in a given year, the location and maximum rate of diversions, and the period of allowable use (year-round) under these reserved rights.¹⁰⁰ Stored water in Upper Klamath Lake is not an authorized source of water for these reserved rights within TLNWR and LKNWR.¹⁰¹

USFWS has also applied and been granted permission by the State of Oregon to temporarily transfer an irrigation water right appurtenant to 2,831 acres above Upper Klamath Lake for use on up to 4,105 acres within LKNWR.¹⁰² The current approved transfer expires at the end of 2021.¹⁰³ The priority date for this water right is September 13, 1920. Under the State's final order approving the transfer, USFWS can divert from the Klamath River to LKNWR via the Ady Canal up to 11,206 AF between April 1 and October 1, at the maximum rate of 30.87 cfs (CFS).¹⁰⁴ USFWS has an application before the State to permanently transfer this water right to LKNWR.

Both Reclamation and USFWS are agencies of the United States Government. Under the Act of September 2, 1964¹⁰⁵ and the 1976 amendments to the National Wildlife Refuge System Administration Act of 1966¹⁰⁶, Congress has conferred upon USFWS all administrative control over LKNWR and TLNWR. Under the ACFFOD, USFWS is the "holder" of the water rights under the Klamath Project appurtenant to the refuges, as well as the federal reserved rights associated with the executive orders or legislative acts establishing these Refuges.¹⁰⁷ Given these authorities, USFWS, not Reclamation, controls whether these water rights are exercised.

Reclamation and USFWS could potentially enter into a memorandum of agreement or something similar, which would specify the parameters under which USFWS would exercise its right to use water for irrigation purposes under the Klamath Project, as well as any or all of the other water rights appurtenant to LKNWR. Reclamation and USFWS have entered into such agreements in the past, but of temporary duration. There is no such agreement currently in place.

Reclamation's other legal interests, for example its control over the Klamath Straits Gates, as described in section 5.2.5, may give Reclamation some indirect influence over the amount, rate, and timing of beneficial use within LKNWR, but Reclamation has neither authority nor discretion to make a fixed determination of the amount of water diverted to LKNWR.

Do not consult on this action. The ACFFOD does not afford Reclamation with the right to determine the volume, rate, location, or timing of water available for beneficial use of water within the Klamath Project, including LKNWR and TLNWR. Under Section 8 of the Reclamation Act of 1902, the ACFFOD is controlling in this matter and states that "the right of beneficial use of water in the Project is held by the beneficial users. This applies to the right to the use of both live flow and stored water".¹⁰⁸

As noted above, Reclamation's contracts or other legal interests, including real property interests, may afford Reclamation some degree of discretion over the exercise of water rights within the Klamath Project for beneficial use; however, there is no such blanket discretion across the entire project as a matter of federal or state law. To the extent individual contracts or agreements provide Reclamation with such

⁹⁹ KBA ACFFOD 03728-03729, 03739, 03743, 03797, 03803, and 03805.

¹⁰⁰ *Id.*

¹⁰¹ *Id.*

¹⁰² Or. Water Res. Dept., "Final Order Approving Temporary Changes of Use and Points of Diversion", Transfer Application No. T-12642 (Aug. 8, 2017).

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ Act of June 2, 1964, Pub. L. 88-567, 78 Stat. 851.

¹⁰⁶ Act of Feb. 27, 1976, Pub. L. 94-223, 90 Stat. 199.

¹⁰⁷ *Infra* n. 96 and 97.

¹⁰⁸ 43 U.S.C. §383; KBA ACFFOD 07061.

discretion for particular areas or parts within the project, Reclamation should consult on those specific contracts or agreements.

5.1.5 Flood Control Operating Criteria

Flood control operations with respect to Upper Klamath Lake generally entail releasing water as necessary to prevent water surface elevations from increasing above levels determined to potentially pose a threat to flooding surrounding lands. Under current operations, Reclamation has designated end-of-month “flood control elevations” for Upper Klamath Lake (see Table 1, below), which are interpolated to a daily value for operational purposes.

Table 1. Current Upper Klamath Lake flood control elevations (in feet above sea level, USBR datum) for the last day of each month, varying by dry or wet year type. A year is characterized as “wet” any time the current NRCS inflow forecast for Upper Klamath Lake for March through September exceeds 710,000 AF.

Month	Water Surface Elevation (ft)	
	Dry Year	Wet Year
April through June	4143.3	4143.3
July through September	4143.1	4143.1
October	4141.4	4141.4
November	4141.6	4141.6
December	4141.8	4141.8
January	4142.3	4142.0
February	4142.7	4142.4
March	4143.1	4142.8

Reclamation anticipates that actual Upper Klamath Lake water surface elevations will differ to some degree from the designated flood control elevations. Reclamation employs professional judgment in evaluating hydrologic conditions, snowpack, weather forecasts, public safety, and other facts into designating the water surface elevations PacifiCorp should attempt to achieve on a daily basis.

The responsibility to maintain civil works structures so they continue to serve their congressionally authorized purposes is inherent in the authority to construct them, and is, therefore, non-discretionary. Maintenance of the structure could only cease if Congress were to de-authorize the structure or terminate this responsibility. Therefore, the requirement to maintain the structure, and to not let it be damaged and compromised during extreme hydrologic events, is non-discretionary and not subject to ESA consultation. However, the manner (how and when) flood control operations occur may be subject to Section 7(a)(2) consultation if the procedures (as opposed to the results) could affect listed species or designated critical habitat, and the agency has latitude for discretion.

