KLAMATH
RIVER RENEWAL
CORPORATION

March 12, 2019

DELIVERY VIA ELECTRONIC FILING

Kimberly D. Bose
Secretary, Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

RE: Supplemental Information FERC Nos. 2082-062 and 14803-000: Klamath River Renewal Corporation's Comments on the Draft Environmental Impact Report for the Lower Klamath Project License Surrender

Dear Secretary Bose:

Enclosed for filing in the above-referenced proceeding are Klamath River Renewal Corporation's comments on the Draft Environmental Impact Report prepared by the California State Water Resources Board in connection with KRRC's application for a Section 401 Clean Water Act certification. Please direct any questions concerning these documents to the undersigned. Thank you.

Sincerely,

/s/ *Mark Bransom*
Mark Bransom
Chief Executive Officer
Klamath River Renewal Corporation

Enclosure

cc: Service List

KLAMATH
RIVER RENEWAL
CORPORATION

February 26, 2019

By electronic mail

Ms. Michelle Siebal
State Water Resources Control Board
Division of Water Rights – Water Quality Certification Program
P.O. Box 2000
Sacramento, CA 95812-2000

Re: Draft Environmental Impact Report for the Lower Klamath Project License Surrender (December 2018) (State Clearinghouse No. 2016122047)

Dear Ms. Siebal:

The Klamath River Renewal Corporation (KRRC) submits these comments on the Draft Environmental Impact Report for the Lower Klamath Project License Surrender (December 2018) (Draft EIR) as part of the California Environmental Quality Act (CEQA) public comment process.

KRRC is the applicant for water quality certification for the Proposed Project, which is to remove four dams (J.C. Boyle, Copco No. 1, Copco No. 2, and Iron Gate) and associated facilities that comprise the Lower Klamath Project (Proposed Project) pursuant to the terms of the Amended Klamath Hydroelectric Settlement Agreement (April 2016) (Amended KHSA). The purpose of the Proposed Project is to restore free-flowing river conditions and volitional fish passage along over 400 stream-miles of historic spawning habitat upstream of the dams on the Klamath River (Amended KHSA, Section 1.4, p. 5).

KRRC submitted our initial request for water quality certification on September 23, 2016. Subsequent to the initial application, KRRC provided further information to refine the scope of the Proposed Project to the State Water Board on June 1, 2017, September 9, 2017, January 1, 2018, and June 1, 2018. These amendments presented the State Water Board with new and additional information that was necessary for the State Water Board to diligently discharge its regulatory responsibilities, including compliance with CEQA.

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On June 7, 2018, the State Water Board staff issued a draft water quality certification for the Proposed Project, including 39 conditions to assure compliance with applicable water quality objectives. The Draft EIR confirms that implementation of the Proposed Project will meet water quality objectives; contribute to the restoration of the population of native anadromous and other fish species; and benefit the local economy by providing commercial and fishing job opportunities. As the Oregon and California Public Utility Commissions have found, successful implementation of the KHSA, which includes the Proposed Project, is in the best interest of ratepayers. The customer cap of $200 million, coupled with liability protections, would cost customers less than the upgrades that would otherwise be necessary to relicense the dams.

The Proposed Project is one of the most comprehensive river restoration projects in U.S. history. The Amended KHSA is a remarkable multi-party agreement between stakeholders with divergent interests in the Klamath Basin to resolve decades of litigation and other controversies in the region over the future of the Klamath River. Under the Amended KHSA, the parties agreed to facilitate the physical removal of all or part of each of the Lower Klamath Project dams to achieve a free-flowing condition and volitional fish passage along the Klamath River below the Keno Dam. In addition, the Amended KHSA provides that the proposed removal of the Lower Klamath Project facilities would be completed in a manner that also achieves site remediation and restoration and with the implementation of measures to avoid or minimize downstream impacts.

We submit these general comments on the Draft EIR. We also submit technical comments (Attachment A), which are organized by section in the Draft EIR.

GENERAL COMMENTS

General Comment 1. The Proposed Project will provide more environmental benefits to the Klamath River as compared to the other action alternatives considered in the Draft EIR.

We support the Draft EIR's conclusion that the environmentally superior alternative is the Proposed Project, under which the four dams in the Lower Klamath Project would be removed to create free-flowing river conditions. See p. ES-24. As the Draft EIR finds, the removal of the Lower Klamath Project's dams will comply with applicable water quality requirements and provide a wide range of beneficial impacts, including: benefits to aquatic species listed under the Endangered Species Act; long-term beneficial effects on riparian habitat and listed species that rely on such riparian habitat; and benefits for Native American tribes that depend on the Lower Klamath River for fisheries and ceremonial purposes (Draft EIR, Executive Summary, pp. ES-9 to ES-10; ES-24 [finding that the Proposed Project as the environmentally superior alternative]).

KRRC appreciates the State Water Board's detailed examination of a number of other alternatives that potentially would meet some, but not all, of the Proposed Project's objectives. Restoration of free-flowing river conditions per the Proposed Project will provide the maximum benefits to the Klamath River's water quality and ecosystem.

General Comment 2. **As conditions of license surrender, KRRC will implement comprehensive measures to avoid and minimize the Proposed Project's adverse environmental impacts.**

While the Proposed Project will have substantial environmental benefits, we recognize that it will have adverse effects on environmental quality, absent the implementation of appropriate mitigation measures. The scope of state and local authority to require such mitigation measures is limited, because the Proposed Project is under the licensing jurisdiction of the Federal Energy Regulatory Commission (FERC) under the Federal Power Act (*California v. Federal Regulatory Commission et al.*, 495 U.S. 490 (1990)). While regulating the Proposed Project under the non-preempted authority of Clean Water Act Section 401, the State Water Board has authority to require mitigation measures as necessary to assure compliance with water quality objectives and related water quality requirements (Draft EIR, p. ES-11). However, it does not have jurisdiction to require mitigation of other potentially adverse impacts. Where the Draft EIR identifies potentially adverse impacts that fall outside of the State Water Board's water quality certification authority, the State Water Board has chosen to identify these impacts as significant and unavoidable impacts since they cannot ensure implementation of mitigation measures to reduce the impacts (Draft EIR, Page ES-24).

The Draft EIR does not reflect, however, that FERC and other agencies considering KRRC's applications for regulatory approvals can and should implement measures to reduce the Proposed Project's adverse effects. Such approvals include the license surrender order, the Biological Opinion under the Endangered Species Act, dredge-and-fill permit under Clean Water Act section 404, and other applicable regulatory authorizations. Before such approvals can be issued, the Proposed Project will also be subject to additional environmental review under the National Environmental Policy Act (NEPA). In addition, the Federal Power Act requires FERC to include terms and conditions in the surrender order that are determined by FERC to be necessary to protect environmental resources and public safety during project decommissioning activities and will serve the public interest.

KRRC has proposed a comprehensive set of mitigation measures for the purpose of license surrender. These measures are described in the Draft EIR as well as in KRRC's Definite Plan, attached to the Draft EIR as Appendix B. The KRRC proposes to implement these measures through the following plans or project components:

- Risk Management Plan
- Draft Recreation Plan
- Reservoir Area Management Plan
- Cultural Resources Plan
- Water Quality Monitoring Plan
- Groundwater Well Management Plan
- Fire Management Plan
- Traffic Management Plan
- Downstream Flood Control Improvements
- Hazards Material Management Plan
- Emergency Response Plan
- Noise and Vibration Control Plan
- Aquatic Resource Measures
- Terrestrial Resource Measures
- Road Improvements
- Yreka Water Supply Improvements
- Recreation Facilities Removal and Development Plan

We derived many of these mitigation measures from the recommendations in the Final Environmental Impact Statement/Environmental Impact Report completed by the Department of Interior and the California Department of Fish and Wildlife in 2012 (2012 EIS/EIR). KRRC then worked closely with a number of federal and state resource agencies and impacted tribes to carefully review the 2012 EIS/EIR's measures to evaluate the efficacy of those measures and to update the measures where appropriate based on additional data gained from recent dam removal projects in the Western United States.

KRRC has also committed to implement additional measures to reduce the Proposed Project's impacts. For example, we are committed to implement mitigation measures to avoid or minimize any impacts to historical and tribal cultural resources. We developed these measures with Native American tribes that requested consultation under Assembly Bill (AB) 52 (Draft EIR, Chapter 3.12). KRRC will continue to work with these and other tribes in the Klamath Basin as we complete both the National Historic Preservation Act Section 106 consultation process associated with the ongoing FERC surrender proceeding and the Tribal Cultural Resources Management Program as part of a comprehensive Historic Properties Management Plan.

Finally, KRRC is working with state and local agencies participating in the FERC process to develop agreements, referred to in the Draft EIR as "good neighbor agreements," to provide FERC with joint recommendations related to mitigation of the Proposed Project's potential impacts to the extent such impacts are not adequately addressed through KRRC's commitments or the State Water Board's required mitigation measures outlined in the Draft EIR (Draft EIR, ES-11). KRRC is working diligently to reach agreements with key state and local stakeholders in an effort to ensure that their concerns are sufficiently addressed prior to the Proposed Project's implementation.

General Comment 3. As a condition of license surrender, KRRC will address any potential increased response time and associated wildland fire risk due to implementation of the Proposed Project.

The Draft EIR finds that implementation of the Proposed Project may increase risk associated with wildland fire during the Proposed Project's construction activities and after construction is complete due to the loss of reservoirs as a potential source of water for fire suppression crews. KRRC is committed to addressing this impact and to reduce any increase in wildland fire risk for the Klamath Basin due to the implementation of the Proposed Project. To that end, KRRC is working closely with CAL FIRE to develop effective ways that KRRC can reduce any increased wildland fire risk during the Proposed Project's construction activities, and to identify ways that KRRC can assist improving emergency response in the Klamath Basin after the Proposed Project is implemented.

KRRC has prepared a draft Fire Management Plan, which sets forth the initial framework by which KRRC will work with local emergency responders to reduce response time and any associated additional risk attributable to the Proposed Project (Draft EIR, Appendix B [Definite Plan, Appendix 01]). The Fire Management Plan details how KRRC will comply with applicable regulations and requirements set forth by the fire suppression agencies in the Proposed Project vicinity. In the draft Fire Management Plan, KRRC commits to having a designated Safety Officer who will be on-call 24 hours a day, 7 days a week who will be the primary on-site contact for emergency responders and will be responsible for implementing the fire suppression and elimination measures. The Safety Officer will be onsite during the removal of the dam facilities. The Safety Officer and KRRC's contractor will work closely with California and Oregon fire suppression agencies to develop broad scale contingency plans for fire suppression within their respective jurisdictions. During construction, KRRC will take precautionary, pre-suppression and suppression measures to ensure public safety, and will comply with applicable fire season regulations and requirements in California and Oregon (*Id.*, p. 33-35). KRRC will carefully monitor weather patterns that may increase fire hazards during construction and will update operations and fire response plans to address changing environmental conditions while closely communicating with relevant fire suppression agencies (*Id*, p. 34-35). KRRC will also work closely with emergency responders to ensure that construction operations will not impede emergency vehicles or impede public access to evacuation routes.

