

United States Department of the Interior

OFFICE OF THE SECRETARY

Office of Environmental Policy and Compliance 2800 Cottage Way, Rm E-1712 Sacramento, California, 95825

April 18, 2022

In Reply Refer To: 22/0078

Honorable Kimberly D. Bose Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

Subject: Department of the Interior comments on the Draft Environmental Impact Statement for the Surrender, Decommissioning, and Removal of the Lower Klamath Hydroelectric Project, FERC Nos. 14803-001, P-2082-063, Klamath County, Oregon, and Siskiyou County, California

Dear Secretary Bose:

The U.S. Department of the Interior (Department), including the United States Fish and Wildlife Service (Service or USFWS), the Bureau of Land Management (BLM), the Bureau of Reclamation (Reclamation), and the National Park Service (NPS) (collectively, Bureaus), has reviewed the Federal Energy Regulatory Commission's (FERC) *Draft Environmental Impact Statement for Hydropower License Surrender and Decommissioning Lower Klamath Project FERC Project No. 14803-001, Klamath Hydroelectric Project FERC Project No. 2082-063, Oregon and California* (Draft EIS), dated February 2022. On behalf of the Bureaus named above, we provide comments, suggestions, recommendations, and information on the Draft EIS.

Background and General Comments

As discussed in previous submissions, the Department has long supported the removal of the lower four PacifiCorp-owned Klamath River dams. The Department was a signatory to the 2010 Klamath Hydroelectric Settlement Agreement (KHSA) and was active in negotiating the 2016 amended KHSA, which led to FERC's June 17, 2021, transfer order as well as the surrender application currently pending before FERC. In June 2021, Secretary Haaland affirmed the Department's support for the decommissioning and removal of the Lower Klamath Project dams, noted the significant benefits that will come from dam removal, and asked FERC to consider the robust record before it and move expeditiously to allow dam removal to proceed without delay.

Departmental bureaus have worked closely with the Klamath River Renewal Corporation (KRRC) since its incorporation, providing technical assistance and information to assist KRRC as it developed and refined the transfer and surrender applications, Definite Plan, and 16 resource- and issue-specific management plans. In December 2021, USFWS completed its

¹ The Bureau of Indian Affairs (BIA) has reviewed the Draft EIS and Appendix K – "Tribal Views on Dam Removal." BIA does not have specific comments on the Draft EIS but appreciates FERC's efforts to summarize the perspectives of the Klamath Basin tribes and understands Appendix K to accurately reflect those perspectives.

Endangered Species Act Section 7 consultation for the surrender and decommissioning of the Lower Klamath Project. USFWS is also working diligently to review KRRC's January 10, 2022, application for incidental take of eagles under the Bald and Golden Eagle Protection Act. BLM has actively participated in discussions to ensure impacts to BLM lands and resources are mitigated, and NPS has also coordinated regularly with KRRC.

In the Department's view, FERC's Draft EIS is thorough and robust, and carefully considers the potential environmental effects of KRRC's proposed action. The Draft EIS considers a reasonable range of alternatives, and the Department is quite pleased that FERC's preferred alternative is the KRRC's proposed action with moderate staff modifications. It is the Department's understanding that KRRC intends to propose some clarifications and revisions to some of those modifications, but KRRC is committed to address the potential environmental impacts of removing the four dams and facilities and restoring impacted lands and resources.

The Department very much appreciates FERC's commitment to meet its proposed timelines and work toward a final EIS by September 2022. Below, please find comments from our individual bureaus to aid with potential revisions to the Draft EIS.

Comments of the United States Fish and Wildlife Service

The mission of the Service is to work with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people. As part of its mission, the Service is charged with conducting section 7 consultations for species listed as threatened or endangered under the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 *et seq.*). The Service appreciates FERC's excellent work on the Draft EIS. Overall, it is well written and well organized.

The Service found several discrepancies in the Draft EIS between the effect determinations for species in the Draft EIS versus the effect determinations in the Biological Opinion (BO) submitted December 22, 2021, and the Draft Biological Assessment (BA) submitted by the KRRC March 22, 2021 and adopted by FERC in its request to initiate formal consultation on August 2, 2021. Throughout the Draft EIS we found discrepancies for bull trout (the BA and the BO made a may affect, likely to adversely affect determination), Oregon spotted frog (the BA and the BO made a may affect, not likely to adversely to affect determination), and northern spotted owl (the BA and BO made a may affect, not likely to adversely to affect determination). These discrepancies are noted in the enclosed spreadsheet and should be corrected in the Draft EIS. In addition, the Biological Assessment made a no effect determination for Oregon spotted frog critical habitat that should be carried through to the Draft EIS.

In the Service's correspondence to FERC dated August 10, 2021, and acknowledged in FERC's August 31, 2021, response letter, the Service recommended drafting conservation measures for a select number of species, including little brown bat, that are under listing review. The Service also discussed developing conservation measures for little brown bat (and three other species) as part of the letter of concurrence submitted with the BO on December 22, 2021. The Service appreciates FERC's incorporation of conservation measures into the Draft EIS. For the little brown bat, the enclosed spreadsheet includes some additional recommendations.

The Service would also like to point out FERC's mention in the Draft EIS of "limited spawning habitat" for listed suckers in the hydroelectric reach. As documented in the BO, there is no

known reproduction or spawning habitat for listed suckers in the hydroelectric reach (this comment is also within the enclosed spreadsheet).

As part of the Service's mission, the Service's Migratory Bird Program is charged with implementing various statutes, primarily the Bald and Golden Eagle Protection Act (16 U.S.C. §§ 668-668; "Eagle Act") and the Migratory Bird Treaty Act (16 U.S.C. § 703 et seq.; "MBTA"). The Service's review and comments focus on legal mandates and trust responsibilities to maintain healthy bird populations for the benefit of the American public pursuant to the Eagle Act and the MBTA.

The Service generally supports the KRRC's approach to eagle protection measures and is processing the KRRC's Eagle Conservation Plan and Incidental Take Permit application submitted on January 10, 2022. The Service plans to release a draft Environmental Assessment, anticipated for the end of May 2022, to further inform a final Eagle Take Permit. The permit will identify any necessary eagle surveys and protection measures. The Service suggests the Staff Modification only reference the implementation of the take permit.

Comments of the Bureau of Land Management BLM Oregon

The BLM Klamath Falls Field Office (KFFO) has primary responsibility for administering and managing BLM land holdings within, and adjacent to, the Upper Klamath River in the State of Oregon. This includes over 10,428 acres of contiguous lands, of which approximately 5,131 are designated as Areas of Critical Environmental Concern. Within this 11-mile section of the river, the KFFO has three designated Special Recreation Management Areas (campgrounds and boat launches). In addition, the canyon (from rim to rim) has been designated by the BLM as a Wild & Scenic River Extensive Recreation Management Area due to the outstanding resource values embodied in the canyon.

Over the last several years the KFFO has engaged in extensive technical discussions and negotiations with the KRRC. The BLM has been pleased with the evolution of the proposed restoration plans and support the preferred alternative as detailed in the Draft EIS. The BLM supports the site-level specifications and general approach that have been integrated into the Use & Occupancy Plan. This document specifically addresses the ultimate condition of BLM lands within the FERC project boundary prior to returning them to BLM's jurisdiction and management.

While the Draft EIS contains some minor errors (see specific comments under BLM California Redding), with the exception of the items listed below, the KFFO supports the analysis presented in this document.

There are only three areas of substantive concern:

• Restoration Metrics BLM Lands: As currently written, the Use & Occupancy Plan does not clearly specify the quantitative metrics that will be used to determine acceptable levels of vegetative cover within restored BLM lands. The BLM strongly recommends that locally degraded plant communities (ecosystems heavily influenced by invasive plant infestations resulting from prior anthropogenic site disruption) not be utilized as a target reference for emulation. The BLM does support the use of healthy native plant communities as a reference and has proposed a reasonable goal for restoration sites of a

minimum of 80% native plant cover and a maximum of 10% invasive plant cover. Based upon extensive professional staff experience in restoration ecology, this objective is both reasonable and obtainable.