Consult on this action. Because flood control operations on Upper Klamath Lake entails increasing or decreasing releases from Upper Klamath Lake (of both stored water and live flow), which could affect listed species and their critical habitat, both in the lake and the river, Reclamation should consult on this action. Reclamation’s latitude to adjust flood control operating criteria for the benefit of listed species will necessarily be limited by what sound engineering and other considerations the agency deems prudent and necessary for structural integrity of civil works and public safety.

5.1.6 Making Water Rights Calls

As previously noted, the ACFFOD in the Klamath Basin Adjudication is legally enforceable as a matter of state law, absent a judicial stay in its enforcement.¹⁰⁹ In the ACFFOD, the water rights for the Klamath Project have a priority date of May 19, 1905.¹¹⁰ In accordance with the doctrine of prior appropriation as it exists in the State of Oregon, when the amount of live flow available for appropriation in Upper Klamath Lake and the Klamath River is insufficient to meet the actual irrigation demands within the Project, a call may be made on the Klamath Project water rights. When a call is made, the State of Oregon, through its Water Resources Department, will then investigate and if it determines that a shortage in fact exists, it will regulate the diversions of other water users from the same source with junior water rights (i.e., with a priority date after May 19, 1905).¹¹¹

In the State of Oregon, with respect to the water rights determined for the Klamath Project in the Klamath Basin Adjudication, the regulation of junior water rights holders is intended to increase the amount of live flow available at the point of diversion for the senior water right holder making a call. In order for the call to remain valid and effective, the senior water rights holder must then put the additional live flow to beneficial use.¹¹² A senior water rights holder cannot bypass or otherwise not beneficially use the live flow made available at the point of diversion as a result of a call on their behalf. If that were to occur, the water rights holder presumably has no lawful basis for making the call.

A valid call on water rights may be made by the holder (i.e., owner) of the water right. The ACFFOD recognizes that the United States owns the right to store water in Upper Klamath Lake, and the districts and individual landowners within the Klamath Project hold the interest in applying water, both stored and live flow, to beneficial use for irrigation and the related purposes designated in the ACFFOD.¹¹³ Outside TLNWR and LKNWR, the United States' interest in the water rights is limited to: 1) the right to store water in Upper Klamath Lake, and 2) the right to re-use water previously appropriated and applied to beneficial use (i.e., "return flows") for another beneficial use.¹¹⁴

Accordingly, both the United States (Reclamation and/or USFWS) and the districts and individual landowners within the Klamath Project that were party to the Adjudication can make a call on the water rights associated with the project. But regardless of who makes a call, the determination of whether that call is valid and the extent to which the diversions of other water users will be curtailed is at the State of Oregon's discretion.

Reclamation has discretion over the decision whether or not to make a call on Klamath Project water rights. This right is not exclusive to Reclamation; other entities and individuals may also make a call on their own or in conjunction with Reclamation.

Whether there is an actual shortage in the live flow available at the point or points of diversion for the calling water right is a factual matter, which the State of Oregon will determine in accordance with state law. In accordance with Section 8 of the Reclamation Act of 1902, Reclamation must follow state law with respect to the control, appropriation, distribution and use of water in operating the Klamath Project, to the extent not in conflict with federal law.¹¹⁵

The additional water made available at the point of diversion as a result of a call must be beneficially used, to the extent the water user's capacity, or else there is no valid basis for the call. Likewise, state law confers upon the State of Oregon jurisdiction to determine when a call is futile in the

¹⁰⁹ Or. Rev. Stat. §539.130(4).

¹¹⁰ KBA ACFFOD 07056.

¹¹¹ Or. Admin. R. §690-250-0100.

¹¹² See Or. Admin. R. §690-250-0020.

¹¹³ *Infra* n. 93 and 94.

¹¹⁴ *Id.*

¹¹⁵ 43 U.S.C. §383.

sense of an inadequate amount of water, or no water, reaching the senior water rights holder making the call.¹¹⁶ Unless the State makes such a determination, *some* additional water must be assumed to be reaching the point or points of diversion. Accordingly, Reclamation can make its own determination about how much additional water is available for diversion and beneficial use within the Klamath Project as a result of a call, but it cannot determine that *no* additional water is available. The authority for that determination lies with the State of Oregon and Reclamation must follow Oregon law in this regard.

Consult on this action. Reclamation has discretion to make a water rights call in the event of a shortage. While the water resulting from a call must be beneficially used, which Reclamation has no interest in except as conferred by contract, the process of making a call and the water resulting from a call may benefit listed species. For example, a water rights call, if enforced, would result in additional inflow to Upper Klamath Lake, which, when used to meet instantaneous irrigation demands within the Klamath Project, could delay or reduce the amount of stored water used within the Project, thereby leaving more water in Upper Klamath Lake. This additional water remaining in storage, albeit for the purpose of beneficial use within the Klamath Project, could benefit listed species in the lake.

5.2 OPERATION OF THE KLAMATH AND LOST RIVERS

This section discusses Reclamation's discrete actions in connection with operating Klamath Project facilities in connection with the Klamath and Lost rivers.