The draft Fire Management Plan also includes a preliminary analysis concerning potential sources of replacement water that can be used by fire suppression crews to replace the reservoirs eliminated by the Proposed Project (*Id.*, Chapter 6). KRRC recognizes that fire suppression efforts in the Klamath Basin rely on helicopter crews. As reflected in the draft Fire Management Plan, KRRC has confirmed with CAL FIRE that helicopter fire suppression will be able to draw water from the Klamath River (*Id.*, p. 41; pers. comm., M. Hebrard, February 2019). Because the water must be a certain depth to extract water, KRRC is working with CAL FIRE to identify which specific portions of the Klamath River are suitable for extraction by helicopter crews during wildland fires (*Id.*, p. 41). KRRC

appreciates the feedback from the State Water Board that certain potential replacement measures, such as dry hydrants, will not be an effective replacement source of water. However, KRRC continues to work with CAL FIRE to identify not only replacement sources of water, but ways in which KRRC can facilitate the reduction of overall emergency response times through communications and roadway improvements. KRRC intends to expeditiously finalize the Fire Management Plan in conjunction with our contactor, federal, state, and local fire suppression agencies, and emergency responders.

General Comment 4. **The Proposed Project will not result in the procurement of additional fossil fuel generation.**

The implementation of the Proposed Project will result in the elimination of a source of hydropower, which PacifiCorp would need to replace in its portfolio. As the Draft EIR correctly concludes, the power that PacifiCorp will procure to replace the Lower Klamath Project's generation will not increase overall greenhouse gas (GHG) emissions (Draft EIR, pp. 2-727 to 730).

As a preliminary matter, PacifiCorp has already accounted for the loss of the generation from the Lower Klamath Project in its Integrated Resource Plan (IRP). Substantial evidence demonstrates that the Lower Klamath Project will not be replaced through the procurement of fossil fuel generation. However, the loss of production attributable to the decommissioning of the Lower Klamath Project loss is many, many times offset by PacifiCorp's acquisition of renewable resources. PacifiCorp's 2017 IRP states that, through the end of 2036, the updated preferred portfolio includes over 2,700 megawatts (MW) of new wind resources, 1,860 MW of new solar resources, 1,877 MW of incremental energy efficiency resources, and approximately 268 MW of direct-load control resources. The 2017 IRP contains no new natural gas resources through the 20-year planning horizon. This is the first time an IRP has not included new fossil-fueled generation as a least-cost, least-risk resource for PacifiCorp. This was reinforced in PacifiCorp's 2017 IRP Update, in which the preferred portfolio continues to assume existing owned coal capacity will be reduced by 3,650 MW through the end of 2036.

The fact that the Lower Klamath Project generation will not be replaced with newly procured fossil fuels is underscored by the energy policies in both California and Oregon. Both states have enacted aggressive renewable energy and carbon reduction goals. In addition to the goals set forth in the Draft EIR, Governor Jerry Brown signed Senate Bill (SB) 100, which accelerates the state's Renewables Portfolio Standard (RPS) to require utilities and other load serving entities derive 60% of their energy from renewable sources by 2030. SB 100 also requires the state to obtain all of its electricity from carbon-free sources by 2045.

The State of Oregon also has a state policy to reduce GHG emissions in Oregon to meet certain GHG reduction goals by 2020 and 2050; ORS 468A.205 et seq. In 2016, Governor Kate Brown signed

legislation that increased the state's RPS to require utilities to procure at least 50% of its power from renewable resources by 2040. Currently, the Oregon legislature is evaluating a number of bills to further its state policy to reduce GHG emissions. This legislation includes House Bill 2020, which would set new GHG reduction goals for 2035 and 2050 and establish a new "cap and trade" regulatory program administered by a new state agency, the Carbon Policy Office, to address GHG emissions by (1) placing a cap on the total anthropogenic GHG emissions by setting annual allowance budgets for 2021 and 2050; and (2) providing a market-based mechanism for covered entities, which includes certain electric companies, to demonstrate compliance with the program.[1]

In light of aggressive efforts by California and Oregon to increase carbon reduction goals and PacifiCorp's stated intention to replace existing fossil fuel generation with an increasing amount of renewable energy, there is substantial evidence that the loss of the Lower Klamath Project's generation will not result in the procurement of fossil fuel generation.

CONCLUSION

The Proposed Project is a unique opportunity to restore anadromous and other fisheries in the Klamath Basin, in a manner that does not reduce any water supplies for agricultural and municipal uses. Restoration of free-flowing river conditions in the Klamath River below Keno Dam will provide access to approximately 400 miles of habitat for a number of aquatic species protected under the Endangered Species Act. The Proposed Project will comply with all applicable water quality requirements. The Klamath Basin will enjoy substantial economic and environmental benefits. KRRC commends the State Water Board for its thorough examination of the potential environmental impacts of this vitally important project for the region's future.

Mark Bransom
Chief Executive Officer

Attachment

1 The Oregon legislature is also evaluating Senate Bill 89, which would require DEQ to assess the net impacts of state policies and programs for reducing greenhouse gases, and Senate Bill 220, which would require DEQ to conduct a study related to greenhouse gas emissions. Separately, House Bill 2322 has been proposed, which would require the Oregon Land Conservation and Development Commission to consider amendment to the statewide land use planning goals related to energy to incorporate the development of renewable energy facilities and reduction of greenhouse gas emissions consistent with the state's energy policies.

Attachment A

TECHNICAL COMMENTS OF KLAMATH RIVER RENEWAL CORPORATION ON CALIFORNIA STATE WATER SOURCES CONTROL BOARD DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE LOWER KLAMATH PROJECT

EXECUTIVE SUMMARY (ES)

ES-5. Clarify that the timing of the drawdown at Copco No. 2 would be before breaching Copco No. 1 dam, not after.

Suggested revision (second paragraph, second sentence):
"Copco No. 2 Reservoir is substantially smaller than the other three dams and the KRRC proposes to drawdown this reservoir ~~after~~ before Copco No. 1 Dam has been breached to final grade in May of dam removal year 2."

ES-5. To clarify, the capacity of the embankment dam crest is related to the passage of a 1 in 150 probable seasonal flow, which would be a higher standard than the annual rate (i.e., 100-year flood event).

Suggested revision (third paragraph, last sentence):
"During Iron Gate Dam removal, the embankment dam crest would be retained at a level to accommodate the passage of a ~~100-year flood event~~ 1 in 150 probable seasonal flow."

ES-5. Clarify the first sentence to describe the sequencing of the dam removal and reservoir drawdowns.

Suggested revision (second paragraph, first sentence):
"Copco No. 1 Reservoir would be drawn down first ~~(November–March of dam removal year 1~~ November of dam removal year 1 to March of dam removal year 2)[1], followed by J.C. Boyle (Oregon) and Iron Gate reservoirs (January–March of dam removal year 2)."

ES-11. Clarify how the State Water Board's limited scope of jurisdiction restricts the scope of mitigation it may require through its water quality certification jurisdiction, resulting in a greater number of determinations of "significant and unavoidable" impacts than would actually happen during the Proposed Project's implementation. Many of these significant impacts will be reduced by the commitments that KRRC has made to fully mitigate adverse impacts of the Proposed Project to the extent feasible. In addition, many of these significant impacts will also be reduced during the additional layers of environmental review and regulatory approvals of FERC, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service. Through this extensive regulatory process, these agencies will add additional terms and conditions under which KRRC must comply in the implementation of the Proposed Project that will further reduce significant impacts identified in the EIR.

Suggested revision (last paragraph, "Significant Unavoidable Adverse Impacts")
"Below is a summary, by resource area, of impacts found to be 'significant and unavoidable' with or without mitigation (Table ES-1). Please note, many of these impacts determinations

are based on the limitations of the State Water Board's jurisdiction based on the proposed issuance of a water quality certification. This is the first of many agencies' review of the Proposed Project. Before KRRC could implement the Proposed Project, the Proposed Project would undergo additional environmental review and permitting by FERC, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service. On balance, this robust federal environmental review and regulatory oversight will result in a reduction of the impacts identified by the State Water Board in this Draft EIR. Because that review has not yet occurred, however, the State Water Board has made significance determinations based only on the scope of mitigation that it can enforce, resulting in a greater number of significant and unavoidable determinations than might actually occur during the Proposed Project's implementation. These impact characterizations are thus conservative from a legal standpoint, and reflect the fact that the State Water Board, by itself, cannot ensure that the significant impacts at issue cannot be mitigated to less than significant levels. For many of these impacts, however, binding mitigation obligations imposed by other regulatory agencies will likely ensure that the impacts will ultimately be mitigated to less than significant levels.

In addition, KRRC has made a wide range of commitments to implement measures to reduce the environmental impacts of this Project. Tthe KRRC proposes to further develop Proposed Project actions relating to certain state and local regulatory requirements for several resource areas that fall outside of State Water Board's water quality certification authority. KRRC anticipates entering into Memoranda of Understanding (MOUs or "good neighbor agreements") with certain state or local agencies, under which KRRC and the relevant agency would provide joint recommendations to FERC to include those terms and conditions in FERC's surrender order.

The State Water Board anticipates implementation of additional measures (e.g., good neighbor agreements between the KRRC and relevant state or local agencies, recommended measures in this EIR, and any modifications developed through the FERC process that provide the same or better level of protection for the resource in question) would reduce impacts. The EIR notes where such protection would eliminate the potential for a significant impact. However, the State Water Board cannot ensure implementation of good neighbor agreements, recommended measures included in this EIR, or modifications anticipated to be developed through the FERC process. Therefore, the State Water Board has identified impacts that rely on implementation of such agreements or recommended measures to reduce impacts to less than significant levels ~~in this EIR~~ as significant and unavoidable in this EIR."