- Restoration Metrics Parcel B Staging/Fill Sites: As currently proposed, vegetative restoration of Parcel B lands that will be utilized for staging and/or extensive fill placement does not adequately address the ultimate condition of the plant community. Given the location of these sites (such as the approximately 15-acre site immediately adjacent to the JC Boyle Dam), the BLM anticipates that they will become potential vectoring sources for subsequent invasive plant infestation of BLM lands downstream. The BLM recommends the restoration metrics of a minimum of 80% native plant cover and a maximum of 10% invasive plant cover.
- Cultural Resource Site Security: The BLM continues to have concerns over the protection of cultural resources that will be exposed following the drawdown of the Topsy Reservoir. This area is readily accessible as it is bisected by Route 66 and has an historic pattern of resource-degrading, illegal activities. The BLM recommends full time monitoring be implemented in the form of either electronic surveillance or the presence of an on-site host until such time as the vegetative community becomes established enough to serve as a deterrent.

BLM California

The BLM Redding Field Office finds that the Proposed Action with Staff Modifications addresses the needs of the Redding Field Office, and the Draft EIS adequately assesses environmental impacts.

Specific Comments

Throughout the document (for example, at pages i, 1-1, and 3-423), there is often some confusion about which BLM field office has jurisdiction and which land use plan is applicable. As the majority of BLM-administered lands are within the jurisdiction of the KFFO, it would be useful for the Draft EIS to state how many acres fall under the KFFO's jurisdiction and how many are within the Redding Field Office's jurisdiction. The Redding Resource Management Plan (1993), as amended, is the land use plan for the Redding Field Office and should be referred to in conjunction with any KFFO land use plan when land use plans discussed.

The Redding Field Office agrees with the inclusion in the Proposed Action with Staff Modifications of the removal of trees to protect public safety in the Copco #2 Bypass Reach (Ward's Canyon). The BLM Redding Field Office manages a small area of land in this reach. It is the Redding Field Office's understanding that the KRRC has agreed to a minimalistic approach to tree removal to avoid significant impacts on fisheries habitat and cultural resources, and we are supportive of that approach.

• As discussed in Exhibit B Construction Management Plan and Appendix D Use and Occupancy Plan for Bureau of Land Management Lands, the KRRC may remove a limited number of trees located in the river channel to protect the public when navigating the reach. The BLM Redding Field Office agrees with the Commission's analysis in section 3.7.3.2 (River Recreation) that the removal of in-channel vegetation could

minimize hazards to boaters and deferring the removal of hazardous trees until after the completion of the Proposed Action could result in ground disturbance and safety risk.

• The actions proposed are consistent with the objectives and decisions of the 1993 Redding Resource Management Plan and Record of Decision, which states, that in the Upper Klamath River portion of the BLM Klamath Management Area, the BLM should "improve the condition of riparian vegetation to Class II or better (pg. 34)" and "enhance non-motorized recreation" (pg. 34). The trees in Ward's Canyon pose a significant impediment to river-based non-motorized recreation. With inundation, the trees will die after dam removal, so removing them before the inundation will improve recreation opportunities while not drastically changing the riparian condition of the area. The impacts for vegetation removal within the project area are adequately analyzed in the Draft EIS to allow BLM to understand the impacts caused by removing the trees in Ward's Canyon, and the Draft EIS identifies the necessary minimization measures to reduce those impacts.

Comments of the National Park Service

The NPS has authority to consult with FERC and applicants concerning a proposed project's effects on outdoor recreation resources under the Federal Power Act (18 CFR §§ 4.38(a), 5.41(f)(4)-(6), and 16.8(a)); the Outdoor Recreation Act (P.L. 88-29, May 28, 1963); and the NPS Organic Act (16 USC § 1 et seq.). The Wild and Scenic River (WSR) Act (16 U.S.C. § 2171 et seq.) also directs the NPS to assist, advise, and cooperate with governments, landowners, or individuals to plan, protect, and manage the river and river-related resources (see 16 U.S.C. § 1282(b)).

Recreation

The NPS supports FERC's Proposed Action with Staff Modifications (preferred alternative) to remove the four dams along the Klamath River. The preferred alternative will bring a restored free-flowing river that will include a range of benefits for fish, water quality, and wildlife. It will also change existing recreation opportunities, including impacting whitewater boating recreation in the Hell's Corner/Upper Klamath due to the change in flow regime post dam removal. The preferred alternative calls for removing recreational barriers in the J.C. Boyle and Wards Canyon bypass reaches and funding strategically placed river access sites in the former hydroelectric reaches. Providing access to the existing and new whitewater boating reach will help mitigate impacts to the boating community and will benefit recreationists and the recreation-based economy of the surrounding communities. Providing well-designed sites will also reduce environmental impacts by directing visitors to appropriate places and discouraging user-created sites. NPS understands that KRRC has agreed to an approach to tree removal that will support boating but also consider potential impacts on fish habitat and cultural resources, and NPS supports this approach.

Comment of both the National Park Service and Bureau of Land Management

Wild and Scenic River Act, Section 7 Determination

The NPS, the US Forest Service (USFS) and the BLM all have responsibility for the Klamath Wild and Scenic River (WSR) and for conducting the WSR Act Section 7(a) (16 U.S.C. §

278(a)) review for projects affecting the Klamath WSR designation and have coordinated on the comments below. The comments address FERC's interpretation of the applicability of Section 7 of the WSR Act in the Draft EIS.

Although the states of California and Oregon administer the Klamath WSR segments under the WSR Act Section 2(a)(ii), the responsibility for the Section 7 determination lies with one of the four federal river-administering agencies. This is an inherently federal responsibility not delegated to the State.² The relevant standard is whether the proposed project either invades or unreasonably diminishes the scenic, recreational, fish, or wildlife values present at the date of designation. NPS, USFS, and BLM have joint responsibility for conducting the Section 7 determination for the California Klamath WSR segment, and the BLM has responsibility for the Oregon Klamath WSR.

Two segments of the Klamath River have been designated as National Wild and Scenic Rivers (WSRs) administered by the State through section 2(a)(ii) of the WSR Act (16 U.S.C. 1273(a)(ii)):

- Klamath WSR (Oregon) segment an 11-mile scenic segment of the Upper Klamath River extending from 0.25 miles below the J.C. Boyle powerhouse to the Oregon-California state line.
- Klamath WSR (California) segment –a 189-mile recreational segment that begins 3600 feet below Iron Gate Dam and ends at its confluence with the Pacific Ocean.

In the Draft EIS, FERC states, "The current proposal is to remove an existing project, not the licensing of any project works. Consequently, section 7 of the Wild and Scenic Rivers Act does not apply here.3" The BLM and NPS disagree with FERC that WSR Act Section 7(a) does not apply to the Lower Klamath River Surrender and Decommissioning Project.

FERC's position conflicts with the long-standing interagency interpretation of Section 7(a) as well as United States Department of Agriculture's regulations (36 C.F.R. § 297) governing the implementation of Section 7.4 The WSR Act provides for multiple standards depending on the type of project and location. The federal river administering agencies (NPS, USFS, and BLM) determine the standard based on the WSR Act, federal regulations, and interagency guidance.

² Control Data Employees Recreation Foundation v. Andrus (DDC 1980) (stating that Section 7(a) did not delegate to the State the authority over federally assisted water resources projects); as summarized in "Wild & Scenic River Management Responsibilities – Technical Report of the Interagency Wild and Scenic Rivers Coordinating Council," p. 16 (2002)

³ FERC's Draft EIS, Appendix B-6.

⁴ Section 7 of the WSR Act states "FERC shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act, as amended, on or directly affecting any river which is designated in section 3 of this Act as a component of the national wild and scenic rivers system or which is hereafter designated for inclusion in that system, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration. Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above a wild, scenic or recreational river area or on any stream tributary thereto which will not invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area on the date of designation of a river as a component of the national wild and scenic rivers system."

The Interagency Wild and Scenic Rivers Coordinating Council (IWSRCC) provides guidance on evaluating FERC projects upstream, downstream, or on a tributary of a WSR corridor under the 'invade or unreasonably diminish' standard that is consistent with federal regulations governing the implementation of Section 7. The IWSRCC Section 7 guidance paper states, "The first sentence of Section 7(a) and (b) applies a more stringent standard to projects licensed by the FERC than for other federally assisted projects proposed on a designated river or congressionally authorized study river (i.e., a prohibition to the FERC). Importantly, both standards in this sentence apply to projects proposed within the river corridor. The second sentence of Sections 7(a) and (b), which applies to the FERC and other federal agencies, defines a standard for projects proposed below, above or on a stream tributary to the designated river or congressionally authorized study river." The WSR-administering agencies have evaluated previous FERC licensing, re-licensing, and surrender applications that are upstream, downstream, or on a tributary of a WSR through the "invade or unreasonably diminish" standard.