5.2.1 Establishing Minimum River Flows

Reclamation's authority in connection with the Klamath Project includes varying water levels in the Klamath River, among other waterbodies.¹¹⁷ There is no express congressional directive providing for minimum flows in the Klamath River at any particular location but establishing such minimums may nonetheless be incidental to varying water levels in the river. Establishing minimum flows in the Klamath River is therefore within Reclamation's authority, but whether it is in the agency's discretion will depend on the circumstances. Depending on the rate and measured location of the minimum flows, actually achieving these flows may require water from Upper Klamath Lake, the Lost River Diversion Channel, and/or the Klamath Straits Drain.

Reclamation's discretion over releasing water from Upper Klamath Lake is generally limited to the decision to store and not store tributary inflow from Upper Klamath Lake, as discussed in sections 5.1.1 and 5.1.2. During extreme hydrologic conditions, Reclamation may be required to release stored water from Upper Klamath Lake to protect civil works and public safety, but these conditions are highly unpredictable in advance. There may also be, at times, stored water in Upper Klamath Lake surplus or excess to the needs of the Klamath Project, and Reclamation may have some discretion to release stored water in these instances, which could potentially help support designated flows in the Klamath River. But this situation is dependent on hydrology and other conditions beyond Reclamation's control.

Reclamation can use inflow forecasts and other information to make estimates but will never be able to predict in advance the exact timing, rate, and volume of inflow to Upper Klamath Lake over any given period – and likewise, the exact volume and rate at which water will be released. Reclamation therefore cannot make an absolute commitment to achieving minimum flows in the Klamath River with water from Upper Klamath Lake.

The Lost River Diversion Channel and the Klamath Straits Drain both operate to release water to the Klamath River and can materially contribute to the river's cumulative flow. Likewise, operation of the Klamath Straits Gates can influence the amount of water diverted from the Klamath River through the Ady Canal owned and operated by Klamath Drainage District. These facilities can be operated, as

¹¹⁶ *Infra* n. 111.

¹¹⁷ 33 Stat. 714.

Reclamation's discretion allows, either independently or in conjunction with Upper Klamath Lake, to potentially contribute to river flows.

Do not consult on this action. Reclamation has the authority but lacks the discretion to guarantee absolute fixed minimum flows in the Klamath River. Reclamation can designate target flows in the Klamath River, minimum or otherwise, and then exercise its discretion, particularly over storing water in Upper Klamath Lake, in a manner that attempts to achieve flows – and to the extent it does so, this would be an action the agency must consult on. But Reclamation cannot *guarantee* certain flows at all times, regardless of the hydrologic conditions and other factors beyond Reclamation's control. Reclamation should therefore not consult on fixed minimum flows in the Klamath River.

As opposed to absolute minimums, establishing “target” flows in the Klamath River, including target minimums, that Reclamation exercises its discretion attempting to produce, would appear to be within the agency's authority and discretion.

5.2.2 Diverting Water Through and Into the Lost River Diversion Channel

Reclamation constructed the Lost River Diversion Dam and Channel between 1910 and 1912. The dam operates to raise the water surface in the Lost River to a level necessary to facilitate gravity drainage to the Klamath River via the eight-mile-long Lost River Diversion Channel.

The Lost River Diversion Channel was originally constructed to a capacity of approximately 250 cfs. In 1930, Reclamation enlarged the channel's capacity to 1,200 cfs. In 1950 Reclamation redesigned and further enlarged the channel to the current capacity of approximately 3,000 cfs.

Throughout the year all Lost River flows, including any flood control releases from Clear Lake or Gerber reservoirs, that reach Lost River Diversion Dam, up to the capacity of the diversion channel (3,000 cfs), are diverted to the Klamath River (unless first diverted for irrigation). When flows in the Lost River are in excess of the diversion channel's capacity, the water is spilled over Lost River Diversion Dam to the lower Lost River, where it then flows into the Tule Lake Sumps. The Lost River Diversion Dam was designed for a maximum overflow of 10,000 cfs.

Operation of the Lost River Diversion Channel is integral to one of the basic purposes of the Klamath Project – to reclaim lands within the former 96,000-acre bed of Tule Lake. That purpose stems from Reclamation's authority under the Act of February 9, 1905.¹¹⁸

Tule Lake, now having been largely reclaimed by Reclamation, has primarily been homesteaded by small-family farms. Smaller portions of the lakebed have formed into cities and towns. A large portion is dedicated as a national wildlife refuge. Two other national monuments also partly lie within the reclaimed area. Other public works, like schools, state and federal highways, have been constructed within the reclaimed area.

Reclamation has, over the last century, undertaken a comprehensive scheme for draining and homesteading Tule Lake, and to a lesser extent, Lower Klamath Lake, building the facilities to achieve this result through appropriations from Congress. Reclamation has no discretion to now undo this work, in terms of allowing Tule and Lower Klamath lakes to refill. The discretion to reflood Tule Lake, to the extent it exists, lies with Congress.

Consult on this action. Reclamation is solely responsible for operation and maintenance of the Lost River Diversion Channel, in accordance with its authority under the Act of February 9, 1905. But, having now constructed this facility and reclaimed an area formerly inundated by Tule Lake pursuant to the authority and with the appropriations provided by Congress, Reclamation has no discretion over maintaining the facility and protecting the reclaimed area from reflooding.

