

Attachment 3

Technical Memorandum: FERC Staff Recommendation Regarding Removal of
Encroaching Vegetation Growth in the Copco No. 2 Bypassed Reach



Technical Memorandum

To: Klamath River Renewal Corporation

From: Resource Environmental Solutions
David Coffman, PG

Date: April 1, 2022

Re: **Lower Klamath Project: FERC Staff Recommendation Regarding Removal of Encroaching Vegetation Growth in the Copco No. 2 Bypassed Reach**

Purpose

In its *Draft Environmental Impact Statement for Hydropower License Surrender and Decommissioning for the Lower Klamath Project*, FERC Staff concludes that vegetation growth within the Copco No. 2 bypass reach portion of Wards Canyon (between the Copco No. 2 dam and the Copco No. 2 powerhouse) creates a hazardous boating condition. Staff recommended that the Renewal Corporation address this condition, in anticipation that the reach will have boatable flows again following dam removal.

Proposed Action

On March 29, 2022, the Renewal Corporation conducted a field site walk with representatives from Upper Klamath Outfitters Association (UKOA) and American Whitewater and tribal representatives to identify trees to be removed from the active channel. Trees were tagged, marked, and GPS located through the first 0.5 miles of the bypass reach. The Renewal Corporation intends to return the bypass reach to finish mapping hazard trees in the coming weeks. Information collected in the field will be used to finalize a tree removal plan that will also be provided to the Commission, including maps showing the distribution, size classes, and species of identified hazard trees. The general framework for the hazard tree removal plan is outlined in the following paragraphs.

Tree removal is anticipated to be conducted using low-impact methods to reduce ground disturbance to the extent practicable. To remove trees from the river channel, the Renewal Corporation will cut trees flush with the riverbed, with root wads remaining in place. Trees will be bucked into small pieces to the extent practicable, to facilitate downstream transport of woody material by river flows, thereby beginning a natural wood recruitment process to the footprint of the Iron Gate Reservoir. Large trees (greater than 6-inch diameter at breast height (DBH)) may be rigged and flown out of the river channel using a helicopter, so that they can be beneficially reused elsewhere on the project for upland or in-stream large wood habitat features. Ground based equipment will not be used within the river corridor to minimize ground disturbance. The results of the tree removal plan will be reported to the Commission.

The Renewal Corporation notes that the Ward's Canyon reach is inherently hazardous for boaters due to high gradient and boulders. This natural condition exists independent of the vegetation to be removed. This Staff Modification will address the most significant tree encroachment resulting from project diversions, but not the natural condition associated with gradient, boulders, and remaining vegetation. In consultation with the State of California, the Renewal Corporation will post signs and conduct public outreach to inform the public of hazardous conditions for boaters in Wards Canyon.