As stated above, the WSR-administering agencies disagree with FERC's statement that the WSR Act does not apply to surrender and removal. However, even if Section 7 of the WSR Act does not apply to surrender and removal, other permits such as the U.S. Army Corps of Engineers' 404 permit (needed for the dam removal project) would qualify as "federal assistance" and a "water resources project," thereby requiring a WSR Act Section 7 determination. The IWSRCC includes dam removal as a type of water resource project.⁶

NPS, USFS, and BLM developed a preliminary Section 7 determination in response to the Bureau of Reclamation's 2012 Draft EIS. This preliminary Section 7 found the dam removal proposal consistent with the WSR Act. The agencies are updating this Section 7 determination based on FERC's Draft EIS Preferred Alternative and will submit this to FERC under separate cover. NPS, USFS, and BLM will also review FERC's Final Environmental Impact Statement and potentially amend the Preliminary Determination if the effects disclosed are different than those analyzed for the Preferred Alternative in the Draft EIS. The agencies plan to provide the Section 7 determination in a timely manner, so the dam removal process moves ahead as scheduled.

Comments of the Bureau of Reclamation

General Comments

Water Resource Management

The Bureau of Reclamation's Klamath Project provides water supplies to approximately 230,000 irrigated acres in the upper Klamath River basin in southern Oregon and northern California. As part of the Klamath Project, Reclamation owns and operates Link River Dam which is located at the headwaters of the Klamath River and controls the flow of water from Upper Klamath Lake into the Klamath River. As part of its operations, Reclamation has responsibilities for meeting contractual obligations to water users, Endangered Species Act requirements, and tribal trust obligations.

Consistent with Reclamation's comments on Scoping Document 1 in the Department's letter to FERC, dated August 19, 2021, Reclamation reiterates the need for ongoing, frequent, and

7

⁵ IWSRCC Wild and Scenic Rivers Act: Section 7 (2004); https://openei.org/wiki/RAPID/Roadmap/17-FD

⁶ IWSRCC Section 7 Flow Chart (www.rivers.gov accessed on March 8th, 2022)

detailed coordination between Reclamation and the KRRC relative to finalizing and adaptively managing any, and all temporary flow control measures that are anticipated during the reservoir drawn down and post facilities decommissioning phases of the project. Coordination efforts between Reclamation and the KRRC should also include the National Marine Fisheries Service and the USFWS to ensure a full understanding of what is needed to implement the Proposed Action with Staff Modifications such that Reclamation can ensure it meets the temporary flow control measures to the fullest extent possible given our Endangered Species Act requirements, tribal trust responsibilities, contractual obligations, and existing operational constraints.

Regarding water temperature, the Draft EIS at section 3.3.1 states that the geographic scope for analysis of water quality includes the Klamath River extending from below Keno Dam to the Pacific Ocean. Accordingly, Reclamation suggests that the water temperature analysis beginning at Section 3.3.2.4 (page 3-65) include recognition that the Oregon temperature standard above Keno Dam is 28 degrees Celsius, while below it is 20 degrees Celsius. Reclamation recommends that the Draft EIS acknowledge that Keno Dam releases water generally well above 20 degrees Celsius during the summer months.

Similarly, regarding Section 3.3.3.2—*Water Temperature* (specifically pages 3-88 to 3-93) there is no detailed temperature discussion on effects of facility removal for the reach from Keno Dam to J.C. Boyle Dam. Removal of the J.C. Boyle dam will change J.C. Boyle Reservoir from a reservoir to a free-flowing river in an area with reduced gradient compared to adjacent upstream and downstream reaches. Reclamation recommends that this section discuss effect(s) of temperature within the Keno Dam to J.C. Boyle reach during and after facilities removal.

Salmonid Disease

Statements in Section 3.4.2.2—*Anadromous Fish Populations*-Consider revising to include additional citations. For example, Reclamation recommends that the following two statements include citations:

"High water temperatures appear to contribute to the incidence of disease outbreaks that may cause substantial mortality of migratory juvenile and adult fall-run Chinook salmon, including the major kill of adult salmon that occurred in September 2002" (page 3-182)

"Infection rates varied widely across weekly samples and reach and were as high as 100 percent infected (table 3.4-11). Estimated mortality rates were as high as 63 percent."

Additionally, the citations in Section 3.4.2.7—Diseases Affecting Salmon and Steelhead are older (pre-2016 for sampling and disease monitoring results) with many references predating 2010. Reclamation suggests that this section be updated to reflect more recent research findings or acknowledge the existence of more recent research and monitoring results, especially given the high infection rates in Chinook Salmon in recent years (e.g., 2019, 2020, and 2021). For example, the citation "Nichols and Foott (2005)" was used for infection estimates in Chinook Salmon in 2004, and the citations "Foott et al. (2002)" and "Foott et al., (2002); Nichols et al., (2003)" were used for infection rates in the Lower Klamath River and its estuary. As research efforts on Ceratonova shasta are ongoing (including sampling, estimated infection rates, and estimated mortalities), with monitoring reports produced annually, this section should acknowledge or include information and citations on recent monitoring and recent scientific data.

In Section 3.4.3.2—*Effects on Diseases Affecting Salmon and Steelhead* the statement "California DFW estimated that drought conditions and disease outbreak would have killed an estimated 90 percent of the young fish if released in the spring, as is the standard practice" (page 3-202) should be modified or revised to include appropriate citations for presented information.

Salmonid Science

Relative to temperature discussions and predications discussed in Section 3.4.3.1—*Effects of Changes in Water Temperature on Aquatic Resources*, it would be helpful if FERC would clarify the life history stage referenced on page 3-198 and the predicted spring temperatures following facilities removal discussed on page 3-201.

In Section 3.4.3.7—Effects on Fish Habitat Access it is described that, "KRRC would cease monitoring in a given tributary, and in the mainstem Klamath River downstream from that tributary, if surveys document the presence of anadromous fish" (page 3-223). Reclamation recommends that monitoring efforts continue through the entirety of the proposed action until sediment transport is confirmed, considering that drought and resulting low flow conditions may not rapidly mobilize sediment. Reclamation suggests that the effort to monitor these conditions should be measured in hydrologic events (i.e., through a majority of sediment transport) as compared to a calendar year schedule to obtain a complete and accurate range of data, as calendar years may cross hydrologic events. Reclamation also recommends that this subsection (page 3-225) be revised to include information on plans to ensure downstream salmonid passage in the event that sediment mobilization and transport impair tributary connectivity.

Specific Comments

Relative to the statement in Section 3.2.3.1—*Project Deconstruction Effects on Water Quantity* (page 3-39) that, "Reclamation could use additional water stored in the Clear Lake and Gerber Reservoirs to help meet contractual water supply deliveries, but these reservoirs have limited storage capacity," additional clarity should be included to recognize that although Clear Lake Reservoir has never spilled, its storage capacity is essentially unlimited. It is the discharge capacity that is limited: Clear Lake Reservoir and Gerber Reservoir have limited discharge capacity due to potential impact of high Lost River flows on water quality of the potable aquifer at Bonanza. Additionally, the subject statement seems to imply that operation of Reclamation-managed facilities in the Lost River Basin may contribute in some way to meet Reclamation's Klamath River Basin operational requirements and/or be in consideration for assisting in the facility decommissioning efforts. Reclamation recommends revision of this statement or inclusion of additional language to clarify that operation of Clear Lake and Gerber reservoirs are outside the scope of the proposed action occurring within the Klamath River Basin.

Table 3.3-7 in Section 3.3.5—Effects of the No-action Alternative (page 3-116) identifies the Klamath Hydroelectric Settlement Agreement baseline water quality monitoring sites and entities responsible for water quality sampling. Specifically, sites-KR25444 at Link River, KR24600 at Miller Island, and KR233 in the Klamath River below Keno Dam are listed as the responsibility of Reclamation. To clarify existing roles and responsibilities for water quality monitoring, Reclamation recommends that FERC state that the above referenced sites were sampled by Reclamation through December 2020 and PacifiCorp now has responsibility for sampling these sites starting January 1, 2021, through present day.