¹¹⁸ 33 Stat. 714

Any potential discretion over diverting live flow from the Lost River to the Klamath River is largely limited by the physical conditions that govern channel operations. The Lost River Diversion Channel and the associated diversion dam on the Lost River have no material storage capacity. Flows cannot be withheld and then released in some manner that possibly benefits listed species or their critical habitat in the Klamath River. The rate of discharges from the Lost River Diversion Channel into the Klamath River cannot be materially altered, given the design and functional operation of the diversion channel, absent electing to bypass diversion of water from the Lost River, allowing it to flow down to the Tule Lake Sumps (*see* 5.4). Given the presence of listed species in the Tule Lake Sumps, this action may have some benefit to listed species. Altering the rate and amount of water diverted from the Lost River to the Klamath River through the Lost River Diversion Channel may also affect flows in the Klamath River.

Reclamation also has some discretion over the other primary use of the Lost River Diversion Channel – diverting water from the Klamath River and Upper Klamath Lake. Reclamation exclusively owns and operates this facility. Reclamation can adjust gate positions and water levels in the channel to influence diversions otherwise made consistent with state law.

Given the potential for operation of the Lost River Diversion Channel to benefit listed species both in the Tule Lake Sumps and potentially the Klamath River, including designated critical habitat, Reclamation should consult on this action.

5.2.3 Opening and Closing the Klamath Straits Gates

In conjunction with Reclamation’s plans to drain and potentially homestead lands underlying Lower Klamath Lake, in 1907 the United States entered into an agreement with the California Northeastern Railway and Southern Pacific companies to construct and maintain a railroad embankment across the northern end of Lower Klamath Lake, extending from the Northwest Quarter of Section 26 to the Northwest Quarter of Section 1, in Township 40 South, Range 8 East, Willamette Meridian.

Additionally, the 1907 agreement required the railroad to construct a concrete control structure in the southern end of the railroad embankment at the Klamath Straits, the original channel connecting the Klamath River to Lower Klamath Lake. This concrete structure, constructed in 1912, has five gated openings, approximately five feet wide, collectively referred to herein as the Klamath Straits Gates. Diversions from the river through these gates flow into the Ady Canal, which is operated by the Klamath Drainage District and provides deliveries to approximately 55,500 acres of public (LKNWR) and private land in the Lower Klamath Lake.

Operation of the Klamath Straits Gates has and continues to be under Reclamation’s exclusive control. However, Reclamation has a contract with the Klamath Drainage District to keep these gates closed, “barring acts of God, unavoidable accidents or other causes beyond the control of the United States”.¹¹⁹ The contract provides that the gates will be opened at the district’s request, when “necessary in connection with the reclamation of lands within the district boundaries, or when this is determined to be necessary by the United States in connection with the reclamation and use of lands in California”.

In its original state, Lower Klamath Lake was an interstate navigable waterway, with regular ferry traffic between California and Oregon. The Act of February 9, 1905, 33 Stat. 714, authorizes Reclamation to raise or lower water levels in Lower Klamath Lake and to homestead the area so reclaimed to the extent feasible. Reclamation entered into the 1907 agreement with the railroad for this purpose. This agreement required the railroad to include a concrete structure in the embankment, the Klamath Straits Gates, for which Reclamation still owns and has exclusive control over.

Given Reclamation’s authority to raise or lower water levels in Lower Klamath Lake, and therefore to control the Klamath Straits Gates, Klamath Drainage District contracted with the United States in 1917 to have these gates closed. This contract generally provides that the gates will remain

¹¹⁹ Contract No. Ilr-402c, dated April 28, 1943, article 28(a).

closed at all times unless opened at the request of the district or the discretion of the United States for purposes of reclaiming federal lands in and around Lower Klamath Lake.

Reclamation originally had discretion over reclaiming Lower Klamath Lake and the surrounding marshes. Congress later directed, in the Act of September 2, 1964, that the remaining federally owned lands in and around Lower Klamath be reserved as refuges for migratory birds.¹²⁰ As discussed in section 5.1.5, USFWS now has administrative jurisdiction over lands within LKNWR and their use as a matter of federal law. Reclamation's interest in the area is limited to operation and maintenance of Klamath Project facilities.

USFWS requires the Klamath Straits Gates to be open in order to be able divert and convey water to LKNWR. This is true for the refuge's water rights in connection with the Klamath Project, as well as federally reserved water rights for refuge purposes. USFWS has a 1940 agreement with Klamath Drainage District to use the Ady Canal for this purpose.¹²¹ A 1977 agreement between USFWS and Reclamation, addressing each agency's administrative responsibilities in LKNWR, recognizes that the right to use the Ady Canal to deliver water to LKNWR is exclusively administered by USFWS.¹²²

Possibly consult on this action. Reclamation has discretion to open and close the Klamath Straits Gates under its authority to vary water levels in Lower Klamath Lake; however, this discretion is materially limited by the United States' contract with Klamath Drainage District, as well as USFWS' administrative jurisdiction over both LKNWR and the United States' right to use the Ady Canal to deliver water to LKNWR. To the extent Reclamation proposes to open and close the Ady Straits Gates, to the extent not constrained by USFWS' administrative jurisdiction over these lands, Reclamation's discretion may afford some capacity to benefit listed species, in which case there is an obligation to consult on this action.