ES-14. Clarify under bullet one under Public Service that it is a short-term increase on response times during construction activities. It is also recommended to clarify that the potential increase in response time is unknown at this time. There are a number of factors that contribute to the severity and extent of a wildland fire. It is hard to predict whether any specific factor will contribute to the severity of a fire (Pers. comm., M. Hebrard, February 2019). In addition, as conditions of license and surrender, KRRC has committed to implement Recommended Measure PS-1, which will substantially reduce impacts to emergency response time in suppressing wildland fire. KRRC will work closely with fire

suppression agencies to finalize the Fire Management Plan consistent with Recommended Measure PS-1.

Suggested revision (top of page, "Public Services")

- "Short term iIncreases in public service response times for emergency fire, police, and medical services due to construction and demolition activities, including construction related traffic; and
- ~~Substantial~~ Potential increase in response times for suppressing wildland fires where suitable replacement water sources cannot be identified in close proximity to a fire in a location for which the Lower Klamath Project reservoirs would otherwise have been the nearest water source."

ES-24. Clarify how the State Water Board's limited scope of jurisdiction restricts the scope of mitigation it may require through its water quality certification jurisdiction, resulting in a greater number of determinations of "significant and unavoidable" impacts than would actually happen during the Proposed Project's implementation. Many of these significant impacts will be reduced by the commitments that KRRC has made to fully mitigate adverse impacts of the Proposed Project to the extent feasible. In addition, many of these significant impacts will also be reduced during the additional layers of environmental review and regulatory approvals of FERC, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service. Through this extensive regulatory process, these agencies will add additional terms and conditions under which KRRC must comply in the implementation of the Proposed Project that will further reduce significant impacts identified in the EIR.

Suggested revision (last paragraph):

"The KRRC proposes to further develop Proposed Project actions related to certain state and local regulatory requirements that fall outside of the State Water Board's water quality certification authority. The State Water Board anticipates that implementation of additional measures, ~~(e.g.,~~ measures that are ultimately recommended through the good neighbor agreements between the KRRC and relevant state or local agencies, KRRC's commitment to implement certain recommended measures in this EIR, and any modifications developed through the FERC, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and/or National Marine Fisheries Service processes that provide the same or better level of protection for the resource in question) would ultimately reduce many of the Proposed Project's impacts to less than significant levels.

In certain instances, the EIR notes where such protection is anticipated to eliminate the potential for a significant impact. However, the State Water Board cannot ensure implementation of good neighbor agreements, recommended measures included in this EIR, or modifications anticipated to be developed through the FERC, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, the National Marine Fisheries Service processes. Therefore, the State Water Board has conservatively identified impacts that rely on FERC's adoption of measures included in ~~implementation of~~ such agreements, the terms and conditions that may be imposed by FERC, U.S. Army Corps of Engineers, U.S. Fish and Wildlife

Service, and National Marine Fisheries Service, or recommended mitigation measures in this EIR as significant and unavoidable. As noted above, these impact characterizations are thus conservative from a legal standpoint, and reflect the fact that the State Water Board, by itself, cannot ensure that the significant impacts at issue cannot be mitigated to less than significant levels. For many of these impacts, however, binding mitigation obligations imposed by other regulatory agencies will likely ensure that the impacts will ultimately be mitigated to less than significant levels."

ES-26. Table ES-1 currently distinguishes between categories of impacts that are "significant and unavoidable" and categories of impacts that are "significant and unavoidable with mitigation." This is a useful and helpful distinction. KRRC believes that Table ES-1 would be even more informative, however, if the table also identified an additional basis for differentiating amongst these significant unavoidable impacts. KRRC suggests that the table be modified to show a distinction between, on the one hand, impacts that are significant and unavoidable because the State Water Board cannot identify *any* mitigation measures—including any that might be beyond the State Water Board's regulatory jurisdiction—that would reduce the impacts below applicable significance thresholds; and on the other hand, impacts that the State Water Board considers significant and unavoidable simply because the Board lacks the regulatory authority to impose mitigation on its own. The table is currently misleading insofar as it portrays the Proposed Project as causing a larger number of significant unavoidable impacts than will truly exist once agencies other than the Water Board issue regulatory approvals and the KRRC develops the good neighbor agreements with relevant state and local agencies. As is clear from pages ES-9 through ES-11, the Proposed Project is, on balance, a project that is very beneficial to the environment, and in particular to long-term water quality and the long-term health of fisheries, by reestablishing a free-flowing river condition and volitional fish passage on the Lower Klamath River.

Suggested revision:
Table ES-1 should be modified to include asterisks and other symbols, defined in a key, to indicate whether particular significant unavoidable impacts are labeled as such (i) due to the Water Board's jurisdictional limitations, or (ii) due to the fact that no known mitigation—as imposed by any agency or as imposed by KRRC on itself—is available to reduce the impacts at issue to less than significant levels.

ES-42. Mitigation Measure TER-5 is applicable to "Potential Impact 3.5-6. Short-term and long-term impacts on culturally significant species in riparian and wetland habitats" in the short-term for the Proposed Project and other alternatives including the Partial Removal Alternative, the Two Dam Removal Alternative, the Three Dam Removal Alternative, and the No Hatchery Alternative.

Suggested revision:
Add TER-5, as revised in later comments, to Potential Impact 3.5-6 in Table ES-1.

PROPOSED PROJECT (2.0)

2-8. Since Table 2.3-1 refers to existing features, the word "modified" should be removed from the description of the diversion tunnels at Copco No. 1. The diversion tunnel at Copco No. 1 would only be modified as part of the Proposed Project.

Suggested revision (Table 2.3-1):
Under column "Copco No. 1": "Overflow spillway with larger control gate and ~~modified~~ diversion tunnel"

2-20. Clarify the title of Section 2.6.1 with the following language.

Suggested revision:
"**2.6.1 Water ~~Conflicts~~ History in the Klamath River Basin**"

2-27. In Table 2.7-1, J.C. Boyle does not require any canal modifications in preparation for drawdown.

Suggested revision:
Under J.C. Boyle tasks:" ~~Modify canal and~~ Prepare for drawdown"

2-27. In Table 2.7-1, under Copco No. 1 tasks "Modify diversion tunnel, prepare for drawdown" and "Dam modifications" are the same, and one or the other should be removed.

Suggested revision:
Table 2.7-1, under Copco No. 1: ~~*Dam modifications*~~

2-27. In Table 2.7-1, revise the schedule under Copco No. 1 for "Power generation facilities demolition" to November 4 to April 14.

Suggested revision:
Under Copco No. 1: "Power generation facilities demolition" *to take place November 4 to April 14 (change from October to January).*

2-32. No improvements to the Access Road from Overlook Point Recreational Facility to Copco Road are envisioned for the project. This bullet point should be removed.

Suggested revision (bottom of page):

- "Access Road from Long Gulch Recreational Facility to Lakeview Road—some road surface rehabilitation during construction.
- ~~Access Road from Overlook Point Recreational Facility to Copco Road—some road surface rehabilitation during construction."~~

2-43. Clarify that KRRC is committed to returning the roads to their "pre-project condition."

Suggested revision (first paragraph, second sentence):
"The KRRC proposes to return roads used for the Proposed Project to an acceptable state (i.e., their pre-project condition), including mitigating any potential reduction in function attributed to the dam removal work."

2-46. The first paragraph of this page describes flood release capacity. KRRC's analysis shows that the 1% seasonal flow is about 4,200 cubic feet per second (cfs) for the second half of June and less than 3,000 cfs for July through September, which is different than what is stated in the document. The flow updates should not affect the impact determination. The Proposed Project will maintain flood protection for a 1 in 150 probable flow during dam removal from June 15 to September 30.

Suggested revision (first paragraph):
"The KRRC proposes to remove Iron Gate Dam and its associated facilities following spring runoff of dam removal year 2 (approximately June 1). The embankment dam crest would be retained at a level needed for flood protection, with a minimum flood release capacity of approximately ~~7,000~~ 3,000 cfs in July (reservoir water surface elevation 2,242.3 feet) and 3,000 cfs in August and September (reservoir water surface elevation 2,194.3 feet), in order to accommodate the passage of at least a 1 percent probable flood for that time of year. Excavation of the embankment section at Iron Gate Dam would not begin before June 1 of dam removal year 2, and it would be complete by September 30 to minimize the risk of flood overtopping. During excavation, rockfill would be temporarily stockpiled for placement on the downstream slope of a temporary cofferdam. Throughout excavation, access would be provided to the gate control house at the base of the intake tower for flow control."

2-57. See comment above regarding the flow analysis conducted by KRRC. The flow for Iron Gate in July would be 4,200 cfs, not 7,700 cfs. Text should be clarified with the updated information.

Suggested revision (last paragraph):
"June – approximately ~~7,700~~ 4,200 cfs
July – approximately ~~7,000~~ 3,000 cfs
August/September – approximately 3,000 cfs"

2-81. An additional location for the settling pond at the existing lower raceways at Fall Creek Hatchery should also be included in the description of the hatchery. This third location is situated within the footprint of existing infrastructure and therefore would have lesser impacts than the other sites being considered.

Suggested revision: (first paragraph, fourth sentence):
"The settling pond would be constructed on one of three ~~two~~ potential nearby sites located on Parcel B lands downstream of the Fall Creek Hatchery, including a location at the existing lower raceways at the hatchery, with a minimally buried or at-grade conveyance pipeline transporting flows from the hatchery to the settling pond."

WATER QUALITY (3.2)

3-82 **Significance Finding for Potential Impact 3.2-1.** The Draft EIR finds that the Proposed Project will have beneficial impacts or no significant adverse impacts on water temperature, varying by Project reach, due to conversion from reservoir areas to free-flowing conditions.

Suggested revision: *None. We concur.*

3-84 **Significance Finding for Potential Impact 3.2-2.** The Draft EIR finds that the Proposed Project will have no significant adverse impacts on seasonal water temperature, due to morphological changes, due to conversion from reservoir areas to free-flowing conditions.

Suggested revision: *None. We concur.*

3-106 **Significance Finding for Potential Impact 3.2-3.** The Draft EIR finds that the Proposed Project will have no significant adverse impacts on water quality in the long term from sediment release due to conversion from reservoir areas to free-flowing conditions.

Suggested revision: *None. We concur.*

3-109 **Significance Finding for Potential Impact 3.2-5.** The Draft EIR finds that the Proposed Project will have no significant adverse impacts on water quality in the long term from the alteration in inorganic suspended material, due to conversion from reservoir areas to free-flowing conditions.

Suggested revision: *None. We concur.*

3-110 **Significance Finding for Potential Impact 3.2-6.** The Draft EIR finds that the Proposed Project will have no significant adverse impacts on water quality in the long term from the alterations in organic suspended material, due to conversion from reservoir areas to free-flowing conditions.

