

Finding of No Significant Impact for Authorization for Incidental Take and Implementation of the PacifiCorp Klamath Hydroelectric Project Interim Operations Habitat Conservation Plan for Coho Salmon

National Marine Fisheries Service

National Oceanic and Atmospheric Administration Administrative Order 216-6 (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental Quality (CEQ) regulations at 40 C.F.R. 1508.27 state that the significance of an action should be analyzed both in terms of “context” and “intensity.” Each criterion listed below is relevant to making a finding of no significant impact and has been considered individually, as well as in combination with all other criteria. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQ’s context and intensity criteria. These include:

1) Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat as defined under the Magnuson-Stevens Act and identified in FMPs?

Response: Designated essential fish habitat (EFH) for both Chinook and coho salmon occurs in the following five watersheds, which overlap with the Action Area described in the National Marine Fisheries Service (NMFS) Biological Opinion (NMFS 2012b) for the proposed action, which is issuance of an incidental take permit (ITP) to PacifiCorp Energy (PacifiCorp): Upper Klamath River, Middle Klamath River, Shasta River, Scott River, and Lower Klamath River (73 FR 60987; October 15, 2008).

The PacifiCorp Klamath Hydroelectric Project (Project) is located approximately 190 miles upstream from coastal and ocean habitats. PacifiCorp seeks an ITP authorizing incidental take of federally listed Southern Oregon/Northern California Coast (SONCC) Evolutionarily Significant Unit (ESU) coho salmon as a result of PacifiCorp’s Project. As discussed in the Essential Fish Habitat Assessment for the proposed project in Appendix B of NMFS’ Biological Opinion for the proposed project (NMFS 2012b), NMFS believes EFH effects from the Project are principally confined to the Klamath River mainstem above the confluence with the Shasta River. Adverse habitat effects from the Project include continued blockage of significant miles of suitable coho habitat, alterations of the Klamath River natural flow regime, the production of the elevated mainstem water temperatures downstream of Iron Gate dam and powerhouse (Iron Gate dam is the current limit to anadromy in the Klamath River), interruption of spawning and incubation gravel recruitment, contributions to poor water quality leading to infectious disease outbreaks that can affect listed and unlisted salmonids, and the trapping of large woody debris that may otherwise provide functional mainstem habitat features. PacifiCorp has prepared a Habitat Conservation Plan (HCP) that will minimize and mitigate for these Project effects through a coho conservation strategy that addresses critical conservation needs for coho in the upper portions of the basin over a 10-year period. At the end of the 10-year permit duration, NMFS expects that passage for anadromous species at Project facilities will be achieved either

through Project dam removal under the Klamath Hydroelectric Settlement Agreement, or through the construction of volitional fish passage facilities at Project dams under the terms of mandatory prescriptions that NMFS has filed in Federal Energy Regulatory Commission proceedings for relicensing the Project. Chapter 1 of the Final Environmental Assessment (FEA) for the Proposed Action has further detail on the background of the Project and detailed information on the projected timeline for the establishment of volitional fish passage at Project facilities (NMFS 2012a).

Adverse effects from the Project do not affect EFH of the Shasta and Scott Rivers, nor does NMFS believe Project effects extend to the Lower Klamath River reach (see section 4.1.3 of the FEA for a description of the environmental consequences on biological resources found downstream of the last Project facility). NMFS concludes that implementation of the HCP will result in beneficial actions in the Scott and Shasta Rivers and has concluded that Chinook and coho EFH for migration pathways in the Shasta, Scott, and Lower Klamath River will not be adversely affected by the proposed action (see section 4.1.3.5 *Coho Enhancement Fund Improvement to Habitat Conditions and Access* of the FEA).