5.2.4 Pumping and Discharging Water from the Klamath Straits Drain

The Klamath Straits Drain is an eleven-mile-long earthen canal with four pumping plants, which conveys excess drainage and runoff from the Lower Klamath Lake area to the Klamath River. The drain was originally built in the mid-1940s, as supplemental works to a joint Reclamation-USFWS construction program that built Pumping Plant D, the Tule Lake Tunnel, the P Canal, and much of the refuge infrastructure.

As originally constructed, the drain had just two pumping plants (designated E and F), each with two pumps with a combined capacity of approximately 200 cfs. An additional pump was added at both plants E and F in the late 1940s, increasing the drain's capacity from 200 to 300 cfs. Then in the 1970s, the drain's capacity was doubled to 600 cfs, with the construction of two new pumping plants (EE and FF), also with three pumps each.

The volume of water pumped to the Klamath River through the Klamath Straits Drain over the last decade has been roughly one-third the historical average (from approximately 90,000 AF annually to 35,000 AF). The amount pumped through the drain has only exceeded 100,000 AF twice in the last 20 years. Prior to 2000 it occurred in more than half of all years.

A major factor in this reduction is the decreased amount of drainage coming from LKNWR. Prior to 2000, the refuge on average discharged over 50,000 AF annually into the Klamath Straits Drain; since then that figure has been about 13,000 AF. This change has been particularly evident in the last decade, during which the refuge has drained less than 1,000 AF annually, except under special arrangements.

¹²⁰ Pub. L. 88-567, 78 Stat. 851.

¹²¹ Agreement dated May 25, 1940, between the United States, Secretary of the Interior, and Klamath Drainage District.

¹²² Reclamation Contract No. 7-07-20-W0089, dated August 2, 1977.

Reclamation and Klamath Drainage District are party to a 1947 contract, providing that Reclamation shall operate and maintain the Klamath Straits Drain and make it “available at all times for the proper drainage of the District lands”.¹²³ Further, the agreement provides that water in the drain must be maintained at a level to provide adequate drainage, “as determined by the Secretary”, for all district lands.¹²⁴ These obligations on the United States expressly terminate if and when operation and maintenance of the drain is transferred to an organization of water users or the district.

Reclamation and USFWS also have a 1946 agreement pertaining to Reclamation’s operation of the Klamath Straits Drain.¹²⁵ The agreement generally requires Reclamation to “remove from [LKNWR] all water brought through the Tule Lake tunnel which it necessary to remove in order to permit the efficient carrying on of [USFWS’] functions”.¹²⁶

The Klamath Basin Adjudication addresses to some extent the United States’ rights with respect to the kinds of “return flows” captured and controlled through a facility like the Klamath Straits Drain. The ACFFOD finds that the United States holds a legal interest in water rights connected to the Klamath Project for the purpose of re-use of return flows.¹²⁷

Consult on this action. Reclamation discretion over operation of the Klamath Straits Drain is influenced by Reclamation’s 1947 contract with the Klamath Drainage District, as well as the 1946 agreement with USFWS. These agreements require Reclamation to operate the drain to dispose of water that these entities discharge into it. Reclamation therefore has no discretion over the amount of water conveyed through the drain to the Klamath River. Reclamation has discretion, however, to determine how these return flows are subsequently used. This act is within Reclamation’s authority over varying water levels in Lower Klamath Lake and connected waterbodies, and the ACFFOD recognizes that this right exclusively belongs to the United States. Reclamation can designate and use these return flows for supporting instream flows in the Klamath River, which can potentially benefit listed species. Therefore, Reclamation has an obligation to consult on this action.

5.3 OPERATION OF CLEAR LAKE AND GERBER RESERVOIRS

This section discusses Reclamation’s discrete actions in connection with Clear Lake and Gerber reservoirs.

5.3.1 Storing Tributary Inflow

Reclamation’s authority to construct, operate, and maintain Clear Lake and Gerber reservoirs stems from the Act of February 9, 1905, as a primary purpose of these reservoirs is to aid in the draining and homesteading of Tule Lake.¹²⁸ Congress did not confine Reclamation’s discretion in carrying out this law, except as generally limited by the Reclamation Act of 1902.¹²⁹

Following authorization of the Klamath Project by the Secretary of the Interior on May 15, 1905, Reclamation gave notice, for and on behalf of the United States of America, of its intentions to appropriate the waters of the Lost River and its tributaries by notices and postings in the states of Oregon and California in the manner authorized by the customs and laws of these states. As previously discussed, on May 19, 1905, Reclamation filed a notice with the Oregon State Engineer, in accordance with Oregon law, to “utilize ... [a]ll of the waters of the Klamath Basin in Oregon, constituting the entire drainage

¹²³ Reclamation Contract No. Ilr-402d, article 10, dated October 11, 1947.

¹²⁴ *Id.*

¹²⁵ Reclamation Contract No. Ilr-1371a, article 9, dated June 28, 1946.

¹²⁶ *Id.*

¹²⁷ KBA ACFFOD 07083.

¹²⁸ 33 Stat. 714.