Suggested revision: *None. We concur.*

3-111 **Significance Finding for Potential Impact 3.2-7.** The Draft EIR finds that the Proposed Project will have no significant adverse impacts on water quality in the short term from the release of sediment associated nutrients, due to conversion from reservoir areas to free-flowing conditions.

Suggested revision: *None. We concur.*

3-119 **Significance Finding for Potential Impact 3.2-8.** The Draft EIR finds that the Proposed Project will have no significant adverse impacts on alterations in nutrients in the long term due to the removal of the dams and will have a beneficial impact on water quality due to the cessation of seasonal releases of total nutrients and the conversion from reservoir areas to free-flowing conditions.

Suggested revision: *None. We concur.*

3-124 **Significance Finding for Potential Impact 3.2-9.** The Draft EIR finds that the Proposed Project will have no significant adverse impacts to dissolved oxygen due to the short term increases in oxygen demand in the lower reaches, due to the removal of the dams and the conversion from reservoir areas to free-flowing conditions.

Suggested revision: *None. We concur.*

3-131 **Significance Finding for Potential Impact 3.2-10.** The Draft EIR finds that the Proposed Project will have long term beneficial impacts to the summer and fall variabilities in dissolved

oxygen and will have no significant adverse impacts to dissolved oxygen for the daily variability due to the conversion from reservoir areas to free-flowing conditions.

Suggested revision: *None. We concur.*

3-136 **Significance Finding for Potential Impact 3.2-11.** The Draft EIR finds that the Proposed Project will have no significant adverse impacts to pH levels in the Hydroelectric Reach from the Oregon-California state line and the lower reaches in the short and long term and will have beneficial impacts to pH levels from Copco No.1 to Iron Gate due to the conversion from reservoir areas to free-flowing conditions.

Suggested revision: *None. We concur.*

3-139 **Significance Finding for Potential Impact 3.2-12.** The Draft EIR finds that the Proposed Project will have beneficial impacts to levels of chlorophyll-a and algal toxins in the short and long term due to the conversion from reservoir areas to free-flowing conditions.

Suggested revision: *None. We concur.*

3-160 **Significance Finding for Potential Impact 3.2-14.** The Draft EIR finds that the Proposed Project will have no significant adverse impacts to freshwater and marine aquatic species in the short and long term due to the removal of the dam and the conversion from reservoir areas to free-flowing conditions.

Suggested revision: *None. We concur.*

3-161. In Potential Impact 3.2-15, update the pre-construction activities at Iron Gate by removing "canal" in the description.

Suggested revision (first paragraph, first sentence):
"Under the Proposed Project, pre-construction activities that would potentially affect water quality include ~~canal and~~ diversion tunnel modifications, road improvements, Iron Gate and Fall Creek hatchery modifications, Yreka pipeline modifications, and dam site preparation between June and November of dam removal year 1 (Table 2.7-1)."

3-166. "Short term" for the hatchery is defined in the Draft EIR as the 8-year operation period. Depending on hatchery operations, discharge water temperatures that are above the receiving water temperatures may occur for short periods, but not consistently for 8-years. Although discharge water temperature increases may occur, it is likely that they would last only a matter of hours. Short duration discharges of minimally higher temperature water would unlikely have an effect on receiving water temperatures and the effect would not be a continuous 8-year impact. The impact is measured to the receiving water not the discharge water.

Suggested revision (first paragraph):
"While the increase in Fall Creek water temperature and subsequent potential increase in Klamath River water temperature due to hatchery discharges would be small, any increase in water temperature would exceed Thermal Plan water temperature water quality standard for COLD interstate waters, and there potentially would be a significant and unavoidable impact without mitigation on water temperature in the Hydroelectric Reach of the Klamath River due to Fall Creek Hatchery under the Proposed Project. <u>It should be noted that although</u>

discharge temperatures may be elevated during the short term, the changes would be very short in duration and would not occur continuously during the 8-year period of operation."

AQUATIC RESOURCES (3.3)

3-212. Clarify text reference to Table 3.3-7. The text should refer to steelhead, not spring Chinook salmon as is currently specified.

Suggested revision (second paragraph, last sentence):
"Table 3.3-7 provides a generalized life history periodicity for ~~spring-run Chinook~~ steelhead ~~salmon~~ life stages, with additional timing provided in Appendix E.3.1.4."

3-324. In the short term, it is likely that summer and winter steelhead would use the additional 80 miles of mainstream and tributary habitat in the Hydroelectric Reach for spawning and rearing (not just migration) beginning in the winter/spring of year 2. Spawning would primarily take place in tributaries and possibly within riffles or newly formed side channels within the previously inundated reservoir areas. See full reference for text revisions below:

- Hamilton, J.B., G.L. Curtis, S.M. Snedaker, and D.K. White. 2005. Distribution of anadromous fishes in the Upper Klamath River watershed prior to hydropower dams – a synthesis of the historical evidence. Fisheries, 30:10-20.

Suggested revision (third paragraph):
"In the short term, adults could first access this reach in winter (summer steelhead) or fall (winter steelhead) of dam removal year 2. Because redband /rainbow trout (*Oncorhynchus mykiss sp.*) are already present in all free-flowing portions of the Hydroelectric Reach and resident *O. mykiss* have similar life history requirements for spawning and rearing habitats as steelhead, it is probable that steelhead will rapidly use these reaches once the habitats become accessible. Further, Hamilton et al. (2005) summarizes historical evidence of steelhead using tributary streams in the Hydroelectric Reach, including Camp Creek, Spencer Creek, Shovel Creek, Scotch Creek, and Fall Creek. Steelhead could use this reach as a migration corridor, as most sediment released from the reservoirs would likely be eroded within the first six months after reservoir drawdown (by June of dam removal year 2) and would not impede upstream movement. By late spring of removal year 2, elevated SSCs resulting from dam removal would likely have returned to low levels unlikely to impact steelhead."

3-336. There is research that supports the conclusion that the return of anadromous species will deliver marine-derived nutrients to the Upper Klamath Basin, which could bolster the population of fish species. See suggested revision below. The full references are included here:

- Bilby, R. E, B. R. Fransen, and P. A. Bisson. 1996. Incorporation of nitrogen and carbon from spawning coho salmon into the trophic system of small streams: evidence from stable isotopes. Can. J. Fish. Aquat. Sci. 53:164-173.

- Cederholm CJ, Kunze MD, Murota T., Sibatani A. 1999. Pacific salmon carcasses: Essential contributions of nutrients and energy for aquatic and terrestrial ecosystems. Fisheries 24: 6– 15.
- Wipfli, M. S., J. P. Hudson, and J. P. Caouette. 1998. Influence of salmon carcasses on stream productivity: response of biofilm and benthic macroinvertebrates in southeastern Alaska, U.S.A. Can. J. Fish. Aquat. Sci. 55:1,503-1,511.

In the long term, the return of anadromous species to the Upper Klamath Basin will deliver marine-derived nutrients (MDN), potentially bolstering the forage base for Lost River and shortnose suckers.

Suggested revision (last paragraph):
"In the long term, reservoir removal associated with dam removal under the Proposed Project would eliminate habitat availability and affect Lost River and shortnose suckers in Lower Klamath Project reservoirs. All individual suckers occurring within these reservoirs would likely be lost within the short term and would not be replaced in the long term. However, the return of anadromous species to the Upper Klamath Basin will deliver marine-derived nutrients (MDN), potentially bolstering the forage base for Lost River and shortnose suckers. The delivery of MDN by spawning anadromous fish and their resulting decomposing carcasses has been linked with the enrichment of aquatic and terrestrial ecosystems through numerous studies (Cederholm et al. 1999). MDN are utilized by stream biota through a variety of pathways and may bolster forage items for native fish species directly, such as through the consumption of eggs, fry, and flesh (Bilby et al. 1996); and indirectly by increasing primary productivity in stream ecosystems, thereby increasing the abundance and biomass of other forage items such as macroinvertebrates (Wipfli et al. 1998)."

3-341. There is research that supports the conclusion that the return of anadromous species will deliver marine-derived nutrients, which could bolster the population of fish species. See suggested revision below.

Suggested revision (fourth paragraph):
"The Proposed Project would restore access for anadromous salmon and steelhead to habitat upstream of Iron Gate Dam, as described in detail above. Restoration of access would result in anadromous salmon and steelhead potentially interacting with resident redband trout and bull trout, with the potential for competition and predation. These species evolved together in the Upper Klamath Basin of the Klamath River, and co-existed prior to the construction of dams (Goodman et al. 2011). The return of anadromous species to the Upper Klamath Basin will deliver MDN, potentially bolstering the forage base for bull trout, redband, and other native species. The delivery of MDN by spawning anadromous fish and their resulting decomposing carcasses has been linked with the enrichment of aquatic and terrestrial ecosystems through numerous studies (Cederholm et al. 1999). MDN are utilized by stream biota through a variety of pathways and may bolster forage items for native fish species directly, such as through the consumption of eggs, fry, and flesh (Bilby et al. 1996); and indirectly by increasing primary productivity in stream ecosystems, thereby increasing the abundance and biomass of other forage items such as macroinvertebrates (Wipfli et al. 1998)."

TERRESTRIAL RESOURCES (3.5)

3-519. Currently, Mitigation Measure TER-1, standing alone, does not provide for unavoidable wetlands impacts. Therefore, it should be clarified that TER-1 works together with TER-5 for all action alternatives to ensure that the Project achieves the net zero loss of wetland function and value standard. Recommend including TER-5 as revised below in the comment on page 4-166 to mitigation for Potential Impact 3.5-1. For reference, our suggested revised version of TER-5 is included below.

Suggested revision (third paragraph, Potential Impact 3.5-1):
"Mitigation Measure TER-1 Establish a 20-foot buffer around delineated wetlands. The KRRC shall establish a minimum of a 20-foot buffer around all delineated wetlands potentially affected by construction impacts to ensure there will not be any significant environmental impacts to wetlands by deterring heavy machinery from traversing the wetland and preventing runoff pollution from directly entering the wetland where doing so would not result in a significant environmental impact. The buffer may be adjusted (e.g., made larger or smaller) based on site-specific conditions, as determined by a qualified biologist acceptable to USACE, as necessary to ensure adequate protection of the delineated wetlands. To the extent that impacts to wetlands cannot be avoided, KRRC shall comply with mitigation measure TER-5 to ensure no net loss of functions and values. The State Water Board has the authority to include this mitigation measure in its water quality certification for the project, and the measure is therefore feasible and used in this analysis to make a significance determination.