Table 3.4-2 on fish species collected in the Upper and Lower Klamath River in Section 3.4.5— *Effects of the No-action Alternative* (page 3-236) lists coho salmon as Resident (R) and Anadromous (A) downstream of the Iron Gate Dam. This appears to be an error, as Iron Gate Dam is the lowest impassable dam on the Klamath River. Unless a resident population of coho are present in this reach, we suggest revising Table 3.4-2 to reflect coho salmon as "Anadromous (A)" only or cite the documentation of a resident coho salmon population.

Appendix F—*Literature Cited* on page F-26 includes a reference to March 29, 2019, as the date for issuance of the U.S. Fish and Wildlife Services' (USFWS) 2020 Biological Opinion (BO) on Klamath Project Operations. This date is incorrect. The correct completion and transmittal date for the USFWS 2020 BO is April 10, 2020.

Conclusion

We look forward to working with FERC, the KRRC, the states of Oregon and California, and Klamath Basin tribes as this proceeding moves forward, and are available to provide any additional information that would be helpful. If you have any questions regarding comments from the Service, please contact Jenny Ericson at jenny_ericson@fws.gov. For questions regarding comments from BLM, please contact Udom Hong at jenny_ericson@fws.gov. For questions on comments from Jennifer Mata at jenny_ericson@fws.gov for BLM California. For questions on comments from NPS, please contact Susan Rosebrough at susan_rosebrough@nps.gov or Barbara Rice at Barbara_Rice@nps.gov. For questions on comments from Reclamation, please contact Tara Jane Campbell-Miranda at tcampbellmiranda@usbr.gov or at (541) 880-2540. For all other questions, please contact me at janet_whitlock@ios.doi.gov or at (415) 420-0524.

Sincerely,

JANET

Digitally signed by JANET WHITLOCK

WHITLOCK

Date: 2022.04.15
16:18:30 -07'00'

Janet L. Whitlock

Regional Environmental Officer

Electronic Distribution: https://ferconline.ferc.gov/eFiling.aspx

Enclosure

cc: Shawn Alam (shawn alam@ios.doi.gov)

Jenny Ericson (jenny ericson@fws.gov)

Douglas Garcia (douglas.garcia@bia.gov)

Charles Jachens (charles.jachens@bia.gov)

Jennifer Mata (jmata@blm.gov)

Tara Jane Campbell-Miranda (tcampbellmiranda@usbr.gov)

Barbara Rice (barbara rice@nps.gov)

Susan Rosebrough (<u>susan rosebrough@nps.gov</u>)

Roxanne Runkel (runkel roxanne@nps.gov)

Udom Hong (uhong@blm.gov)

Danette Woo (pwr nepa compliance@nps.gov)

Document Accession #: 20220418-5107 Filed Date: 04/18/2022

t letter on the Draft Environmental Impact Statement for the Lower Klamath Hydroelectric Project (Project Nos. 14803-001, 2082-063) Detailed comments of the L

Page Number(s Section		Topic or Species	USFWS Comments		
1vii	Table ES-2	bull trout	Table ES-2 on page 1vii: The decision statement for the proposed action effects on bull trout is not correct. The BiOp, which was based on the proposed action (not the action with staff modifications), determined the proposed action is likely to adversely affect bull trout.		
2-16	2.1.2.9	Suckers	To be consistent with the Biological Opinion, Lower Klamath Project, issued December 22, 2021, from the U.S. Fish and Wildlife Service to FERC ("2021 USFWS BiOp" or "USFWS BiOp"), all references in the DEIS to translocation of suckers to Tule Lake Sump 1a should be replaces with 'Tule Lake National Wildlife Refuge". This will provide consistency with our BO where we say relocation efforts will occur at the Klamath Falls National Fish Hatchery, the Tule Lake National Wildlife Refuge , and the Klamath Tribes' sucker rearing facility.		
2-17	2.1.2.9	Suckers	P. 2-17: We recommend the second sentence of the first paragraph be updated to include a description or summary of the three different population modeling methods, to make this clear on how the 300 listed suckers equate to between 11 and 35 percent of the mean population estimates the KRRC calculated for J.C. Boyle Reservoir. Notably, the Bootstrap Method is considered the most reliable statistical technique for estimating individuals/quantities from small data samples, as it has the least assumptions built into the model and has the highest probability of being the most trustworthy.		
2-17	2.1.2.9	Suckers	P. 2-17: We recommend the second sentence of the second paragraph be updated to include a description or summary of the three different population modeling methods, to make this clearer on how the 300 listed suckers equate to between 8 and 22 percent of the mean population estimates the KRRC calculated for Copco No. 1 and Iron Gate Reservoirs. Notably, the Bootstrap Method is considered the most reliable statistical technique for estimating individuals/quantities from small data samples, as it has the least assumptions built in to the model and has the highest probability of being the most trustworthy.		
2-20 to 2-31	2.1.2.11	RAMP - Reservoir Area Management Plan	P. 2-27, 3rd paragraph: The DEIS reports that water used for irrigation would be pumped directly - we recommend that pumps should be screened.		
2-33	2.1.2.12	nesting birds	P. 2-33: Concern that the native nesting bird visual estimation surveys (VES) and avoidance measures leave the door open to removing active nests or clearing vegetation right up to nests. Recommend extending VES surveys to surrounding areas so that disturbance to active nests can be avoided if possible and using breeding season starting March 15. Raptor nests (non-eagle) - 250 feet; Other birds - 50 feet. Buffer reductions may take place only after consideration of site-specific conditions such as distance to construction, type and anticipated duration of construction, microhabitat at the location of the nest that may provide visual and acoustic barriers between the nest and construction activities, behavior of the pair, and its reproductive stage. The project avian biologist may reduce buffers based on field observations and bird behavior.		
2-33	2.1.2.12	northern spotted owl	P. 2-33: KRRC's proposal as reflected in the first sentence of second paragraph under Northern Spotted Owl heading should be modified to add red text and strike out text: "If nesting northern spotted owls were are observed during these additional surveys within the limits of work and access, KRRC would determine, in coordination with California DFW and/or Oregon DFW and FWS, the best management measures, which may include disturbance buffers and avoidance of key areas."		
2-34	2.1.2.12	little brown bat	P. 2-34: We recommend that the dates in this section be changed to reflect the dates in our comments on section 3.6.3, pp. 3-370-3-371 below, which provides our Conservation measures for bats.		
2-34	2.1.2.12	wolf	Under separate cover, we are notifying FERC that the delisting rule was vacated and remanded on 2/10/2022.		
2-37	2.1.2.12	little brown bat	P. 2-37: We recommend that the dates in this section be changed to reflect the dates in our comments on section 3.6.3, pp. 3-370-3-371 below, which provides our Conservation measures for bats.		
2-41	2.1.2.13	other	Table 2.1-10: Given there is a stream named the "New River" in the Klamath Basin (tributary to the Trinity), suggest replacing header "Potential New River Recreation Sites" with "Potential Additional River Recreation Sites" to minimize confusion.		
2-50	2.2.1	mussels	P. 2-50: Based on the Aquatic Technical Working Group discussions, we do not support translocation of mussels.		