¹²⁹ 32 Stat. 388.

basins of the Klamath River and Lost River, and all of the lakes, streams, and rivers supplying water thereto or receiving water therefrom, including ... all their tributaries”. This notice provides “[t]hat the United States intends to use the above described waters in the operation of works for the utilization of water in the State of Oregon under the provisions of [the Reclamation Act of 1902]”.

Also in support of the operations of Clear Lake and Gerber reservoirs, Reclamation posted five specific notices of appropriation of water from the Lost River and its tributaries on behalf of the United States. The posting on the Lost River for Clear Lake Reservoir was made on December 19, 1904, and filed for record in Modoc County, California, on December 28, 1904.¹³⁰ This notice provided that the “water is to be used for irrigation, domestic, power, mechanical, and other beneficial uses in and upon lands situated in Klamath (Oregon) and Modoc (California) counties...”¹³¹

The posting on Miller Creek for Gerber Reservoir was made on March 5, 1905, and was recorded on March 18, 1905, in Klamath County, Oregon.¹³² As filed, this notice provided for “... all the unappropriated waters of Miller Creek, both surface and underflow, and more specifically stated as amounting to one thousand cfs ... for irrigation, domestic, power, mechanical, and other beneficial uses ... in Klamath County...”¹³³

The water rights associated with the Klamath Project to water from the Lost River and its tributaries remain unadjudicated in either California or Oregon.

The exercise and use of these rights are nonetheless governed by California and Oregon law, as applicable, in accordance with Section 8 of the Reclamation Act of 1902, to the extent not in conflict with federal law.¹³⁴ Reclamation also has contracts with certain entities for providing stored water from these reservoirs for irrigation and related purposes.

As previously discussed, the act of storing water, at the most basic level, entails regulating outflow from a reservoir to a rate less than instantaneous tributary inflow. When outflow is less than inflow, the surface elevation on a reservoir will increase as water is actively stored. The act of storing water is always evidenced by increasing water surface elevations.

Reclamation has discretion over the act of storing water in both Clear Lake and Gerber reservoirs. The water rights were claimed on behalf of the United States, and the United States owns these reservoirs, including both the facilities that impound them and the underlying land. Storing and/or bypassing tributary inflow to the reservoirs is a function of managing storage levels in the reservoir.

Although the United States’ rights remain unadjudicated, in storing and/or bypassing tributary inflow, Reclamation must comply with the respective laws of the states of Oregon and California regarding the control, appropriation, use and distribution of water used in irrigation. Reclamation cannot therefore exercise this right in a manner inconsistent with its claims, as provided in the various notices and posting relative to the rights to water from the Lost River and its tributaries.

Nonetheless, Reclamation must at times bypass tributary inflow from these reservoirs for flood control purposes, either in connection with the reservoirs themselves or for operation of the Lost River Diversion Channel (and protection of Tule Lake) (*see* 5.2.2). These releases can affect water levels in the reservoir as well as the Tule Lake Sumps. If discharged through the Lost River Diversion Channel, these releases can also affect flows in the Klamath River. The releases are non-discretionary in that Reclamation must protect federal facilities and carry out the purposes of the Klamath Project, including

¹³⁰ Modoc Co. records, *Water Rights*, vol. 2, p. 15.

¹³¹ *Id.*

¹³² Klamath Co. records, *Water Rights*, vol. 11, p. 192.

¹³³ *Id.*

¹³⁴ 43 U.S.C. §383.

reclaiming Tule Lake. Reclamation may, however, exercise some discretion in how exactly these releases are made.

The United States' contractual obligation to Klamath Project water users may also influence the manner in which Reclamation exercises its discretion over storing and/or bypassing tributary inflow to Clear Lake and Gerber reservoirs.

The tribal trust obligations of the Yurok, Hoopa Valley, and Klamath Tribes do not extend to water stored in Clear Lake and Gerber reservoirs, since the water in the Lost River did not physically reach the Klamath River prior to the Klamath Project and therefore this water is necessarily not part of the rights reserved by the United States on behalf of these tribes. Therefore, Reclamation's discretion in storing water from Clear Lake and Gerber reservoirs is not influenced by these obligations.

Consult on this action. As designated critical habitat for endangered shortnose and Lost River suckers, Reclamation's act of storing water in Clear Lake and Gerber reservoirs can potentially benefit listed species in these reservoirs, and therefore there is an obligation to consult on this action.

5.3.2 Releasing Stored Water

The act of releasing stored water entails releasing more water than is simultaneously flowing into a reservoir. When outflow is more than inflow, the surface elevation on a reservoir will decrease as stored water is actively released. Decreasing water surface elevations in a reservoir is always indicative of stored water being released.

Reclamation's discretion over releasing water from Clear Lake and Gerber reservoirs is also governed by federal and state law. Reclamation must comply with Oregon and California law, as applicable, releasing and using stored water from Clear Lake and Gerber reservoirs. The various rights the United States has claimed in connection with these reservoirs all are for the purpose of utilizing the stored water for irrigation and related purposes within the Klamath Project, as so stated. Reclamation's claimed rights on behalf of the United States do not include the use of water for purposes other than as enumerated in the various notices and postings.

Reclamation's contractual obligations also influence how Reclamation releases stored water from Clear Lake and Gerber reservoirs. Reclamation has no obligation to deliver water to entities or individuals except under contract with the United States.