Mitigation Measure TER-5 – Identification, protection, and restoration of wetland and riparian habitats. The KRRC shall conduct a wetland delineation within the limits of construction in accordance with the 1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual (USACE 1987) and applicable Regional Supplements (i.e., Western Mountains, Valleys, and Coast Region [USACE 2010] and Arid West [USACE 2008]). The results of the wetland delineation shall be incorporated into all alternatives, except for the No Project Alternative, ~~the Continued Operations with a Continued Operations with Fish Passage Alternative design~~ to avoid and minimize direct impacts on wetlands to the maximum extent feasible, and wetland areas adjacent to the construction Limits of Work shall be fenced to prevent inadvertent entry. Where avoidance is not feasible the KRRC shall develop a restoration plan to re-vegetate all areas disturbed during construction with a ~~goal~~ requirement of no net loss of wetland or riparian habitat acreage or no net loss of overall functions and values. The restoration plan shall include details on revegetation native seed mixes based on existing species that will be impacted and installation techniques for container plants and seeds. Wetlands established in restored areas would be monitored for five years or until the performance criteria, as defined in the restoration plan~~t~~ that shall be developed, have been met."

3-530. Clarify the wording of Mitigation Measure TER-2.

Suggested revision (second paragraph, last sentence):
"These features of TER-2 will be implemented to reduce the impacts to less than significant ~~such that there is no significant impact~~ on special-status amphibians and reptiles."

3-531. Clarify the wording of Mitigation Measure TER-3

Suggested revision (first paragraph, last sentence):
"These features of TER-3 will be implemented to reduce the impacts to less than significant ~~such that there is no significant impact~~ on western pond turtles."

3-561. This statement appears to be missing words between "frogs" and "loosen," or otherwise requires clarification: "If suspended sediment settles further downstream, and/or foothill yellow-legged frogs are present, the presence of settled fine silt in slow moving portions of the river reaches would not likely affect the adhesion of egg masses based on foothill yellow-legged frogs loosen algae and sediment that could enhance the ability of egg masses to adhere to the substrate (Rombough and Hayes 2005)."

Suggested revision: *Clarify sentence.*

3-562. Based on surveys conducted in 2018, biologist noted the great blue heron colony is no longer active at Copco 1, but has now become active at the Copco Bypass. Suggest removing reference to the great blue heron colony at Copco 1, as it is no longer active.

Suggested revision:
"The loss of aquatic reservoir habitat would also reduce foraging opportunities for fish-eating birds including bald eagle, osprey, merganser, cormorant, egret, and heron ~~(including the great blue heron rookery documented at Copco No. 1 Reservoir~~ (PacifiCorp 2004b)."

3-567. Surveys in 2018 indicated a change in the number of turtles at Copco No. 1 and Iron Gate. See revisions below for updated information. This should not change the impact determination.

Suggested revision (third paragraph, fifth sentence):
"Surveys conducted in Copco No. 1 Reservoir in 2002 documented 12 turtles while surveys in 2018 documented ~~31 to 36~~ 42, which ~~are~~ is similar to the anticipated density estimate. Surveys conducted in Iron Gate Reservoir in 2002 documented 8 turtles, while surveys in 2018 also documented ~~17~~ 8, which is lower than the anticipated density estimates."

3-571. The text in the second paragraph describes the use of herbicides. During informal consultation with NMFS under Section 7 of the Endangered Species Act, additional guidance on the use of herbicides was provided by NMFS. See revised language below.

Suggested revision (second paragraph):
Include the following input KRRC received from NMFS during informal Endangered Species Act Section 7 consultation, as applicable, in a revised discussion on herbicides:

"KRRC's evaluation of herbicides for the Biological Assessment concluded that glyphosate formulation Rodeo is associated with the relatively lowest aquatic toxicity among agency-approved herbicides and should be considered if chemical control is determined to be a best practice for IEV management near or adjacent to aquatic systems, presenting less risk than the other herbicides evaluated to aquatic wildlife (including Coho salmon and their prey). Care must be taken to select adjuvants (additions like surfactants) that have low toxicity.

- Aquatic formulations of glyphosate and imazapyr are favorable for use with adjuvants that have low toxicity.
- Glyphosate is effective for control of nearly all of the IEV in the action area. In addition, glyphosate has a short half-life in soil, and thus is less prone to leaching than other herbicides. For these reasons, glyphosate is recommended as the primary herbicide for control of IEV in the action area.
- For [Invasive Exotic Vegetation] IEV not easily controlled by glyphosate (i.e., bearded creeper), dicamba and metsulfuron may be preferable due to low average half-lives in soil compared to other herbicides."

FLOOD HYDROLOGY (3.6)

3-601. In Table 3.6-4 the units for depth should be feet, not feet above mean sea level. Recommend revising table column headers.

Suggested revision:
"Average Depth" *and* "Maximum Depth": "(feet ~~amsl).~~"

AIR QUALITY (3.9)

3-701. Section 3.9.4, Clarify text with following revision (note all text would be added to the 2018 EIR, but the strikeout/underline in text below indicates changes from the 2012 EIS/EIR mitigation measure):

Suggested revision (third paragraph):
"Appendix N contains an estimate of "uncontrolled emissions" and an estimate of emissions after implementation of mitigation measures that were proposed as part of the analysis in the 2012 KHSA EIS/EIR. These included Mitigation Measures Air Quality (AQ)-1 (Off-road construction equipment), AQ-2 (On-road construction equipment), AQ-3 (trucks used to transport materials), and AQ-4 (Dust control measures). As conditions of license surrender, KRRC has committed to implement the following mitigation measures from Appendix N as updated below: ~~Mitigation Measures AQ-1 through AQ-3 required off-road construction equipment and on-road construction equipment and trucks to be equipped with engines that meet certain model year emissions standards. Mitigation Measure AQ-4 required dust control measures to minimize fugitive dust emissions during construction activity.~~

- AQ-1 – For the construction activities occurring within California, any off-road construction equipment (e.g., loaders, excavators, etc.) that are 50 horsepower or greater must be equipped with engines that meet the EPA Tier 4 Final emission standards for off-road compression-ignition (diesel) engines, unless such an engine is not available for a particular item of equipment. To the extent allowed by California Air Resources Board Off-Road Diesel Fueled Fleets regulations, Tier 3 and Tier 4 interim engines will be allowed when the contractor has documented, with appropriate evidence, that no Tier 4 Final equipment or emissions equivalent retrofit equipment is available or feasible. Documentation may consist of signed written statements from at least two construction equipment rental firms.

- AQ-2 – Any heavy-duty on-road construction equipment must be equipped with engines that meet the MY 2010 or newer on-road emission standards.
- AQ-3 – Any heavy-duty trucks used to transport materials to or from the construction sites must be equipped with engines that meet the MY 2010 or later emission standards for on-road heavy-duty engines and vehicles. Older model engines may also be used if they are retrofitted with control devices to reduce emissions to the applicable emission standards.
- AQ-4 – Dust control measures will be incorporated to the maximum extent feasible during blasting operations at Copco No. 1 Dam. The following control measures will be used during blasting activities as applicable: Conduct blasting on calm days to the extent feasible. Wind direction with respect to nearby residences must be considered. To the extent that blasting cannot be limited to calm days, install wind fencing for control of windblown dust during blasting activities. Design blast stemming to minimize dust and to control fly rock.

  These updated Mitigation Measures AQ-1 to AQ-4 are more protective than those in the 2012 KHSA EIS/EIR. Even with the implementation of these mitigation measures, ~~the 2012 KHSA EIS/EIR determined~~ construction emissions from the Proposed Project would still result in significant and unavoidable impacts from NOx and PM10."

GEOLOGY, SOILS, AND MINERALS (3.11)

3-737. Paragraph 1 and Table 3.11-1: Table 3.11-1 includes Cedar Mountain fault zone but not Meiss Lake fault, which is the closest active fault to the Lower Klamath Project and is within the Cedar Mountain fault zone. However, the text discusses the Meiss Lake fault, but not its relation to the Cedar Mountain fault zone. Recommend reconciling the table information and the text with the following revisions.

Suggested revision (first paragraph, second sentence):
"In California, the nearest active fault to the Lower Klamath Project is the Meiss Lake fault, which is part of the Cedar Mountain fault zone and approximately 5 miles east of the Klamath River near the California-Oregon State line in Siskiyou County."

In Table 3.11-1 under Fault include: "Cedar Mountain fault – Meiss Lake fault."

3-765. Mitigation Measure GEO-1: KRRC is committed to protecting surrounding properties throughout drawdown. For example, materials will be stockpiled on-site for immediate road repairs (continuous access will be needed by KRRC and other state agencies, in addition to local residents). Potentially affected properties will be mitigated in advance (buy-out, slope reinforcement, or temporary relocation of resident during drawdown and monitoring). Additional details will be provided in the final Rim Stability Analysis.

Suggested revision (second paragraph):
"~~Following~~ Throughout drawdown activities, and when ~~once~~ the areas are safe to inspect, the KRRC shall inspect any slope failures and implement slope stabilization measures, as appropriate. Additional details will be included in the final Rim Stability Analysis prepared for

the project. For any large slope failure that occurs during drawdown or the year following drawdown, KRRC will offset potential impacts by implementing the following actions:

1. Move affected structures or purchase affected property,
2. Re-align affected road segments,
3. Engineer structural slope improvements (e.g., drilled shafts or other structural elements that could be installed to resist slope movement), and
4. Revegetate affected areas."

3-775. While the best available science suggests that there will not be significant impacts from sediment delivery to the Pacific Ocean nearshore environment, KRRC suggests including language to confirm that KRRC will have sufficient insurance coverage to the extent sediment delivery to the Pacific Ocean nearshore environment requires dredging to maintain marine navigation in, for instance, Crescent City Harbor.

Suggested revision (seventh sentence, first paragraph):

"The short-term (less than two years following dam removal) and long-term (2–50 years following dam removal) effects of the Proposed Project on sediment delivery to the Pacific Ocean would be less-than significant, given the relatively small amount of total sediment input from reservoir sediment release in comparison to the total annual naturally occurring sediment inputs to the nearshore environment. Although the best available science indicates no measurable impacts to the Pacific Ocean nearshore environment, KRRC has committed, as a condition of license surrender, to implement mitigation measures as necessary to address such impacts should they occur and to protect maritime navigation in, for instance, Crescent City Harbor."

HISTORICAL RESOURCES AND TRIBAL CULTURAL (3.12)

3-826. Clarify text describing various resources that could be eligible for inclusion on the National Register of Historic Places.