Chinook and coho salmon are known to spawn in the Klamath River mainstem where suitable spawning habitat exists (e.g., clean and appropriately sized gravels for redd building). Spawning and incubation habitat in the mainstem Klamath River will continue to be adversely affected by the trapping of sediment and spawning gravels behind IGD during the permit term. However, this adverse Project related effect will be mitigated for by gravel augmentation efforts planned in the HCP (see pages 4-16 through 4-17 of the FEA). The HCP conservation measures in combination are expected to improve spawning and incubation habitat above baseline conditions throughout the permit term below IGD. Besides short-term adverse effects to EFH which may occur when gravels are placed in the mainstem (e.g. turbidity), NMFS expects as a result of implementation of the HCP, EFH below IGD will be improved for coho and Chinook spawning and incubation. Additionally, implementation of the HCP would result in primarily beneficial effects from conservation measures carried out in the Scott and Shasta Rivers, therefore, NMFS does not anticipate adverse effects to spawning and incubation EFH habitat in the Scott and Shasta Rivers (see section 4.1.3.5 of the FEA).

Although continued adverse effects from the Project will occur over the 10-year permit period regardless of whether an ITP is issued to PacifiCorp, NMFS anticipates implementation of the HCP will result in overall improvements to stream rearing habitat in the Upper and Middle Klamath mainstem reaches, as well the Scott and Shasta Rivers (see Table 3 of the FEA for a description of anticipated beneficial effects from the proposed action). Implementation of the No Action Alternative described in the FEA would mean deferring or not implementing the additional mitigation measures outlined in the HCP submitted to NMFS. Under a No Action scenario, the Project would continue to operate under the terms and conditions of the existing FERC license in a manner consistent with current operations, which does not include minimization, mitigation, and conservation measures based on Project impacts identified by NMFS (see FEA section 2.2 *No Action*).

Protection, enhancement, and restoration of rearing habitat in the Klamath mainstem and Scott and Shasta Rivers as proposed in the HCP are expected to increase the conservation value of EFH that is currently in conditions that are likely not properly functioning for the conservation of coho and Chinook. Finally, NMFS believes that overall, there will be improvements to smolt migration habitat with implementation of the HCP (see sections 4.1.3.4 and 4.1.3.5 of the FEA).

Most importantly, reducing disease outbreaks in the upper basin is expected to have the most benefits for Chinook and coho smolts utilizing the Klamath mainstem in its upper reaches.

Project related effects (adverse and beneficial from implementation of the HCP) are not expected to affect the Klamath River estuary or nearshore coastal habitat as Project effects will occur more than 100 miles upstream from the estuary of nearshore coastal habitats, therefore, NMFS anticipates no adverse effects to Coastal Pelagics or Groundfish EFH.

2) Can the proposed action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?

Response: No. NMFS concludes that implementation of the proposed action, issuance of an ITP and implementation of the proposed HCP will not result in significant impacts to the biodiversity or current ecosystem function of the Klamath River basin because the proposed action will not result in new *adverse* impacts to current conditions related to biodiversity, established flow regimes, sediment transport, predator/prey relationships, or other ecosystem functions (see Table 3 of the FEA comparing a summary of anticipated effects of the proposed action versus the no action alternative).

In terms of a cumulative effect analysis of the proposed action, NMFS believes the proposed action will result in some beneficial improvements to the ecosystem function of the Klamath River basin. NMFS believes that there may be some beneficial impacts to biodiversity and ecosystem function from the following aspects of the proposed action: (1) gravel augmentation may increase benthic productivity leading to improvements in prey species, (2) flow variability above required minimum flows will likely reduce outbreaks of disease in the areas below Iron Gate dam, (3) instream restoration projects planned as part of the HCP will improve habitat quality and quantity, increase predator avoidance and escape habitat, increase overall habitat complexity in major and minor tributaries in the basin, and (4) turbine venting will improve water quality conditions in the area immediately downstream of Iron Gate Dam (Table 3 of FEA). Increases in salmonids (particularly coho) abundance and spatial diversity expected with the implementation of the HCP over the proposed permit term, may result in indirect benefits to fish-eating birds in the basin such as bald eagle and osprey that may experience some increase in available prey items (see section 4.1.3.4 of the FEA). These beneficial impacts, although important to maintain the biodiversity of the Klamath basin are not expected to be substantial given the large size of the basin, in relation to the much smaller area affected by the HCP.