Consult on this action. In releasing water from the reservoirs for flood control purposes (which is non-discretionary), Reclamation may nonetheless have some discretion over *how* this operation occurs, and that discretion may be exercised in a manner that potentially benefits listed species, including in the Klamath River.

5.4 OPERATION OF THE TULE LAKE SUMPS

The Tule Lake Sumps (Sump 1A and 1B) are diked portions of the original lake that are now used to store and dispose of excess drainage and runoff. The sumps are also within the boundaries of the Tule Lake National Wildlife Refuge (TLNWR). Reclamation designed and built the dikes surrounding the sumps in the 1940s, as part of a joint construction program with the USFWS. Excess drainage and runoff in the sumps is pumped into the Tule Lake Tunnel via Pumping Plant D. Reclamation has transferred operation and maintenance responsibilities for Pumping Plant D to the Tulelake Irrigation District, subject to rules and regulations issued by Reclamation, which generally specify the water surface elevations to be maintained in the sumps for refuge and flood control purposes.¹³⁵

¹³⁵ Reclamation Contract No. 14-06-200-5954, dated September 10, 1956. U.S. Bur. of Reclamation, *Rules and Regulations for Operation and Maintenance of Klamath Project Works Transferred to Tulelake Irrigation District under Contract No. 14-06-200-5954* (rev. Feb. 21, 1984).

Reclamation has established minimum elevations for Sump 1A, notwithstanding Reclamation has no direct control over inputs to the lake (from numerous non-point sources), and that operation of the main outlet (Pumping Plant D) has been transferred to Tulelake Irrigation District. While Reclamation assumes that these levels can reasonably be met based on historical operations, it may not be possible to maintain Tule Lake Sump 1A elevations during excessively dry periods.

The Tule Lake Sumps constitute the remnants of Tule Lake. Congress authorized Reclamation to raise and lower water levels of Tule Lake. Reclamation lacks some physical control over this condition, not being able to control all inflows (at least downstream the Lost River Diversion Channel). Reclamation also lacks complete control and therefore discretion over operation of Pumping Plant D, the only outlet from the sumps besides natural evaporation, transpiration, and seepage.

Reclamation's agreement with USFWS does not further confine Reclamation's discretion over operation of the sumps, recognizing that these are Klamath Project facilities under Reclamation's administrative responsibility.

Consult on this action. Although limited in some respects, Reclamation has discretion over the water levels in the Tule Lake Sumps, as the remnant waterbodies of Tule Lake. Although not designated critical habitat for Lost River and shortnose suckers, both species are present in the Tule Lake Sumps. Reclamation cannot *guarantee* that certain levels in the Sumps, due to factors outside of Reclamation's control (e.g., evaporation). But to the extent Reclamation elects to establish target levels in the Tule Lake Sumps, this discretion can be exercised in a manner that benefits listed species. This action should be consulted upon accordingly.

CHAPTER 6 - APPLICATION OF ENVIRONMENTAL BASELINE

Review of the specific operational actions described in Chapter 5 was performed in accordance with the goals of this reassessment: ensuring compliance with law and regulation; defining the scope of Reclamation's proposed actions; correcting attributing actions to the appropriate entity; excluding non-discretionary actions from the consultation; and properly characterizing the environmental baseline.

The effects of actions over which Reclamation has no discretion – even though those actions may occur within the service area or involve existing facilities of the Klamath Project – cannot reasonably be characterized as an agency action causing impacts to the species or modification of species' habitat within the meaning of the ESA. Those effects are not an agency action subject to consultation. Rather they are activities or conditions that exist overarching, alongside, or in the background of operation of the Klamath Project, and are therefore properly attributable to the environmental baseline. It is only the agency's discretionary actions that are subject to consultation.

A hypothetical example serves to illustrate this situation. If Reclamation were to propose an agency action of, among others in connection with the Klamath Project, storing tributary inflow in Upper Klamath Lake, it is the act of storing tributary inflow that Reclamation must consult on. Reclamation does not need to extend this act to consulting on Upper Klamath Lake being at designated water surface elevations to a hundredth of an inch under certain hydrologic conditions at certain times of the year, because that action necessarily entails conditions, events, and non-federal actions beyond Reclamation's control (e.g., rain, runoff, diversions).

Similarly, if Reclamation proposes to bypass and release tributary inflow from Upper Klamath Lake under certain conditions, it is the releases from Upper Klamath Lake that the agency must consult on. Reclamation does not need to extend this action to consulting on daily designated flows occurring in the Klamath River approximately forty miles downstream of the Klamath Project, particularly through four private hydroelectric facilities, because that subsequent condition, although influenced by Reclamation's action, is beyond Reclamation's discretionary control.

Reclamation recognizes that the existence of the Klamath Project has altered hydrologic conditions in the Klamath Basin. That alteration, however, has occurred within the context of a congressionally authorized project maintained for congressionally authorized purposes. The ESA Section 7(a)(2) consultation process is not the proper venue to address affects related to the continued presence of Reclamation structures or the activities or conditions outside the scope of the agency's discretion. Those effects are more properly and efficiently addressed through collaborative efforts among all agencies and parties causing impacts to listed species in the Klamath Basin. Reclamation continues to honor its commitment to address those impacts attributable to the environmental baseline, but through collaborative, locally supported processes, such as demonstrated in the KBRA.