Page Number(s Section		Topic or Species	USFWS Comments	
2-54 to 2-55	2.2.3 and 2.2.4	Biological Opinion RPMs and T&C	Sections 2.2.3 and 2.2.4, these sections purport to describe the terms and conditions from the National Marine Fisheries Service and USFWS BiOps, but fail to include full text. The headings should be changed as follows: 2.2.3 NMFS Biological Opinion Reasonable and Prudent Measures and Terms and Conditions (filed December 20, 2021) and 2.2.4 FWS Biological Opinion Reasonable and Prudent Measures and Terms and Conditions (filed December 22, 2021). The text under Section 2.2.4 must be modified to add the full text of the USFWS Reasonable and Prudent Measures and Terms and Conditions.	
2-56	2.3	Mussels	P. 2-56: Based on the Aquatic Technical Working Group discussions, for this project, we do not support translocation of mussels.	
2-57	2.3	eagles	P. 2-57: Statement needs editing: "Develop an eagle conservation plan that includes occupancy and nest productivity surveys; timing restrictions on vegetation clearing and [replace "construction noise" with "disturbance"]; monitoring of active eagle nests; coordination with FWS, California DFW, and Oregon DFW; and reporting as described in California Water Board WQC condition 17." We are working closely with the KRRC on their approach to eagle protection measures and are currently reviewing their Eagle Conservation Plan and Incidental Take Permit application submitted on January 10, 2022. We plan to release a draft Environmental Assessment to further inform a final Eagle Take Permit, which will identify any necessary eagle surveys and protection measures.	
2-57	2.3	little brown bat	P. 2-57: Bullet on California and Oregon Terrestrial Wildlife Management Plan bat sections - We recommend that the dates in this section be changed to reflect the dates in our comments on section 3.6.3, pp. 3-370-3-371 below, which provides our Conservation measures for bats.	
2-66 to 2-67	2.5.3	Flow / Sediment	All references to "polychaetes" should be changed to "annelids" as the freshwater host of Ceratonova shasta in the Klamath River, previously thought to be Manayunkia speciosa has since been red escribed as the annelid Manayunkia occidentalis. Atkinson, S. D., J. L Bartholomew, and G. R Rouse. 2020. The invertebrate host of a salmonid fish parasites Ceratonova shasta and Parvacapsula minibicornis (Cnidaria: Myxozoa), is a novel fabriciid annelid, Manayunkia occidentalis sp. nov. (Sabellida: Fabriciidae). Zootaxa. Mar 17; 4751(2).	
3-180 to 3-186	3.4.2.2	Salmon	P. 3-181, first sentence: "The runs in the Upper Klamath River Basin are thought to have been in substantial decline by the early 1900s and were eliminated by the completion of Copco No.1 Dam in 1917 (California Water Board, 2021a: Snyder, 1931)." This isn't an accurate representation of the cited reference. Needs to be re-worded to state: "The runs in the Klamath River Basin are thought to have been in substantial decline by the early 1900s and runs in the Upper Klamath Basin were eliminated by the completion of Copco No. 1 Dam in 1917 (California Water Board, 2021: Snyder, 1931)."	
3-180 to 3-186	3.4.2.2	Salmon	P. 3-182: Second full paragraph, last sentence: The paragraph ends with "There have been multiple other fish kills since then, including one that occurred in the spring/summer of 2021 (Yurok, 2021)." Note that this citation references a juvenile fish kill.	
3-186		Salmon	P. 3-186: Has an inaccurate paragraph that needs to be changed to the following: "The FWS Arcata Fish and Wildlife Office and the Yurok and Karuk tribes of California annually monitor the outmigration of juvenile coho on the mainstem Klamath River from March through June at four trapping sites. Moving from upstream to downstream, the trap sites are located near the Bogus Creek confluence (single frame net trap), near the I-5 bridge close to Yreka (two rotary screw traps and a single frame net trap), near the confluence of Kinsman Creek (one rotary screw trap), and at Weitchpec (one rotary screw trap and 2 frame net traps). The Weitchpec site was initiated in 2021, and counts of young-of-year coho and coho one year or older from 2012 to 2020 have ranged from 0 to 601 fish (table 3.4-3)."	
3-188 to 3-189	3.4.2.2	lamprey	PP. 3-188 to 3-189: The DEIS states that lamprey's "degree of fidelity to their natal streams is unknown (FWS, 2004)" (P. 3-189). Pacific Lamprey's degree of site fidelity is now known to be very low. See Goodman, D.H., S.B. Reid, M.F. Docker, G.H. Haas and A.P. Kinziger. 2008. Mitochondrial DNA evidence for high levels of gene flow among populations of a widely distributed anadromous lamprey Entosphenus tridentatus (Petromyzontidae). Journal of Fish Biology 72:400-417. AND Spice, E. K. et al. 2012. Either philopatric nor panmictic: microsatellite and mtDNA evidence suggests lack of natal homing but limits to dispersal in Pacific Lamprey. Molecular Ecology (12)2916-2930. The DEIS should recognize that positive actions taken to improve production of Pacific Lamprey in the Klamath River via the proposed action can have a strong positive influence on Pacific Lamprey adult returns in outyears on other rivers and streams throughout the range of the species given their low degree of natal site fidelity.	
3-194 to 3-197	3.4.2.7	Salmon	Section 3.4.2.7 and throughout document, the word (and plural versions as well) "polychaete" should be replaced with "annelid." Likewise, the scientific name "Manayunkia speciosa" is obsolete, and should be universally replaced with "Manayunkia occidentalis."	

Page Number(s	Section	Topic or Species	USFWS Comments
3-194 to 3-197	3.4.2.7	Salmon	P. 3-195, recommend removing second-to-last sentence of first paragraph that reads "Ceratomyxosis has been shown to persist in juvenile salmon after they enter salt water, and Foott et al. (2004) conclude that most smolts with detectable infection are likely to die from the disease." We recommend removing the sentence because 1) there have been some recent experiments conducted by the Yurok Tribe and UC Davis researchers that challenge the notion salt water entry has no bearing on Ceratomyxosis, and 2) since 2004 we've learned that under relatively cooler seasonal temperatures, or short exposure durations that detectable infections are not be as likely to progress to disease and eventual death.
3-197	3.4.2.7	Salmon	P. 3-197: 1st Sentence of 2nd paragraph. Change from - Guillen (2003) estimated that "a total of 33,527 adult anadromous salmonids were killed" to "a minimum of 33,527 adult anadromous salmon were killed"
3-225 to 3-227	3.4.3.8	Hatchery	P. 3-226: USFWS opposes any methods to encourage straying (including imprinting fish to return to non-natal tributaries) of returning adult salmon.
3-231	3.4.4	Mussels	Based on the Aquatic Technical Working Group discussions, for this project, we do not support translocation of mussels.
3-232	3.4.4	Mussels	Based on the Aquatic Technical Working Group discussions, for this project, we do not support translocation of mussels.
3-278	3.5.2.6	nesting birds	P. 3-278: FWS Birds of Conservation Concern should be included as Special Status Species, per EO 13186. Also see comments on pp. 3-332 to 3-337.
3-290 to 3-291	3.5.3.9	eagles	PP. 3-290 through 3-291: 1. Change last line first paragraph of 3.5.3.9 to "noise [add "and other"] disturbance related construction" since disturbance is not from noise alone, but includes movement of equipment, presence of people. 2. Update second paragraph for when KRRC will file the Eagle Conservation Plan with FERC 3. Third paragraph refers to USFWS 2007 for buffers. This is OK for bald eagle, but for golden eagle refer to FWS regional guidance: https://www.fws.gov/sites/default/files/documents/USFWS-California-Great-Basin-golden-eagle-nest-buffer-recommendations-May2021_0.pdf
3-294	3.5.4	eagles	P. 3-294: The DEIS concludes that short-term, adverse effects of the proposed action with staff modifications on bald and golden eagles would be less than significant. The FWS considers that the short-term loss of reproduction is significant because it results in take under the Bald and Golden Eagle Protection Act. The Eagle Incidental Take permit would authorize this take.
3-294 to 3-296	3.5.4	little brown bat	PP. 3-294 to 3-296: We recommend that the dates in this section be changed to reflect the dates in our comments on section 3.6.3, pp. 3-370-3-371 below, which provides our Conservation measures for bats.
3-307 to 3-319	3.5.4	little brown bat	Table 3.5-6: The table about bat survey results has duplicate/repeated entries
3-332 to 3-337	3.5.4	nesting birds	PP. 3-332 through 3-337: Per EO 13186, FWS Birds of Conservation Concern (BCC) should be included as Special Status Species. The following BCC species will likely be identified if an IPaC species report (https://ipac.ecosphere.fws.gov/) is generated by staff. We recomend all these species be included in Table 3.5-9. Black Tern: Already identified as BCC in Table 3.5-9 Cassin's Finch: Consider for addition to Table 3.5-9 as BCC Evening Grosbeak: Consider for addition to Table 3.5-9 as BCC Lewis' Woodpecker: Consider for addition to Table 3.5-9 as BCC Oak Titmouse: Consider for addition to Table 3.5-9 as BCC Olive-sided Flycatcher: Already identified as BCC in Table 3.5-9 Rufous Hummingbird: Consider for addition to Table 3.5-9 as BCC Willet: Consider for addition to Table 3.5-9 as BCC
3-333 to 3-334	3.5.4	eagles	PP. 3-333 to 3-334: For both bald and golden eagle: Available Habitat/Occurrence section simply lists some (but likely not all) known nests. Would be better to just acknowledge that there is nesting, foraging, and roosting habitat throughout the project area, and it is known to be occupied by both species.
3-348	3.6.2.5	Suckers	P. 3-348: The term "emigration" should to be changed to "drift". The FWS does not use the word emigration as it implies a voluntary movement from one place to another. We believe that suckers are in these reservoirs as a result of larval or juvenile drift down stream.

