



18 July 2018

TO: WR401Program@waterboards.ca.gov
Klamath401@deq.state.or.us

Subject: Klamath Project License Surrender, CWA §401 Certification — comments

Dear Oregon DEQ and California Water Resources Control Board:

Please accept the following comments from Oregon Wild concerning the proposed CWA §401 Certification of the Klamath Hydro Project License Surrender, FERC Project No. 14803, by the States of Oregon and California,

https://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/lower_klamath_ferc14803.shtml, and <https://www.oregon.gov/deq/GetInvolved/Documents/070618Klamathpn.pdf>.

Oregon Wild represents 20,000 members and supporters who share our mission to protect and restore wildlands, wildlife, and water of the greater Oregon ecosystem as an enduring legacy. Oregon Wild has a long-term history of advocacy on behalf of the Klamath River, the entire Klamath Watershed, and the fish and wildlife that call it home. Our members and supporters have a great affection and connection to this area.

Oregon Wild supports the states' 401 certification of the Klamath Project Dam Removal and License Surrender because it will lead to significant improvements in the water quality of the Klamath River. Of course, there are some adverse water quality impacts associated with dam removal, and the dam removal effort must be accomplished with great care to minimize and mitigate water quality impacts, but because the existing situation is causing a variety of significant adverse water quality impacts, the long-term net effect of dam removal on water quality is strongly positive.

The existing dams alter river flow and contribute to water quality problems, including toxic algal blooms, low dissolved oxygen, and higher water temperatures. The dams also contribute to fish disease in the lower reaches of the Klamath River. The license surrender and dam removal will revert the Klamath River to more natural riverine conditions resulting in improved water quality and a more natural regimes of water flow, temperature, sediment storage/mobility. Free-flowing riverine conditions and improved water quality will benefit aquatic habitat and anadromous fish populations by increasing access to historical habitat, restoring mainstem and tributary habitat, and improving biological and physical factors that heavily influence fish populations (e.g., flow

www.oregonwild.org

Eugene | 541.344.0675
PO Box 11648
Eugene, OR 97440

Portland | 503.283.6343
5825 N Greeley Ave
Portland, Oregon 97217

Bend | 541.382.2616
2445 NE Division St, Ste 303
Bend, OR 97701

Enterprise | 541.886.0212
P.O. Box 48
Enterprise, OR 97828

conditions, sediment and bedload transport, water quality, fish disease, toxic algal blooms, and water temperature).

We urge DEQ and the Water Boards to adopt conditions that will minimize water quality impacts, reduce the spread of weeds, and conserve unique species like pond turtles, suckers, salmonids, amphibians, and lamprey, while allowing the dam removal effort to proceed in an efficient and timely manner.

The project controls significant acreage of uplands surrounding the project, as well as the footprint of the reservoirs themselves. We urge the agencies to require sound ecological stewardship of those lands so they are not subjected to grazing, logging, mining, or motorized recreation, to the detriment of Klamath River water quality. Native species should be required for seeding after the reservoir is drawn down. We urge the agencies to require planting of native willows and other appropriate trees and shrubs in the exposed reservoir along the newly established river channels and tributaries. This will provide several benefits: (i) provide shade to mitigate temperature problems, (ii) suppress weeds, and (iii) stabilize the loose sediments along the river banks.

The plan is to salvage ESA-listed Lost River suckers and Short-Nose suckers that use the reservoirs, but this effort is expected to salvage only 10% of the population. We urge the agencies to require genetic testing, and if the fish are not badly hybridized, then a more aggressive fish salvage effort should be undertaken. The locations for planting these salvaged fish must be carefully thought out in advance.

Dead and down wood plays a critical role in maintaining aquatic and terrestrial ecological structure, function, and process. See Rose, C.L., Marcot, B.G., Mellen, T.K., Ohmann, J.L., Waddell, K.L., Lindely, D.L., and B. Schrieber. 2001. Decaying Wood in Pacific Northwest Forests: Concepts and Tools for Habitat Management, Chapter 24 in Wildlife-Habitat Relationships in Oregon and Washington (Johnson, D. H. and T. A. O'Neil. OSU Press. 2001) <http://web.archive.org/web/20060708035905/http://www.nwhi.org/inc/data/GISdata/docs/chapter24.pdf>. We expect to find a significant shortage of dead wood within the reservoir area. This wood deficit should be mitigated by importing wood to kick start the process of natural wood recruitment. Wood should be placed both in and near the river and tributaries, as well as in uplands. Extra wood near tributary junctions is recommended. Wood for restoration should be obtained from appropriate sites, such as thinning of (young) plantations, (young) juniper removal projects, or reservoir salvage efforts.

We also urge the agencies to adopt monitoring and adaptive management requirements specifically designed for learning and application to other similar projects. Dam removal is still a fairly new endeavor with uncertainty about environmental impacts and the spatial and temporal

fate of stored sediment. Let's learn from this dam removal effort, so that future dam removal efforts can be even better.

Sincerely,

A handwritten signature in black ink that reads "Doug Heiken". The signature is written in a cursive, flowing style.

Doug Heiken

dh@oregonwild.org