



Water Boards

Relicensing the Klamath Hydroelectric Project: Frequently Asked Questions

What is the Klamath Hydroelectric Project?

The KHP is a facility that produces hydropower in Southern Oregon and Northern California. Its key parts are a series of four hydroelectric dams on the Klamath River. Three of the main dams (Irongate, Copco 1 and Copco 2) are in California, and the fourth (J.C. Boyle) is in Oregon. The dams were built between 50 and 95 years ago. They are owned and operated by PacifiCorp, a private utility company that provides electricity in Southern Oregon and Northern California.

Why is it in the news?

The KHP is up for relicensing before the Federal Energy Regulatory Commission (FERC). The relicensing process only happens every 30 to 50 years, and the process provides a unique chance for people and agencies with an interest in the river an opportunity to comment on or influence how the dams are operated in the future. Generally, there is little chance to change operations once they are set in a license.

Why is the State Water Resources Control Board (Water Board) involved?

The Water Board (and its counterpart in Oregon) must issue a water quality certification as part of the FERC relicensing process. The licensing process gives the Water Board a window of opportunity to address concerns about how a dam affects water quality and the beneficial uses of the river, such as swimming, boating and fishing. Once the FERC license is issued, the Water Board no longer has authority to address those issues.

The Water Board has several concerns about how the KHP dams affect the water quality and beneficial uses of the Klamath River. Under the water quality certification process the Water Board would prepare an Environmental Impact Report to evaluate different project alternatives to improve water quality and protect beneficial uses.

What are the water quality issues involved with the KHP?

There are many issues associated with the KHP that affect water quality, habitat and surrounding communities and Native American Tribes. The salmon run on the Klamath, once the third largest on the West Coast, has collapsed, leading to shutdowns of the commercial fishing operations in recent years. The dams block salmon and other fish from reaching the upper portions of the river to spawn. Water quality concerns include toxic blue-green algal blooms during the summer in the associated reservoirs



that pose potential health risks for people, fish, and mammals. Two of these toxic blue-green algae include *Anabaena flos-aquae* and *Microcystis aeruginosa*. *Anabaena flos-aquae* produces neurotoxins and *Microcystis aeruginosa* produces microcystin, a liver toxin. The dams sometimes release low-oxygen water. Elevated water temperatures, which also reduce oxygen in the river, further threaten the river ecology: the KHP extends the period of warmer water temperatures later into the year. There are also indications that the dams create flow conditions conducive to fish parasites, which are a potential threat to salmon.

What are some of the alternative solutions?

PacifiCorp could be required to build a fish conveyance structure, such as a fish ladder, into the dams to allow salmon and other fish to move up river to spawn. The National Marine Fisheries Service, which oversees the health of migrating fish such as salmon, has already mandated that the dams will have to have fish ladders if they are to be relicensed. The fish ladders would have to be very long, they would be very expensive, and it is uncertain how well they could work.

Many of the stakeholders believe a less costly and more effective solution would be to take the dams out, allowing the lower river to flow naturally. Options include removing all four main dams, or three or fewer.

A large group of the stakeholders, including farm irrigators, Indian tribes, fishing and conservation advocacy groups, county, state and federal agencies have worked together to craft a pair of settlement agreements that would take the place of the relicensing process.

What are the settlement agreements?

There are two, linked agreements that share many stakeholders. The Klamath Hydroelectric Settlement Agreement (KHSA) lays out the process for possible removal of the four dams. The Klamath Basin Restoration Agreement (KBRA), which depends on the dams being removed, calls for improvement to the fish habitat along the river, improved access to river tributaries for the fish to spawn, and allocates river water to various users to resolve historic disputes over water rights. The parties to each agreement have agreed to support the other.

If approved, the settlement agreements call for the dam removal to take place in 2020.

How would dam removal be paid for under the settlement agreements?

Under the KHSA, PacifiCorp ratepayers would pay the first \$250 million in costs, and the State of California would pay for the next \$200 million. A recent estimate put the total cost at \$290 million, so California's share would potentially be smaller. PacifiCorp ratepayers in California and Oregon are already paying a surcharge on their electricity bills to cover the cost of dam removal, as part of the settlement agreements.

Do all river stakeholders approve of the settlements?

No. Some Indian tribes, environmental groups, county officials, and individuals oppose the settlements, for various reasons. Some favor dam removal, but don't like the details of the settlements, and some don't feel dam removal is the best option. Some Indian tribes are concerned about potential loss of federal water rights; some stakeholders feel PacifiCorp shareholders rather than ratepayers should pay for the dam removal; some local officials and residents are concerned about the loss of tax revenue, recreation and property values if the dams are removed, and feel they should remain in place.

How do the settlements relate to the Water Board's certification process?

The Water Board is currently holding its certification process with FERC in abeyance while the settlement process takes place. If the settlement agreements are implemented by federal legislation, they take the place of the FERC relicensing. If the settlement agreements terminate or if the Water Board determines that the settlements are not moving forward in a timely fashion, the Water Board will push forward with the certification process before the Federal Energy Regulatory Commission. That process includes an Environmental Impact Report which will evaluate approaches to correct the water quality issues associated with the KHP and may or may not conclude that dam removal is the best option.

What is the Water Board's position on the settlement agreements?

The Water Board is not a participant or signatory to either of the agreements, and is not bound by them. The Water Board retains its independent authority to address issues related to water quality, beneficial uses, the public trust and the waste and unreasonable use of water in California. The Water Board is closely watching the settlement agreement process, and will take action as appropriate.

Where is the settlement process now?

The settlement process has a timeline with target dates for accomplishing steps in the decision on dam removal, and then for dam removal itself. One of them is a determination by the Secretary of the Department of Interior on whether the removal of the dams is in the public interest and will help the fisheries in the river. The target date of March 31, 2012 has passed without that determination.

The Water Board voted on July 17, 2012 to extend its abeyance until June 30, 2013, to allow the settlement process to continue.

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