CHAPTER 7 - SUMMARY OF FINDINGS AND REGIONAL DECISION

The U.S. Bureau of Reclamation, California-Great Basin Region, has performed this thorough reassessment of actions associated with its continuing operation of the Klamath Project, in southern Oregon and northern California. These actions were critically evaluated for the purpose of facilitating consultation with USFWS and NMFS under Section 7(a)(2) of the ESA. This comprehensive reassessment permitted careful consideration of previously proposed Reclamation actions to:

- verify compliance with law and regulation;
- clearly define the scope of the actions;
- correctly attribute actions to the appropriate agency;
- ensure non-discretionary actions were excluded from consultation; and
- properly characterize the environmental baseline.

Application of the above criteria resulted in a determination that there are at least eleven operational actions in connection with the Klamath Project that are properly considered subject to ESA consultation at this time. (Note that other actions, including administration of certain contract provisions) may also be subject to ESA consultation by Reclamation.) Reclamation will verify or re-evaluate the effects of these actions and will conduct ESA consultation *only if the manner* (“how” or “when”) of performing the action may affect listed species or designated critical habitat. They are:

Operation of Upper Klamath Lake:

1. Storing Tributary Inflow
2. Releasing Stored Water
3. Establishing Target Lake Levels
4. Flood Control Operating Criteria
5. Making Water Rights Calls

Operation of the Klamath and Lost Rivers:

6. Diverting Water Through and Into the Lost River Diversion Channel
7. Lost River Diversion Channel Operations
8. Control of the Klamath Straits Gates
9. Klamath Straits Drain Operations

Operation of Clear Lake and Gerber Reservoirs

10. Storing Tributary Inflow
11. Releasing Stored Water

Further at this time, Reclamation anticipates not consulting on four operational actions pursuant to Section 7(a)(2) of the ESA. They are:

1. Establishing Minimum Release Rates from Upper Klamath Lake

2. Coordinating Project Diversions from Upper Klamath Lake
3. Establishing Minimum River Flows in the Klamath River
4. Establishing Minimum Water Levels in Tule Lake Sump 1A.

Reclamation has the authority but lacks the discretion to *guarantee* absolute fixed minimum releases from Upper Klamath Lake, flows in the Klamath River, or water surface elevations in Tule Lake Sump 1A. Reclamation can designate target releases from Upper Klamath Lake, target flows in the Klamath River, and target water levels in Tule Lake Sump 1A, minimum or otherwise, and then exercise its discretion – and to the extent it does so, this would be an action the agency must consult on. But Reclamation cannot produce pre-determined flows, lake levels, or sump levels at all times, regardless of the hydrologic conditions and other factors beyond Reclamation’s control. Reclamation should therefore not consult on fixed releases from Upper Klamath Lake, flows in the Klamath River, and water levels in Tule Lake Sump 1A.

Again, as opposed to absolute flows or levels, establishing “target” releases from Upper Klamath Lake, flows in the Klamath River, and water levels in Tule Lake Sump 1A, including target minimums, would appear to be within the agency’s authority and discretion, and should be consulted on if proposed by Reclamation.

The recommendations provided in this reassessment reflect a thorough and comprehensive review of Reclamation’s continuing operations of the Klamath Project. Actions recommended for inclusion in future consultations vary significantly from the far-reaching scope of actions included in past BAs. The broad reach of past consultations appears to have been the result of a number of factors, including:

1. Pre-existence of FERC minimum release requirements from Iron Gate Dam under PacifiCorp’s 1956 license for operation of the Klamath Hydroelectric Project (FERC license no. 2082), which could never be met by PacifiCorp except with volumes supplied by the Klamath Project;
2. Reclamation’s assumption, prior to issuance of the ACFFOD, that Reclamation unilaterally owned the water rights in connection with the Klamath Project, including the interest in beneficial use of the water;
3. An attempt to negotiate proposed actions for BAs that were agreeable to all stakeholders and attempted to “balance” competing needs and respective rights within the basin, through the form of a Section 7(a)(2) consultation but also in the context of anticipated enactment of a basin-wide settlement; and
4. A view of agency action that was overly broad, especially in light of intervening court decisions.

This latter point was the largest single determining factor in this reassessment. It is clear, based on applicable authorizing legislation, applicable water rights at issue (both adjudicated and unadjudicated), and the physical conditions in the Klamath Basin that Reclamation’s discretion to regulate water surface levels in Upper Klamath Lake and flows in the Klamath River – for the benefit of endangered species or otherwise – is narrower than the scope of Reclamation’s recent consultations. Reclamation has (and currently still is under the Interim Operations Plan) attempted to manage the Klamath Project in a manner that achieves pre-determined hydrologic conditions throughout the entire Klamath Basin, based on effects associated with operation of the Klamath Project, as well as other federal, state, and private actions over which Reclamation has no discretionary control.

Klamath Basin, based on effects associated with operation of the Klamath Project, as well as other federal, state, and private actions over which Reclamation has no discretionary control.

Accordingly, and for the reasons stated herein, it is recommended that consultation be limited to actions consistent with the analysis and determinations stated above.

Principal Author:

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Through:

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Concurrence:

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