Suggested revision (last sentence, first paragraph):
"Resources identified as villages, cairns or burial sites, or other sites eligible for the National Register of Historic Places in a subsequent compilation by Cardno ENTRIX (2012) were also considered as part of this analysis."

3-828. Clarify the sentence describing historic artifacts that are present in the Hydroelectric Reach from the Oregon-California state line to Copco No. 1.

Suggested revision (second sentence, first paragraph):
"Historic period refuse scatters, ~~an~~ historical hotel ruin sites, historical ranching sites, and historic roads are also present."

3-832. Include Copco No.1 to make the sentence on existing TCRs more specific to that dam.

Suggested revision (first sentence, third paragraph):
"There is at least one TCR that was present at Copco No. 1 before dam construction that would be potentially impacted."

3-838. Include Shasta Indian Nation to the list of tribes with TCRs in the Area of Analysis Subarea 1. Resources from other tribes are not known to be in this area.

Suggested revision (first sentence, fifth paragraph):
"Tribal cultural resources known to the Shasta Nation and Shasta Indian Nation to be within the Area of Analysis Subarea 1 include resources identified in PacifiCorp (2004a) and Daniels (2006), as updated by Confidential Appendix Q, Attachment 4."

PUBLIC SERVICES (3.17)

3-913. Potential Impact 3.17-1 – Suggested revision to reflect the commitments that KRRC intends to implement to reduce the risk of increased public services response times for emergency fire, police, and medical services due to the Proposed Project's construction and demolition activities.

Suggested revision (last paragraph):
"The Proposed Project could result in a significant impact if it results in substantial increases in emergency response times within the Area of Analysis. KRRC has committed to developing a Traffic Management Plan, a draft of which is attached as Appendix O2 to the Definite Plan (Appendix B of this Draft EIR). ~~In general, development of an adequate Traffic Management Plan (Traffic Management Plan)~~ This Traffic Management Plan would mitigate the potential short-term impacts of construction-related traffic and therefore minimize changes to public service response time. Under the Proposed Project, demolition and construction areas would be closed off to the public to reduce hazards. Due to the rural nature and low concentration of roads in the area, most existing roads are currently used, and would continue to be used, by emergency responders and for evacuation routes in the event of fire or other emergencies. The use of these roads for construction activities could interfere with emergency response and evacuation. The potential for substantial interruptions to road access for property owners within the public services Area of Analysis during construction activities would not be a significant impact since alternative routes are or would be made available as part of the proposed Traffic Management Plan ~~(Traffic Management Plan)~~ (Section 3.22 Transportation and Traffic). The KRRC's Traffic Management Plan is a specialized program tailored to minimize impacts by applying a variety of techniques, including the following:

- Public Information – use of telephone hotlines, a Traveler Information System via the Project website, local community outreach (meetings, newsletters, etc.), press release(s), and local news media, as appropriate, to ensure the public have easy access to current or upcoming interruptions to the local or state road network
- Motorist Information – use of portable changeable message signs, stationary mounted signs, and highway advisory radio to provide advanced notice to motorists of potential traffic delays throughout the project sites and associated access routes
- Incident Management – traffic procedures to be adopted in the case of an incident on a road or highway, developed in collaboration with local and state agencies, and in accordance with local and state requirements

- **Construction Strategies** – scheduling of road closures and notifying the public of detours; planning signage and traffic control, including with respect to work zones and construction vehicles; scheduling haul trips to avoid peak hours; identifying emergency detours; managing potential safety hazards from haul vehicles and dust; and providing access for pedestrians and bicycles.

As a condition of license surrender, the ~~major objectives of the~~ KRRC is committed to ensure that the Traffic Management Plan ~~are to~~ will maintain efficient and safe movement of vehicles through the construction zone covered by activities in the Definite Plan and to provide public awareness of potential impacts to traffic on both haul routes and access roads to the four dams and associated facilities. The Traffic Management Plan outlines the structure and key requirements that would be incorporated by the KRRC's contractor into a final Traffic Management Plan. The final Traffic Management Plan would be informed by KRRC's contractor's specific means and methods for construction, and input received from relevant local jurisdictions, which could refine the approach to access and traffic management. KRRC proposes that the final Traffic Management Plan would meet applicable regulatory permit requirements, as well as applicable state and local ordinances, as appropriate (Appendix B: Definite Plan – Appendix 02). By reducing the potential for traffic incidents during construction and demolition activities, implementation of the final Traffic Management Plan would reduce the potential for increased public services response times for emergency fire, police, and medical services.

Construction activities would involve staging and stockpiling areas and equipment that would be kept on-site for the duration of construction. The Limits of Work (Figures 2.7-2 and 2.7-4) would include activities that may result in accidental spills of flammable liquids or use of equipment that generates heat, such as welding, grinding, torch-cutting, gas and diesel generators. Other construction activities could result in open sparks or flame in vegetated open space that could further aggravate the risk of fire. Emergency and Security services would be provided by the construction contractor, therefore the Proposed Project would not increase the need for emergency services or the number of emergency responders. What is important for the reduction of impacts is that all construction workers have the knowledge and resources to respond to emergencies and all emergency preparation and work are overseen by a designated health and safety manager, which is proposed as part of the Proposed Project. In addition, the Proposed Project (Appendix B: Definite Plan) proposes that responding agencies and departments are made aware of the activities during the construction period so that they can implement their existing regulatory framework, establish an emergency contact process, and include inspections as needed throughout the process.

In particular, the Proposed Project includes a Hazardous Materials Management Plan (Appendix B: Definite Plan – Appendix 03) to address the management of hazardous materials during Project construction. The Hazardous Materials Management Plan identifies potential hazardous materials that may be encountered at J.C. Boyle, Copco No. 1 and No. 2, and Iron Gate dams and their powerhouses, and the anticipated sampling, testing, abatement, and disposal of hazardous materials. KRRC will update the Hazardous Materials Management Plan, as appropriate, based on the Phase I-Environmental Site Assessment

visits and interviews and the Phase II Site Investigation, if needed. The Final Hazardous Materials Management Plan will be submitted to the State Water Board Deputy Director for review and approval. By reducing the potential for hazardous materials incidents during construction and demolition activities, implementation of the Final Hazardous Materials Management Plan would reduce the potential for increased public services response times for emergency fire, police, and medical services.

Mitigation Measure HZ-1 and Recommended Measure TR-1 would reduce the potential impacts related to construction activities since these measures require that the KRRC and its contractor(s) for the Proposed Project submit the additional documentation/details included in the final Emergency Response Plan, Fire Management Plan, Traffic Management Plan, and a Hazardous Materials Management Plan, and they work with applicable agencies prior to the start of construction. Implementation of these two measures would reduce the potential for a short-term increase in personal and public health and safety risks due to the Proposed Project as related to emergency response services. There would be no long-term impacts due to the Proposed Project construction-related activities since the construction would be completed in the short term."

3-919. Though outside of the State Water Board's jurisdiction, as a condition of the license surrender, KRRC is committed to working with CAL FIRE to update the Fire Management Plan and to implement Recommended Measure PS-1.

Suggested revision (last paragraph):
"**Recommended Measure PS-1 – Fire Management Plan.** The KRRC and/or its Contractor(s) shall develop a post-dam removal Fire Management Plan in consultation with the CAL_FIRE Siskiyou Unit. The Fire Management Plan shall identify long-term water sources for helicopter and ground crews (including construction and use of proposed dry hydrants, dip ponds, or other alternatives). After reaching agreement on the Fire Management Plan with CAL_FIRE Siskiyou Unit, the KRRC and/or its Contractor(s) shall submit the Final Fire Management Plan to the CAL_FIRE Siskiyou Unit and implement any portions of the plan for which the KRRC has identified responsibilities. As a condition of license surrender, KRRC is committed to complying with this mitigation measure to reduce any increased challenges in responding to wildland fire in the Klamath Basin due to the implementation of the Proposed Project."

RECREATION (3.20)

3-1010. The discussion of Potential Impact 3.20-4 did not incorporate the requirement to conduct project-specific review for individual recreation projects through the use of a checklist authorized by CEQA Guidelines Section 15168(c). In addition, KRRC would implement all applicable mitigation measures set forth in the Draft EIR related to the construction of any new recreational facilities.

Suggested revision:
"As described previously, the Proposed Project involves the development and implementation of a plan to construct new recreational facilities and river access points along the restored river channel between the California-Oregon border and Iron Gate Dam following dam removal activities. Replacement of recreation facilities would not necessarily

be 'like for like', but rather would be designed to accommodate similar levels, if different types of use. This would require the creation of new gravel roads, parking areas and other improvements for vehicle and visitor access to and use of the new river-based recreation sites, which could result in construction-related impacts to the environment, including potential impacts to water quality, terrestrial resources, and historical and/or tribal cultural resources.

While new recreation facilities are part of the Proposed Project, the final location, size, and design of the facilities are still under development. ~~and will be the subject of subsequent approvals. It is thus too soon to conduct a meaningful environmental analysis of the replacement facilities. However, construction and operation of new recreational facilities would undergo any environmental review necessary for the subsequent approvals.~~ The recreation plan takes a programmatic approach to developing recreational facilities and mitigating any impacts attributable to these developments. New recreational facilities are being evaluated in a process that includes California and Oregon state officials, Siskiyou County, Klamath County, the Bureau of Land Management, PacifiCorp, economic development organizations including chambers of commerce, tourism organizations, recreation businesses, local communities, and the broader public. A Final Recreation Plan will be submitted to FERC, and this plan will include any new recreation facilities that are proposed by KRRC. The Final Recreation Plan will be subject to environmental review under NEPA, and mitigation measures will be determined by FERC. If implementation of this plan (at FERC's direction) requires any further state or local approvals, then written checklists will be prepared pursuant to CEQA Guidelines Section 15168, subdivision (c) to ascertain whether formal site-specific environmental review for individual recreational projects will be necessary. Such individual projects shall be subject to applicable best management practices and mitigation measures required by FERC, applicable mitigation measure in this EIR such as Mitigation Measures WQ-1, TER-1 through TER-3, and TER-5, TCR-1 through TCR-3, and any other measures required by an agency with jurisdiction over those individual recreational projects. ~~and any impacts of the construction and operation of the facilities would be mitigated, if feasible, to levels that comply with all applicable laws, regulations, and environmental standards. Because this component of the Proposed Project would not be approved until a later date, for the purposes of this EIR the impacts of this component are not significant.~~ The potential environmental impacts of these new recreational facilities will be reviewed at a project level in subsequent evaluations prior to their development."

HAZARDS AND HAZARDOUS MATERIALS (3.21)

3-1034. Include other treated wood such as wood utility poles as noted in Tables 2.7.3, 2.7.5 and 2.7.7 into this section to maintain consistency.