3) Can the proposed action reasonably be expected to have a substantial adverse impact on public health or safety?

Response: No. The proposed action does not concern or address human public health and safety issues.

4) Can the proposed action reasonably be expected to adversely affect endangered or threatened species, their critical habitat, marine mammals, or other non-target species?

Response: NMFS has reviewed the adverse effects of the proposed action on endangered and threatened species and their critical habitat through consultation under Endangered Species Act section 7. This consultation resulted in a biological opinion (Opinion), in which NMFS determined that adverse project effects on SONCC coho salmon and its designated critical habitat will continue to some degree, but the proposed action is not likely to jeopardize the continued existence of the SONCC coho salmon ESU and is not likely to result in the destruction or adverse modification of SONCC coho salmon ESU critical habitat (NMFS 2012b). The No Action alternative (essentially maintaining existing conditions) would continue adverse Project effects on SONCC coho salmon ESU, without any offsetting actions described in the proposed action (see section 4.2.2.3 of the FEA).

The proposed action would authorize incidental take of SONCC ESU coho salmon with continued implementation of the Project, while also minimizing and mitigating take as a result of the Project to the extent practicable via implementation of the HCP (see section 4 of the FEA *Environmental Consequences*). Implementation of the HCP will help to alleviate these effects on the target species, coho, by working to improve water quality conditions, increase habitat access, availability, quantity and quality, and partially restoring the currently altered hydrograph. Beneficial actions to improve the viability of coho over baseline conditions are expected to occur throughout the 10-year permit term. Therefore, while the proposed action will continue to have some adverse effects on the SONCC coho salmon ESU and its critical habitat, these adverse effects will be minimized and mitigated to the maximum extent practicable through the proposed action and will not be significant. In addition, NMFS has concluded in the Opinion for the proposed action (NMFS 2012b) that the proposed action will have no adverse effect or is not likely to adversely affect other listed species and designated critical habitat occurring in the Klamath River basin, as well as listed Southern Resident Killer Whales which rely on Chinook salmon as an important part of their diet. Finally, because all the conservation measures proposed in the HCP occur downstream of Iron Gate dam, except for flow measures that will not affect habitat suitability in a manner substantially different than exists under current conditions, NMFS does not believe the proposed action will result in significant adverse impacts to listed sucker populations or other aquatic biota occurring in the Klamath River above Iron Gate dam (see section 4.1.3 of the EA).

5) Are significant social or economic impacts interrelated with natural or physical environmental effects?

Response: No. NMFS anticipates minor beneficial effects to socioeconomic and environmental justice concerns with implementation of the HCP (see section 4.1.4 of the FEA, *Socioeconomics and Environmental Justice*). NMFS makes this determination based upon the assumption that an important minority population (tribes) will benefit from funding for restorative projects when this population is a part of the implementation and monitoring of these projects. Additionally, NMFS anticipates there may be some reductions to fishable steelhead days during implementation of the flow variability program in the winter, but does not anticipate this impact will be significant. There may be some improvement to recreational opportunities should implementation of the HCP result in an increase in adult returns of Chinook and steelhead during the permit duration, allowing for stable and perhaps increasing adult returns available for

capture. NMFS anticipates no impacts to camping opportunities. Although impacts to whitewater boating from flow variability may be neutral, there may be adverse impacts limited to short periods and limited area of overlap, but no significant adverse impacts to whitewater boating are expected.

6) Are the effects on the quality of the human environment likely to be highly controversial?

Response: No. Although the proposed action is controversial in that it is related to larger conservation problems in the Klamath River basin, for example the Klamath Hydroelectric Settlement Agreement and Klamath Basin Restoration Agreement (KHSR/KBRA) which would have effects on the quality of the human environment, the proposed action itself is not thought to be highly controversial. Most public comments received on the proposed action were supportive of ITP issuance and implementation of the HCP as quickly as possible to improve conditions for coho in the Klamath River.

7) Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, essential fish habitat, or ecologically critical areas?

Response: No. The proposed action would not impact cultural or historic resources, park land, prime farmlands, wetlands, or ecologically critical areas. The Klamath River is designated as a Wild and Scenic River (WSR) and the proposed action is expected to improve the resources of this WSR with implementation of the HCP as compared to its current state (Table 3 of FEA). Implementation of the HCP is expected to improve conditions for coho viability and will likely benefit Klamath River Chinook as well resulting in improvement to the unique characteristics of the WSR designation. Effects of the proposed action on EFH have been described in #1 above.

Because the Project affects the Klamath River mainstem, and most of the conservation measures proposed in the HCP are likely to occur within active river and stream channels, NMFS believes no historic or cultural properties are at risk (see section 4.1.5 of the FEA). Additionally, future HCP-funded projects will need to undergo their own permitting actions, thus triggering a review of potential cultural or historic resources that may occur within the project area. At this time, the proposed action considers conservation measure projects funded through the coho enhancement fund in the HCP in a general sense, but specific project planning with detailed site plans will need to be developed before these funds will be used to implement projects. When this occurs a review of historic and cultural resources within the potentially affected area may need to occur depending on the circumstances.

8) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

Response: No. Effects on the human environment from the Project are fairly well-known (e.g., contributes to poor water quality, impacts fishery resources indirectly affecting tribal resources, alters the natural flow regime). The restorative actions proposed in the HCP as conservation measures to mitigate for Project impacts on coho are fairly well-known to provide

improvements to salmonid habitat (e.g., addition of LWD, gravel augmentation, protection of cool water refugia).

9) Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?

Response: No. The issuance of the ITP will authorize the incidental taking of SONCC coho during PacifiCorp’s continued operations of the Project for an interim period of 10 years. Ten years is considered “interim” as the Secretary of the Interior, in coordination with the States of Oregon and California and other federal agencies, determines whether removal of four Project dams will advance restoration of the salmonid fisheries of the Klamath Basin and is in the public interest as provided under the Klamath Hydroelectric Settlement Agreement (Secretarial Determination). If the Secretarial Determination is negative or the Klamath Hydroelectric Settlement Agreement terminates for any other reason, the Project would revert to the Federal Energy Regulatory Commission (FERC) relicensing proceedings for the Project in which NMFS has prescribed mandatory volitional fish passage facilities at Project dams (e.g., fish ladders and screens). In that case, this Proposed Project would cover the ten-year interim period until it is expected that such volitional fish passage facilities would be required under any new FERC license for the Project. Although the proposed ITP is related to the KHSA/KBRA, it is not tiered to this other process exploring longer term options for Project facilities. The proposed action, issuance of an ITP and implementation of the HCP, will stand alone for the permit term, regardless of the outcome of KHSA/KBRA. In the FEA for the proposed action, NMFS concludes the proposed action will not result in individual or cumulative significant impacts to the human environment over the next 10 years until fish passage is established either through dam removal or volitional fish passage facilities. NMFS expects that impacts from the proposed action will be beneficial to the human environment as compared to the No Action alternative (see page 5-14 of the FEA).

10) Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources?

Response: No. The proposed action would not affect any districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places. Similarly, the issuance of the ITP and implementation of the HCP are not likely to cause any loss or destruction of scientific, cultural or historical resources primarily because the proposed action covered activities and HCP conservation measures will occur within active stream channels, or within existing facilities (Iron Gate Dam and Iron Gate Fish Hatchery).

11) Can the proposed action reasonably be expected to result in the introduction or spread of a nonindigenous species?

Response: No. The proposed action does not involve the introduction, removal, or movement of any non-indigenous species into or out of the action area. The species involved in the proposed restoration activities are native to the study region (coho), and common handling and movement methods will be used where necessary.

12) Is the proposed action likely to establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration?