Page Number(s Section		Topic or Species	USFWS Comments		
3-349	3.6.2.5	Suckers	P. 3-349: The first paragraph (continued from p. 3-348) needs to be updated. Strike this text: "because they experience low reproductive success due to limited spawning habitat" There is no known reproduction or spawning habitat in the hydroelectric reach reservoirs for the listed suckers. (FWS BO p. 94, 119) (USFWS 2012, 2013, Hamilton et al. 2011, Buettner et al. 2006).		
3-349	3.6.2.5	Suckers	P. 3-349: Second full paragraph describes the 11,531 total population estimate for the sucker and this should be qualified that this number is based on the 95% confidence maximum estimate. The BiOp used the Bootstrap method for the total adult estimates as this statistical method/model for estimating population numbers from small data sets, has the least assumptions built into the model, has the highest probability of being the most trustworthy, and is considered the best available.		
3-349	3.6.2.5	Suckers	P. 3-349, Footnote 156 AND 3-367, Footnote 161: Sink populations exist in low quality habitat patches that would not be able to support a population in isolation without a source population. Without the contribution of individuals from a source population, they would become extinct.		
3-352 to 3-353	3.6.2.8	little brown bat	P. 3-352: Change first sentence in Population Status and Project Occurrence to, "Little brown bats have been considered one of the most common bats in Oregon and the United States"		
3-355	3.6.2.10	northern spotted owl	P. 3-355: Last sentence of second paragraph should be modified to add red text and strike out text: KRRC did not perform surveys for northern spotted owls near Copco No. 1, Copco No. 2, and Iron Gate Dams and Reservoirs because there is no suitable nesting habitat for spotted owls in these areas suitable spotted owl habitat was not available (KRRC, 2019).		
3-355	3.6.2.10	northern spotted owl	P. 3-355: Part of third Paragraph - Strike this entire statement as not consistent with the BA or habitat conditions near J.C. Boyle: "but suitable habitat for the species was documented around J.C. Boyle Dam and associated facilities, the disposal site, and haul and access roads."		
3-355	3.6.2.10	northern spotted owl	P. 3-355: Last sentence of third paragraph needs be modified to add red text: "Because no northern spotted owls were detected during the 2018 surveys and because there is no suitable habitat near the facilities or reservoir that may support nesting pairs, KRRC does not propose additional surveys for the species."		
3-366	3.6.3	Suckers	P. 3-366: Remove the term "rearing" from first paragraph/sentence of the Lost River and shortnose sucker section. There is no known spawning that occurs in the hydroelectric reach reservoirs and there is no spawning habitat for the two listed suckers in the reach. It is inconsistent with the BiOp to categorize the reservoirs as rearing habitat for the listed suckers. (FWS BO p. 94, 119) (USFWS 2012, 2013, Hamilton et al. 2011, Buettner et al. 2006).		
3-366	3.6.3	Suckers	P. 3-366: Remove any text that discusses spawning by the Lost River or shortnose sucker in the hydroelectric reach. These fish are not known to spawn in the hydroelectric reach and there is no spawning habitat. (FWS BO p. 94, 119) (USFWS 2012, 2013, Hamilton et al. 2011, Buettner et al. 2006).		
3-366	3.6.3	Suckers	P. 3-366: First sentence of second paragraph in sucker section describes that capture and translocation in spring prior to drawdown and that is the preference, but additional text should be included here that a fall capture would occur if spring is not feasible as described in AR-6.		
3-366	3.6.3	Suckers	P. 3-366: In the last sentence of the third paragraph of the sucker section, remove the term "significantly" or modify the statement to reflect that the contribution provided by the Lost River and shortnose suckers in the hydroelectric reach reservoirs is genetic broodstock.		
3-367 to 3-369	3.6.3	bull trout	P. 3-367: First paragraph under Bull Trout. This section currently only describes adverse effects from the proposed action. Suggest adding that there will also be beneficial effects, such as marine derived nutrients.		

Page Number(s Section		Topic or Species	USFWS Comments		
3-370 to 3-371	3.6.3	little brown bat	PP. 3-370-3-371: In our correspondence last summer (dated August 10, 2021 and acknowledged in your August 31, 2021 letter) we recommended drafting conservation measures for a select number of species, including little brown bat, that are under listing review. We also discuss little brown bat as part of our letter of concurrence and Biological Opinion that we sent on December 22,2021. The DEIS contains some of these conservation measures. For the little brown bat we recommend the following conservation measures. 1) The best time for structure oost removal is Sept 1 to March 31. If more information about bat hibernation in project structures becomes available the agencies will coordinate. 2) Install suitable replacement roosts prior to removing existing structure roosts. 3) A qualified bat biologist acceptable to the agencies will inspect structures to be removed immediately before deconstruction begins to make sure there are no bats present. If bats are present and it is during the non-maternity season of Sept 1 to March 1, the structures will be removed in two stages and when temperatures are above 45 degrees Fahrenheit (F) and less than 0.5 inches of rain are predicted for the following day: 3a-Phase 1: Roofs and/or walls removed or opened up to alter the microclimate of the roost and then leave the structure undisturbed overnight to allow bats to leave. 3b-Phase 2: Structure would be demolished following confirmation that bats are no longer present. 4) If removing roost structures between April 1 and August 31 will be unavoidable due to known schedule constraints, install exclusion measures and deterrents/hazing equipment (e.g. ultrasonic emitters, lights, fans) prior to March 15 to keep bats from occupying. Exact type and location of deterrents and exclusion measures dependent on structure and will be determined in coordination with agency biologists. 5) If during roost structure removal at any time, bats are found to be present and deconstruction cannot be delayed, the agencies will coordinate on the b		
3-372	3.63	northern spotted owl	hibernation with a bat compatible closure, consider doing so in coordination with agency staff. P. 3-372: Modify as follows to add red text and strike out text, to be consistent with the BA and habitat conditions: "The use of blasting, helicopters, and other heavy equipment for dam and facility removal and restoration activities could disturb any nearby nesting northern spotted owls. However, there is no suitable nesting habitat for the northern spotted owl is limited at in the project area; the majority of areas that would be vegetation that will be affected by dam removal and restoration activities are is considered unsuitable habitat. Adjacent to the J.C. Boyle Powerhouse, there are small, isolated stands of trees that may provide roosting and foraging opportunities; but the majority of this habitat functions for dispersal.		
3-373	3.63	northern spotted owl	P. 3-373: Statement in last paragraph should be modified to add the red text: "This tree removal would have minimal effect on northern spotted owl dispersal habitat designated as critical habitat because forest conditions at the scale important to dispersing northern spotted owls would essentially remain the same."		
3-374	3.63	northern spotted owl	p. 3-374: The DEIS states (for the northern spotted owl), "though KRRC may thus potentially adversely modify or destroy the species' critical habitat, removal of a relatively small number of trees would not influence forest conditions with respect to the species' life history." The project will not adversely modify or destroy the species' critical habitat. The analysis of effects in the BA (and the USFWS Biological Opinion/Letter of Concurrence) determined that the project may affect, but is not likely to adversely affect, critical habitat for the northern spotted owl. The statement in the Draft EIS regarding adverse modification of critical habitat is not correct or in accordance with the determination. The project will affect 0.4 acres of dispersal habitat that is designated as critical habitat for the northern spotted owl.		