Suggested revision (last paragraph, fourth sentence):

"The dams and hydroelectric facilities within the Proposed Project area may also include items such as transformers, batteries, bushings, oil storage tanks, bearing and hydraulic control system oils, lead bearings, soils or other material contaminated with lead from the use of lead-based paints or plumbing and 700 tons of creosote-treated wood in the wooden

stave penstock at Copco No. 2 Dam, as well as wood utility poles (see also Appendix B: Definite Plan – Appendix 03)."

3-1050. KRRC commits to working with all federal, state, and local fire suppression agencies to reduce any potential risk of wildland fire attributable to the implementation of the Proposed Project. As CAL FIRE has confirmed, helicopter crews can extract water on the Klamath River and KRRC is working with CAL FIRE to identify specific locations in the Klamath River that are suitable for such extraction. KRRC also proposes changes that better reflect feedback from CAL FIRE regarding the potential impacts of the Proposed Project's implementation on wildland fires in the Klamath Basin. Finally, KRRC agrees with and commits to implement the Recommended Measure PS-1.

Suggested revision (fifth paragraph):

"The Proposed Project would result in the removal of one readily available water source for wildfire services or increased emergency response times if other sources of water are not as readily available. Under the Proposed Project, removal of the Copco No. 1, Copco No. 2, and Iron Gate reservoirs would remove a long-term water source for fire suppression crews after the reservoirs are removed. Absent the identification of replacement sources of water, ~~T~~the removal of the reservoirs could increase turn-around time for helicopters or ground crews refilling with water for fire abatement purposes. However, the initial response times for existing aircraft with fire *retardant* would not be changed by the loss of the reservoirs. Following dam removal, CAL FIRE has confirmed that helicopters and ground crews would still be able to extract water from the Klamath River (both the current channel and the channel reaches to be exposed in the current reservoirs following drawdown), Lake Ewauna, and Upper Klamath Lake. Retrieving water directly from the Klamath River is consistent with how wildfires are suppressed along the Klamath River downstream of Iron Gate Dam under current conditions. Ground crews would be adversely affected unless access to Klamath River water continues to be supported under the Proposed Project. Loss of the reservoirs would not affect the use of fire retardant, which is loaded onto aircraft at regional airports (i.e., Redding, Montague, Klamath Falls) and then applied directly to wildfire sites.

With respect to Klamath River access, most helicopter water tanks require three feet of water depth to fill properly, so only deeper pools in the Klamath River would be able to be used by helicopters. CAL FIRE uses the closest available water source that is suitable for fire-fighting, where suitability is determined by local conditions including water flow, depth of pool (2- to 3-foot minimum), amount of debris in pool, shoreline vegetation, and surrounding terrain. Rotor blade length and the length of bucket lines are also determinants, since there must be a safe amount of space to enter and exit the pool site. Individual pilots use their discretion to determine the closest and safest locations from which to withdraw water. KRRC is working with CAL FIRE to assist in mapping exact locations along the Klamath River that are suitable for water extraction during a wildfire based on applicable parameters, which will be included in the final Fire Protection Plan.

Analysis of aerial photos (Google Maps 2018) suggests the presence of pools with suitable conditions for helicopter filling in the currently free-flowing reaches of the Middle and Upper

Klamath River, particularly in the reaches between Copco No. 1 and J.C. Boyle reservoirs and downstream of Iron Gate Dam. While source water would be available in the Klamath River in pools located in the river reaches exposed following reservoir drawdown, the travel time involved in accessing the newly formed pools ~~would be~~ may be greater than that for the existing Lower Klamath Project reservoirs because retrieval of water from relatively smaller, more narrow, river pools is more difficult than dipping directly from the broad water surface of a lake or reservoir, and only one helicopter at a time would have access to a given river pool *versus* multiple helicopters that can draw at one time from a large reservoir. Thus, response and travel times between water fills for helicopter crews ~~would be expected to~~ could increase with the loss of the reservoirs. Wildfires can spread at a rapid speed, and involve high risks. There are a number of factors that contribute to the severity and extent of a wildland fire. It is hard to predict whether any specific factor will contribute to the severity of a fire. In an abundance of caution, the State Water Board finds that ~~A~~any amount of additional response time compared with existing conditions could result in a substantial increased risk of loss, injury, or death involving wildland fires and this would be a significant impact.

To compensate for the loss of reservoir water supply, the Proposed Project includes providing alternate water supply through dry hydrants that would be accessible to ground crews following removal of the dams. Flows in the Klamath River and tributaries are not expected to substantially change post-dam removal, as compared to current flows, and firefighting ground crews could still use the river as a water supply as long as physical access to water is provided. A dry hydrant is a passive, unpressurized system, with a screened intake placed in the channel above the channel bed. An above-ground fire hose is used to connect the intake to truck-mounted pumps (Figure 3.17-1). Placement of the dry hydrant must be in a location of satisfactory depth (during dry conditions), flow rate, and channel stability. The Definite Plan states that dry hydrants are commonly used as water supply for fighting fires in rural areas, and typical dry hydrants and fire truck pumps can supply over 1,500 gallons per minute, which is sufficient for rapid filling of typical water tankers and firefighting apparatus (Appendix B: Definite Plan – Appendix 01).

To assist ground-based firefighting efforts, the Fire Management Plan proposes the development of eight sites near the Copco No. 1 Reservoir and four sites near the Iron Gate Reservoir for installation of permanent dry hydrants from which water trucks and fire engines could draw directly from the Klamath River and larger tributaries (Figures 3.17-2 and 3.17-3). The Proposed Project also includes an evaluation of the potential for riverine pool features to be used for helicopter water filling and development of an associated map of resources that can be used by air-based firefighting crews.

The proposed dry hydrants are likely to be of limited use for firefighting compared with existing conditions because only ground crews can access them (i.e., they are of no use to aerial crews that can access the reservoirs under existing conditions). Hook-ups to the dry hydrants would require standard specifications and existing CAL_FIRE pumper trucks would require special equipment such as hard suction lines (a flexible hose would collapse) to successfully draft from the dry hydrants. The ground crews would need to be able to get close

to the river to draft from the dry hydrants because firetrucks typically can only lift water over short vertical distances (i.e., 10 to 14 feet, with a maximum 15-foot height from the intake) and drafting from bridges may require too much lift. Decreased response time associated with dry hydrants as compared with aerial crew access of reservoir water via helicopters would be a significant impact since it would increase the risk of loss, injury, or death involving wildland fires. Direct withdrawal from the river using a boat ramp, pumping stations equipped with pumps connected to wells or deep pools in the river, above-ground storage tanks with ready access for transferring water to pumper trucks, are likely to be better options than the dry hydrants proposed by KRRC because these alternatives would be easier to use and thus would reduce ground crew response time. Section 3.17 Public Services includes Recommended Measure PS-1 that requires the KRRC or the Contractor's Safety Officer for the Proposed Project to submit a final Fire Management Plan after reaching agreement with CAL_FIRE Siskiyou Unit on a long-term water source replacement for helicopter and ground crews (including construction and utilization of proposed dry hydrants, dip ponds or other alternatives). KRRC commits to complying with this mitigation measure to reduce any risk in wildland fire in the Klamath Basin due to the implementation of the Proposed Project."

TRANSPORTATION AND TRAFFIC (3.22)

3-1060. Copco Road description should be updated. The road is approximately 32 feet wide (paved), not 27 feet wide as written.

Suggested revision (fifth sentence):

"Copco Road is a paved, two-lane road in generally good pavement condition between I-5 and Ager Road with few pavement cracks or ruts and is approximately 32 ~~27~~ feet wide."

3-1073. KRRC is committed to implementing the Recommended Measure TR-1 and recommends the following revisions to the language of the measure.

Suggested revision (second paragraph):

"Recommended Measure TR-1 – Transportation and Traffic.

A. The KRRC and/or its contractor(s) shall develop a final Traffic Management Plan (TMP) that provides:

1. Implementation details consistent with all applicable regulatory requirements including the latest version of the Caltrans California Manual on Uniform Traffic Control Devices (MUTCD,Caltrans 2018b), Caltrans Traffic Management Plan (TMP) Guidelines, Oregon Department of Transportation (ODOT) Oregon Supplement to the MUTCD, Federal Highway Administration MUTCD, ODOT Traffic Control Plans Design Manual, and ODOT TMP Project Level Guidance Manual. KRRC will coordinate ~~and coordination~~ with the noted agencies (Caltrans, ODOT, Siskiyou and Klamath County Public Works and Sheriff's Departments, California Highway Patrol and Oregon State Police, CAL_FIRE, Oregon Department of Forestry [ODF] Fire Division, and other emergency response agencies) as part of the detailed design phase and prior to start of construction. Potential conflicts with bicycle and pedestrian use, as well as transit and school bus service, need to be addressed in the Traffic Management Plan. KRRC has proposed Memoranda of Understanding to Siskiyou County and to Klamath

County (i.e., good neighbor agreements) to jointly develop and recommend to FERC additional terms and conditions of the Traffic Management Plan that address local interests. The final version of the Traffic Management Plan, after coordination with the above referenced agencies, shall be received by the State Water Board prior to the start of construction.

2. Each road, bridge, and culvert improvement project included in the Proposed Project, or any other road, bridge, or culvert improvement project that is identified as necessary for the Proposed Project, shall be constructed consistent with the latest version of the Caltrans Highway Design Manual (Caltrans 2018c), Caltrans Standard Plans, and Caltrans Standard Specifications, or ODOT Highway Design Manual, ODOT Standard Drawings and Standard Details, and ODOT Standard Specifications, or equivalent, and shall not conflict with any applicable plan, ordinance, or policy regarding performance of the transportation system, traffic safety and/or congestion management within the Area of Analysis. Construction shall not begin until all final designs for road, bridge, and culvert improvement projects included in the Proposed Project have been received and approved, as necessary, by the county and other responsible agencies.

3. The KRRC shall be responsible for repairing and/or rehabilitating ~~any Siskiyou County roadways~~ Copco Road, Ager Beswick Road, Daggett Road, and Lakeview Road within the traffic and transportation Area of Analysis that are damaged or otherwise adversely impacted by Proposed Project activities, such that they are in a condition equal to or better than they were before dam removal activities.

B. The KRRC and/or its construction contractor(s) shall develop an Emergency Response Plan with details and procedures to be put in place to help prevent incidents, to ensure preparedness in the event incidents occur, and to provide a systematic and orderly response to emergencies through coordination with emergency response agencies, as described in Appendix B: Definite Plan – Appendix 04."