Response: No. The proposed ITP to PacifiCorp is a singular action considered for the “interim period” while dam removal or fish passage facilities are contemplated for implementation; neither of which will occur during the proposed action permit term. This proposed action is unique to PacifiCorp’s Klamath Hydroelectric Project. It is possible that, if there is a similar amount of time before FERC relicensing or related decisions are going to be made for other hydroelectric projects, some aspects of the proposed action could be adopted elsewhere to address listed species needs while relicensing or dam removal is considered, but any such aspects would need to be tailored to the specific circumstances of that project and the listed species affected by that project.

13) Can the proposed action reasonably be expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment?

Response: No. Issuance of an ITP is not expected to result in violations of Federal, state, or local requirements for protection of the environment. NMFS believes the issuance of an ITP to PacifiCorp will be in compliance with all federal, state, or local laws or requirements imposed for the protection of the environment. In response to comments received in the public comment period on the draft HCP and Draft Environmental Assessment for issuance of an ITP, NMFS addressed public comments asserting the proposed action would threaten violation of any laws or requirement imposed for the protection of the environment.

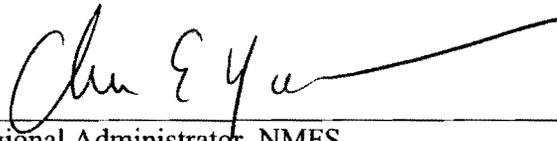
14) Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

Response: No. As discussed in response to #4 above, because all the conservation measures proposed in the HCP occur downstream of Iron Gate dam, except for flow measures that will not affect habitat suitability in a manner substantially different than exists under current conditions, NMFS does not believe the proposed action will significantly adversely impact listed sucker populations or other aquatic biota occurring in the Klamath River above Iron Gate dam or result in cumulative adverse impacts to sucker populations or other aquatic biota occurring in the Klamath River above Iron Gate dam. Additionally, as discussed in response to #4 above, while the proposed action will continue to have some adverse effects on the SONCC coho salmon ESU and its critical habitat, these adverse effects will be minimized and mitigated to the maximum extent practicable through the proposed action and will not be significant. In addition, NMFS has concluded in the Opinion for the proposed action (NMFS 2012b) that the proposed action will have no adverse effect or is not likely to adversely affect other listed species and designated critical habitat occurring in the Klamath River basin, as well as listed Southern Resident Killer Whales which rely on Chinook salmon as an important part of their diet. As discussed in response to #9 above, in the FEA for the proposed action, NMFS concludes the proposed action will not result in individual or cumulative significant impacts to the human environment, including target and non-target species, over the next 10 years until fish passage is established either through dam removal or volitional fish passage facilities. NMFS expects that impacts

from the proposed action will be beneficial to the human environment as compared to the No Action alternative (see page 5-14 of the FEA).

DETERMINATION

In view of the information presented in this document and the analysis contained in the supporting Final Environmental Assessment prepared for issuance of an ITP to PacifiCorp and resultant implementation of the PacifiCorp Klamath Hydroelectric Project Interim Operations Habitat Conservation Plan for Coho Salmon (PacifiCorp 2012) and the conclusion reached in the NMFS Biological Opinion for the proposed action (NMFS 2012b), it is hereby determined that the issuance of an ITP to PacifiCorp and implementation of the HCP will not significantly impact the quality of the human environment as described above and in the Final Environmental Assessment. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an EIS for this action is not necessary.

FOR 
Regional Administrator, NMFS

23 February 2012
Date

REFERENCES CITED

National Marine Fisheries Service. 2012a. Final Environmental Assessment: Authorization for Incidental Take and Implementation of the PacifiCorp Klamath Hydroelectric Project Interim Operations Habitat Conservation Plan for Coho Salmon

National Marine Fisheries Service. 2012b. Final Biological Opinion on the Proposed Issuance of an Incidental Take Permit to PacifiCorp Energy and Implementation of the PacifiCorp Klamath Hydroelectric Project Interim Operations Habitat Conservation Plan for Coho Salmon.

PacifiCorp. 2012. Final PacifiCorp Klamath Hydroelectric Project Interim Operations Habitat Conservation Plan for Coho Salmon.