heed modification to be consistent with the BA and the BIOp/letter of concurrence. Need to remove and replace these sentences in the second paragraph with the BA and the BIOp/letter of concurrence. Need to remove and replace these sentences in the second paragraph with the BA and the BIOp/letter of concurrence. Need to remove and replace these sentences in the second paragraph with the BA and the BIOp/letter of concurrence. Need to remove and replace these sentences in the second paragraph with the BA and the BIOp/letter of concurrence. Need to remove and replace these sentences in the second paragraph with the BA and the BIOp/letter of concurrence. Need to remove and replace these sentences in the second paragraph with the BA and the BIOp/letter of concurrence. Need to remove and replace these sentences in the second paragraph with the BA and the BIOp/letter of concurrence. Need to remove and replace these sentences of these sentences of the BA analysis for Cregor subtited reflect to the own and to the overall function of the surrounding, remaining dispersal habitat. The first sentence of Oregon spotted firing the sentence of Dregon spotted firing the sentence of Dregon spotted firing the sentence of Inst paragraph describes that KRRCs BA analysis for Oregon spotted firing. Paragraph describes that KRRCs BA analysis for Oregon spotted firing the BA an	Page Number(s Section	Topic or Species	USFWS Comments
Peach 3-374 3.63 Oregon spotted frog Peach 3-374: Faulty determination statements/reflection of the BA analysis for Oregon spotted frog. The first sentence of last paragraph describes that KRRC's BA found the potential for adverse effects to occur, and that is not the case. This needs to be modified as the determination for the Oregon Spotted frog is 'may affect, not likely to adversely affect'. 3-375 3.63 Oregon spotted frog P. 3-375: Need to remove any statements regarding adverse modification or destruction of critical habitat. There will be no effect to Oregon spotted frog critical habitat. The first sentence in third full paragraph needs to be updated to remove adversely modify language. Suggest editing as follows: "removal, there is no potential for the proposed action to adversely modify or destroy affect the species' critical habitat." 3-375 3.63 Oregon spotted frog P. 3-375: Please remove any mention of an adverse effect to the oppose posted frog in the Final Bis. The third sentence in the third full paragraph should to be edited to remove the term "adverses". Soft the project BA and ESA determination is that there will be no effect to critical habitat. There will be no effect to critical habitat. The mode of the proposed action will have insignificant and discountation is that there will be no adverse effects.) Suggested edit: "agencies, we find that dam removal and associated restoration activities would have a dess-them agrificant, adverse an insignificant and discountable effect on Oregon spotted frog."	3-374	3.63	northern spotted owl	need modification to be consistent with the BA and the BiOp/letter of concurrence. Need to remove and replace these sentences in the second paragraph with the red text/sentences: "With KRRC's proposed protective measures in place, the proposed action would have a short-term, less than significant, adverse effect on northern spotted owl nesting, roosting, or foraging habitat. While a relatively small amount of dispersal habitat could be temporarily affected, the restoration of the river channel and adjacent riparian forest would increase dispersal habitat over the long term, providing a permanent, less than significant, beneficial effect on northern spotted owls." The proposed action will have no effect on suitable nesting, roosting or foraging habitat for the northern spotted owl. While 0.4 acre of dispersal habitat will be removed, this is considered an insignificant effect to the owl and to the overall function of the surrounding,
found the potential for adverse effects to occur, and that is not the case. This needs to be modified as the determination for the Oregon Spotted frog is 'may affect, not likely to adversely affect,' 3-375 3-387 3-38	3-374	3.6.3	Oregon spotted frog	
critical habitat. The first sentence in third full paragraph needs to be updated to remove adversely modify language. Suggest editing as follows: "removal, there is no potential for the proposed action to adversely modify or destroy affect the species' critical habitat." 3.83 3.83 Oregon spotted frog P. 3-375: Please remove any mention of an adverse effect to the Oregon spotted frog in the Final Els. The third sentence in the third full paragraph should to be edited to remove the term "adverse". Both the project BA and ESA determination is that there will be no effect to critical habitat for this species and the proposed action will have insignificant and discountable effects on the Oregon spotted frog (there will be no adverse effects). Suggested edit: "agencies, we find that dam removal and associated restoration activities would have a elsewhan-significant, adversed an insignificant and discountable effect on Oregon spotted frog." 3-393 3.6.5 Suckers P. 3-393: The Source / citation for Table 3.6-3. should be changed to KRRC, 2021) (it cites NMFS 2014 now). Note this is the exact same table as Table 3.4-17 on page 3-256. 4-10 4-1 4-1 Flow / Sediment P. 4-48: Global change -replace the term "polychaete" with "annelid" globally. It appears here under Permanent, significant, beneficial effect 4-10 4-1 Bentic	3-374	3.63	Oregon spotted frog	found the potential for adverse effects to occur, and that is not the case. This needs to be modified as the determination for the Oregon Spotted frog is 'may
edited to remove the term "adverse". Both the project BA and ESA determination is that there will be no effect to critical habitat for this species and the proposed action will have insignificant and discountable effects on the Oregon spotted frog (there will be no adverse effects). Suggested edit: "agencies, we find that dam removal and associated restoration activities would have a-less than significant, adverse an insignificant and discountable effect on Oregon spotted frog." 3-393 3.6.5 Suckers 9.3-393: The source / citation for Table 3.6-3. should be changed to KRRC, 2021 (it cites NMFS 2014 now). Note this is the exact same table as Table 3.4-17 on page 3-256. 4-2 to 4-3 4.1 Flow / Sediment P. 4-8: Global change -replace the term "polychaete" with "annelid" globally. It appears here under Permanent, significant, beneficial effect 4-10 benthic packing and the proposed Action portion of the table we recommend adding the idea that greater thermal diversity that will be experienced following removal of the Klamanta River dams and reservoirs is likely to result in greater invertebrate diversity and less favorable environmental conditions for the production and survival of a single species such as the annelid worms. 4-14 4-15 and 4-17 4-1 eagles P. 4-14: Short term effects are not explained. They are called adverse but less than significant. See note for p. 3-294. 4-15 and 4-17 4-1 Suckers P. 4-16: Under the No effect column, change the word emigrate to drift/entrain (see comments above regarding this term) 4-16 4-17 4-18 4-18 4-19 bull trout P. 4-16: Under the No effect column, change the word emigrate to drift/entrain (see comments above regarding this term) P. 4-16: Under the No effect table for Lost River and shortnose suckers in the reach. It is inconsistent with the BiOp to categorize the reservoirs as rearing habitats for the listed suckers. (FWS BO p. 94, 119) (USFWS 2012, 2013, Hamilton et al. 2011, Buettner et al. 2006). 4-18 4-19 4-10 4-10 4-10 4-10 4-10 4-11 4-11	3-375	3.63	Oregon spotted frog	critical habitat. The first sentence in third full paragraph needs to be updated to remove adversely modify language. Suggest editing as follows: "removal,
page 3-256. 4-2 to 4-3 4.1 Flow / Sediment P. 4-8: Global change -replace the term "polychaete" with "annelid" globally. It appears here under Permanent, significant, beneficial effect 4-10 benthic macroinvertebrates P. 4-10: In the Proposed Action portion of the table we recommend adding the idea that greater thermal diversity that will be experienced following removal of the klamath River dams and reservoirs is likely to result in greater invertebrate diversity and less favorable environmental conditions for the production and survival of a single species such as the annelid worms. 4-14 4.1 eagles P. 4-14: Short term effects are not explained. They are called adverse but less than significant. See note for p. 3-294. 4-15 and 4-17 4.1 little brown bat P. 4-15 and p. 4-17: add to discussion potential long-term beneficial effect of increase in potential crevice roost sites as reservoir drawdown exposes more crevice roosting habitats. 4-16 4.1 Suckers P. 4-16: Under the No effect column, change the word emigrate to drift/entrain (see comments above regarding this term) 4-16 4.1 Suckers P. 4-16: No Effect' table for Lost River and shortnose sucker: the term "rearing" needs to be removed as there is no known spawning that occurs in the hydroelectric reach reservoirs and there is no spawning habitat for the two listed suckers in the reach. It is inconsistent with the BiOp to categorize the reservoirs as rearing habitat for the listed suckers. (FWS BO p. 94, 119) (USFWS 2012, 2013, Hamilton et al. 2011, Buettner et al. 2006). 4-18 4.1 Inorthern spotted owl P. 4-18: Need to remove the terminology in the table regarding adverse effects to northern spotted owl. Change the table text for Northern spotted owl to strike the term "adverse' as there will not be any adverse effects. Should state "Insignificant effect" because of the removal of 0.4 acre of dispersal habitat. No suitable nesting, roosting, foraging habitat will be affected by the action.	3-375	3.63	Oregon spotted frog	proposed action will have insignificant and discountable effects on the Oregon spotted frog (there will be no adverse effects). Suggested edit: "agencies, we find that dam removal and associated restoration activities would have a less than significant, adverse an insignificant and discountable effect on Oregon
4-10	3-393	3.6.5	Suckers	
the Klamath River dams and reservoirs is likely to result in greater invertebrate diversity and less favorable environmental conditions for the production and survival of a single species such as the annelid worms. 4-14 4-15 and 4-17 4-15 and 4-17 4-15 and 4-17 4-16 4-17 4-18 4-18 4-18 4-19 4-19 4-19 4-19 4-19 4-19 4-19 4-19	4-2 to 4-3	4.1	Flow / Sediment	P. 4-8: Global change -replace the term "polychaete" with "annelid" globally. It appears here under Permanent, significant, beneficial effect
4-15 and 4-17 4.1 little brown bat P. 4-15 and p. 4-17: add to discussion potential long-term beneficial effect of increase in potential crevice roost sites as reservoir drawdown exposes more crevice roosting habitats. 4-16 4.1 Suckers P. 4-16: Under the No effect column, change the word emigrate to drift/entrain (see comments above regarding this term) 4-16 4.1 Suckers P. 4-16: 'No Effect' table for Lost River and shortnose sucker: the term "rearing" needs to be removed as there is no known spawning that occurs in the hydroelectric reach reservoirs and there is no spawning habitat for the two listed suckers in the reach. It is inconsistent with the BiOp to categorize the reservoirs as rearing habitat for the listed suckers. (FWS BO p. 94, 119) (USFWS 2012, 2013, Hamilton et al. 2011, Buettner et al. 2006). 4-16 4.1 bull trout P. 4-16: Same as above for Table ES-2, the Proposed Action Effect Conclusion for bull trout should be corrected (should be Likely to adversely affect) 4-18 4.1 northern spotted owl P. 4-18: Need to remove the terminology in the table regarding adverse effects to northern spotted owl. Change the table text for Northern spotted owl to strike the term 'adverse' as there will not be any adverse effects. Should state "Insignificant effect" because of the removal of 0.4 acre of dispersal habitat. No suitable nesting, roosting, foraging habitat will be affected by the action.	4-10	4.1		, · · · · · · · · · · · · · · · · · · ·
crevice roosting habitats. 4-16	4-14	4.1	eagles	P. 4-14: Short term effects are not explained. They are called adverse but less than significant. See note for p. 3-294.
4-16	4-15 and 4-17	4.1	little brown bat	
hydroelectric reach reservoirs and there is no spawning habitat for the two listed suckers in the reach. It is inconsistent with the BiOp to categorize the reservoirs as rearing habitat for the listed suckers. (FWS BO p. 94, 119) (USFWS 2012, 2013, Hamilton et al. 2011, Buettner et al. 2006). 4-16	4-16	4.1	Suckers	P. 4-16: Under the No effect column, change the word emigrate to drift/entrain (see comments above regarding this term)
4-18	4-16	4.1	Suckers	hydroelectric reach reservoirs and there is no spawning habitat for the two listed suckers in the reach. It is inconsistent with the BiOp to categorize the
strike the term 'adverse' as there will not be any adverse effects. Should state "Insignificant effect" because of the removal of 0.4 acre of dispersal habitat. No suitable nesting, roosting, foraging habitat will be affected by the action.	4-16	4.1	bull trout	P. 4-16: Same as above for Table ES-2, the Proposed Action Effect Conclusion for bull trout should be corrected (should be Likely to adversely affect)
	4-18	4.1	northern spotted owl	strike the term 'adverse' as there will not be any adverse effects. Should state "Insignificant effect" because of the removal of 0.4 acre of dispersal habitat. No
4-31 4.2.2 little brown bat P. 4-31: Refer to comments on Conservation Measures (see section 3.6.3, pp. 3-370 to 3-371 Conservation Measures)	4-31	4.2.2	little brown bat	P. 4-31: Refer to comments on Conservation Measures (see section 3.6.3, pp. 3-370 to 3-371 Conservation Measures)