3-1077. Potential Impact 3.22-3. Appendix K of the Definite Plan indicates that improvements and upgrades are not anticipated (in some sections where poor pavement condition has been observed) but pavement rehabilitation may be required during or post-construction. The pavement rehabilitation may be used to help mitigate for increase in potential hazards or incompatible uses.

Suggested revision (sentences 8 and 9):

"These sections of roads may not be up to a standard for the transportation of construction equipment, adequate for emergency response, or in a condition adequate for future use after dam removal activities have been completed; however, as described in Appendix K of the Definite Plan, there will be pavement rehabilitation as part of the Proposed Project, which will address the deficiencies in the existing road conditions to the extent necessary."

3-1077. Clarify Potential Impact 3.22-5 with respect to safety.

Suggested revision (third sentence, first paragraph):

"If an unacceptable level of risk to non-motorized users is deemed to persist, KRRC's contractor will arrange appropriate detours to allow safe and adequate continued movement for such users ~~to allow continued movement for such users~~ (Appendix B: Definite Plan – Appendix 02)."

CUMULATIVE EFFECTS (3.24)

3-1198. In Section 3.24.13, update section references for clarity.

Suggested revision (last paragraph, first sentence):
"Existing conditions for paleontologic resources are as described in Section 3.13.2 ~~3.14.2~~ [Paleontologic Resources] Environmental Setting. The majority of bedrock deposits within the Area of Analysis for paleontologic resources are not fossil-bearing units. Two mapped geologic units that contain paleontologic resources are present within the Area of Analysis: (1) the unnamed diatomite deposit at Copco No. 1 Reservoir; and (2) the Hornbrook Formation. The diatomite deposit is determined to be of Low Paleontologic Potential. The fossils in the Hornbrook Formation are documented to include megafossils and microfossils, but it is not known if the fossil abundance varies spatially within this geologic unit. The Klamath River cuts across the Hornbrook Formation in the region of Hornbrook, California, along approximately three river miles (Figure 3.13-2). Sub-units within the Hornbrook formation are described in Section 3.13.2 ~~3.14.2~~ *[Paleontologic Resources] Environmental Setting*. Section 3.13.2 ~~3.14.2~~ also includes consideration of major past or ongoing projects that have impacted, or currently impact, paleontologic resources."

3-1202. Potential Impact 3.24-53, Recommend re-wording title for clarification.

Suggested revision (last paragraph):
"Potential Cumulative Impact 3.24-53 Short-term and long-term effects to forestry resources from the combination of the Proposed Project and wildfire."

ALTERNATIVES – PARTIAL REMOVAL (4.3)

4-93. In Section 4.3.17, clarify to reflect the commitments that KRRC will implement, as conditions of license surrender, to reduce the risk of increased public services response times for emergency fire, police, and medical services due to the Proposed Project's construction and demolition activities. Commitments apply to all alternatives except the No Project Alternative.

Suggested revision (third sentence):
"Implementation of Mitigation Measure HZ-1 (Section 3.21 *Hazards and Hazardous Materials*) would reduce impacts for reasons described under the Proposed Project. ~~However,~~ In addition, KRRC has developed a draft Traffic Management Plan that includes mitigation and other protective measures that would be implemented to reduce impacts to public services (Appendix B: Definite Plan – Appendix 02). The final Traffic Management Plan would be informed by KRRC's contractor's specific means and methods for construction and input received from relevant local jurisdictions, which could refine the approach to access and traffic management. KRRC has proposed Memoranda of Understanding to Siskiyou County and to Klamath County (i.e., good neighbor agreements) to jointly develop and

recommend to FERC additional terms and conditions of the Traffic Management Plan that address local interests. KRRC is committed to ensuring that the final Traffic Management Plan meets applicable regulatory permit requirements, as well as applicable state and local ordinances. In addition, KRRC has committed to coordinate the implementation of the Traffic Management Plan and Emergency Response Plan to reduce impacts. Overseeing development and implementation of the final Traffic Management Plan and final Emergency Response Plan does not fall within the scope of the State Water Board's water quality certification authority. While the State Water Board expects that the Traffic Management Plan and Emergency Response Plan will be finalized and implemented, the State Water Board cannot require their implementation. Accordingly, while the State Water Board anticipates that implementation of Mitigation Measure HZ-1 and Recommended Measure TR-1 would reduce impacts to public services, because it cannot require implementation of Recommended Measure TR-1, it is analyzing the impacts under this alternative as significant and unavoidable."

ALTERNATIVES – CONTINUED OPERATIONS WITH FISH PASSAGE (4.4)

4-166. As a preliminary matter, Mitigation Measure TER-5 should apply to all action alternatives to ensure no net loss of wetlands. Currently, Mitigation Measure TER-1, standing alone, does not provide for unavoidable wetlands impacts. Therefore, it should be understood that TER-1 works together with TER-5 to ensure that the Project achieves the net zero loss of wetland function and value standard.

Suggested revision:

"Mitigation Measure TER-1 Establish a 20-foot buffer around delineated wetlands. The KRRC shall establish a minimum of a 20-foot buffer around all delineated wetlands potentially affected by construction impacts to ensure there will not be any significant environmental impacts to wetlands by deterring heavy machinery from traversing the wetland and preventing runoff pollution from directly entering the wetland where doing so would not result in a significant environmental impact. The buffer may be adjusted (e.g., made larger or smaller) based on site-specific conditions, as determined by a qualified biologist acceptable to USACE, as necessary to ensure adequate protection of the delineated wetlands. To the extent that impacts to wetlands cannot be avoided, KRRC shall comply with mitigation measure TER-5 to ensure no net loss of functions and values. The State Water Board has the authority to include this mitigation measure in its water quality certification for the project, and the measure is therefore feasible and used in this analysis to make a significance determination.

Mitigation Measure TER-5 – Identification, protection, and restoration of wetland and riparian habitats. The KRRC shall conduct a wetland delineation within the limits of construction in accordance with the 1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual (USACE 1987) and applicable Regional Supplements (i.e., Western Mountains, Valleys, and Coast Region [USACE 2010] and Arid West [USACE 2008]). The results of the wetland delineation shall be incorporated into all alternatives, except for the No Project Alternative, ~~the Continued Operations with a Continued Operations with Fish Passage Alternative design~~ to avoid and minimize direct impacts on wetlands to the maximum extent

feasible, and wetland areas adjacent to the construction Limits of Work shall be fenced to prevent inadvertent entry. Where avoidance is not feasible the KRRC shall develop a restoration plan to re-vegetate all areas disturbed during construction with a ~~goal~~ requirement of no net loss of wetland or riparian habitat acreage and functions. The restoration plan shall include details on revegetation native seed mixes based on existing species that will be impacted and installation techniques for container plants and seeds. Wetlands established in restored areas would be monitored for five years or until the performance criteria, as defined in the restoration~~t~~ plan that shall be developed, have been met."

ALTERNATIVES – TWO DAM REMOVAL (4.5)

4-238. In Section 4.5.17, clarify to reflect the commitments that KRRC intends to implement to reduce the risk of increased public services response times for emergency fire, police, and medical services due to the Proposed Project's construction and demolition activities. Commitments apply to all alternatives except the No Project Alternative.

Suggested revision (second paragraph):

"Mitigation Measure HZ-1 would reduce impacts. In addition, the KRRC is developing a Traffic Management Plan to identify mitigation and other protective measures that would be implemented to reduce impacts to public services. It would also be appropriate for the final Traffic Management Plan to include Recommended Measure TR-1. The final Traffic Management Plan would be informed by KRRC's contractor's specific means and methods for construction and input received from relevant local jurisdictions, which could refine the approach to access and traffic management. KRRC has proposed Memoranda of Understanding to Siskiyou County and to Klamath County (i.e., good neighbor agreements) to jointly develop and recommend to FERC additional terms and conditions of the Traffic Management Plan that address local interests. KRRC is committed to ensuring that the final Traffic Management Plan meets applicable regulatory permit requirements, as well as applicable state and local ordinances. In addition, KRRC has committed to coordinate the implementation of the Traffic Management Plan and emergency response plan to reduce impacts. Overseeing development and implementation of the Traffic Management Plan does not fall within the scope of the State Water Board's water quality certification authority. While the State Water Board expects that this plan will be finalized and implemented, at this time the plan is not finalized, and the State Water Board cannot require its implementation. Accordingly, while the State Water Board anticipates that implementation of Mitigation Measure HZ-1 would reduce impacts to public services, because it cannot require implementation of Recommended Measure TR-1, it is analyzing the impacts under this alternative as significant and unavoidable."

ALTERNATIVES – THREE DAM REMOVAL (4.6)

4-296. In last sentence of Section 4.6.17, change impact numbers to 3.17-1 through 3.17-3.

Suggested revision:

"Thus, for reasons described in Section 3.17.5 *[Public Services] Potential Impacts and Mitigation*, impacts and associated mitigation measures from increased public service response times for emergency fire, police, and medical services due to construction and demolition activities, elimination of a long-term water source for wildfire services substantially increasing the response time for suppressing wildfires, and potential effects on schools services and facilities would be the same under the Three Dam Removal Alternative as those described for the Proposed Project ~~(Potential Impacts 3.5-1 through 3.5-3)~~ (Potential Impacts 3.17-1 through 3.17-3)."

ALTERNATIVES – NO HATCHERY (4.7)

4-320. In last sentence of Section 4.7.17, change impact numbers to 3.17-1 through 3.17-3.

Suggested revision:

"Thus, for reasons described in Section 3.17.5 *[Public Services] Potential Impacts and Mitigation*, impacts and associated mitigation measures from increased public service response times for emergency fire, police, and medical services due to construction and demolition activities, elimination of a long-term water source for wildfire services substantially increasing the response time for suppressing wildfires, and potential effects on schools services and facilities would be the same under the Three Dam Removal Alternative as those described for the Proposed Project ~~(Potential Impacts 3.5-1 through 3.5-3)~~ (Potential Impacts 3.17-1 through 3.17-3)."

CERTIFICATE OF SERVICE

I hereby certify that, on this 12th day of March 2019, I have served the public filing of Klamath River Renewal Corporation's Letter dated March 12, 2019 to FERC regarding Supplemental Information FERC Nos. P-2082-062 and P-14803-000: Klamath River Renewal Corporation's Comments on the Draft Environmental Impact Report for the Lower Klamath Project License Surrender via email containing a link thereto, or via U.S.P.S. if no email address was available, upon each person designated on the official service list compiled by the Secretary in this proceeding.

/s/ Ivy Carr

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