Page Number	(s Section	Topic or Species	USFWS Comments
4-31	4.2.2	eagles	P. 4-31: Sixth bullet - Same comment as for page 2-57 (Statement needs editing: "Develop an eagle conservation plan that includes occupancy and nest productivity surveys; timing restrictions on vegetation clearing and [replace "construction noise" with "disturbance"]; monitoring of active eagle nests; coordination with FWS, California DFW, and Oregon DFW; and reporting as described in California Water Board WQC condition 17.") We suggest you identify places in the document relating to eagles where "construction noise" should be replaced with "disturbance." We are working closely with the KRRC on their approach to eagle protection measures and are currently reviewing their Eagle Conservation Plan and Incidental Take Permit application submitted on January 10, 2022. We plan to release a draft Environmental Assessment to further inform a final Eagle Take Permit, which will identify any necessary eagle surveys and protection measures.
4-31	4.2.2	Mussels	Second bullet - Based on the Aquatic Technical Working Group discussions, for this project, we do not support translocation of mussels.
4-31	4.2.3	Mussels	Based on the Aquatic Technical Working Group discussions, for this project, we do not support translocation of mussels.
4-9	4.1	Mussels	Based on the Aquatic Technical Working Group discussions, for this project, we do not support translocation of mussels.
A-23	A.2.9	Suckers	P. A-23: Response to Comment should be corrected to reflect that spawning and reproduction by listed suckers in the hydroelectric reach reservoirs or tributaries is not known to occur and there is no spawning habitat for them. (FWS BO p. 94, 119) (USFWS 2012, 2013, Hamilton et al. 2011, Buettner et al. 2006)
B-2	B.2	Policy / Regulations	P. B-2: Last sentence of first Full paragraph: Update to reflect that FERC already requested FWS concurrence that the proposed action may affect but is not likely to adversely affect the Franklin's bumble bee. FWS concurrence with this effects determination was provided in the Service's December 22, 2021, letter transmitting the Biological Opinion and Informal Consultation on the Surrender and Decommissioning of the Lower Klamath Hydroelectric Project.
C-3	С	little brown bat	P. C-3: Third Element on page - Please modify per the Conservation Measures we provide in response to section 3.6.3, pp. 3-370 to 3-371 Conservation Measures, above.
C-3	С	eagles	P. C-3: Table reports zero cost for developing/implementing Eagle Conservation Plan. There will be costs for monitoring eagles.
E-35	E	yellow-legged frog	P. E-35: Since there is suitable habitat for foothill yellow-legged frogs in the project area, they need to be included in the Amphibian and Reptile plan.
E-36 to E-37	E	eagles	PP. E-36 to E-37: State Water Resources Control Board Condition 17 describes activities that are not part of the permit application submitted to the FWS for an BGEPA permit. The plan called for by the SWRCB condition anticipates nest removal, which is not currently in the BGEPA permit application. In addition, Staff should add the following clarifications to plan requirements: 1. Focused surveys should occur w/in 2 miles of planned work using helicopters and blasting, per regional golden eagle buffer recommendations. 2. 'Limits of work' should include power line removal activities and, if necessary, tree removal in Ward's Canyon, for the purposes of surveys that are required w/in 1 to 2 miles of limits of work. 3. Disturbance buffers: use FWS national recommendations for bald eagle; FWS regional guidelines for golden eagle. Exclude automatic buffer reduction to 0.25 mi if out of line of sight for golden eagle. Note: with BGEPA permit for disturbance, buffers would not be applied at all eagle nests. 4. Eagle nests, even if inactive, are protected under BGEPA. No eagle nests should be removed without a permit from FWS. The requested eagle permit does not include a request to remove nest, nor to render eagles nests temporarily unavailable.

Document Content(s)
DOI letter Lower Klamath DEIS Final.pdf
DOI Enclosure FWS Lower Klamath Project DEIS Final.pdf

Document Accession #: 20220418-5107 Filed Date: 04/18/2022