



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Klamath Falls Resource Area
2795 Anderson Avenue, Building 25
Klamath Falls, Oregon 97603-7891
Phone: (541) 883-6916 | Fax: (541) 884-2097
E-Mail Address: Klamath_Falls_Mail@or.blm.gov
Website: <http://www.or.blm.gov/Lakeview/kfra/index.htm>

IN REPLY REFER TO:
2320 (ORL040)

April 27, 2011

Dear Interested Parties:

In cooperation with PacifiCorp and in consultation with the Interim Measures Implementation Committee (IMIC), the Bureau of Land Management's (BLM) Klamath Falls Field Office, is conducting public scoping and National Environmental Policy Act (NEPA) analysis on actions to implement Interim Measures (IM) 7 and 8 identified in the Klamath Hydroelectric Settlement Agreement (KHSA). The KHSA includes detailed interim actions for the operation of the dams and mitigation activities during the period between the signing of the KHSA (February 18, 2010) and either a negative Secretarial Determination on dam removal or decommissioning of the hydropower facilities, whichever is later. Parties to the KHSA have designated their representatives and created the IMIC.

The KHSA provides a framework for possible decommissioning and removal of four PacifiCorp dams on the Klamath River: Iron Gate, J.C. Boyle, Copco 1, and Copco 2. The potential decommissioning and removal of these dams is subject to certain contingencies including availability of funding, the passage of federal legislation, and a determination by the Secretary of Interior that removal of the dams is in the public interest. The Secretarial Determination process is now underway and scheduled to be completed by March 31, 2012.

PacifiCorp is coordinating with the IMIC on river habitat improvement to benefit listed species in the Klamath River between the J.C. Boyle Powerhouse and Copco Reservoir. Access to the river via BLM roads will likely be necessary to implement these measures, thus requiring NEPA analysis. The BLM is soliciting comments on these interim measures that can help identify issues and develop alternatives to achieve the goals of these proposed measures.

Interim Measure 7 - The objective of this interim measure is to place suitable gravels in the J.C. Boyle bypass and peaking reach to enhance the following aquatic resources:

- Current spawning habitat for Rainbow trout (*Oncorhynchus mykiss*)
- Potential future spawning habitat for coho (*Oncorhynchus kisutch*), Chinook (*Oncorhynchus tshawytscha*), and steelhead (*Oncorhynchus mykiss*)
- Macroinvertebrate habitat
- Channel geomorphic processes (e.g., gravel bar formation for aquatic and riparian species)

Seven gravel placement sites are proposed within the 3.8 mile long J.C. Boyle bypass reach, between the J.C. Boyle dam (River Mile [RM] 224.7) and the J.C. Boyle Powerhouse (RM 220.4). Five gravel placement sites are proposed within the 16.9 mile long J.C. Boyle peaking reach between the powerhouse (RM 220.4) and Copco Reservoir (approximately RM 204). Proposed sites were selected based on their accessibility for gravel placement and aquatic habitat type (riffle, run or pool tailout locations). Preference was also given to upstream locations that would facilitate gravel seeding downstream during peak flows. Gravel will be placed approximately 1-foot deep across the proposed placement areas. This approach is intended to minimize hydraulic changes at the placement sites while still providing suitable gravel depths for spawning in case gravel is not transported from the sites.

IM-7 will be conducted until the dams are decommissioned or a negative Secretarial Determination on dam removal, whichever comes last, with the initial plan covering an eight-year period, beginning in 2011, with applications at different sites each year. Gravel will be applied based on the timing of fish, wildlife, and recreational use of the Klamath River. The Oregon Department of Fish and Wildlife (ODFW) approved an in-water work window during the period of July 1 – September 30 each year, with the potential to extend the work period through December, if necessary. Rafters, fishermen, and other recreationists use the peaking reach during the summer months. Therefore, to balance the needs of fish, wildlife, and recreationists, the first gravel application is proposed to occur commencing in November, 2011.

Gravel will be delivered to the selected locations by either truck or helicopter. Trucks will be outfitted with gravel shooters with booms extending 16 feet from the truck. The gravel shooters can distribute gravel up to 3 inch in diameter beyond the end of the boom approximately 100 feet horizontally, and up to 120 feet when applied from locations that are vertically elevated above the river. Applying gravel from a truck outfitted with a gravel shooter is proposed in locations within 100± feet of a road, where the desired size of gravel is limited to 3 inch diameter. In locations where this strategy is not feasible, helicopter placement of gravel would be employed. Helicopter placement involves transporting gravel from a stockpile location into the river using a specialized bucket carried below the helicopter.

Proposed monitoring will provide annual feedback on placement methods and gravel movement. Based on the outcome of the monitoring, placement methods and schedule can be adjusted in future years to ensure that objectives are met.

Interim Measure 8 – A high gradient riffle in the J.C. Boyle bypass reach has been identified as a passage impediment and potential barrier for upstream adult fish. The riffle has large, side-cast boulders that create an obstruction in the river channel; removal of some of these boulders to improve passage for future migrating adult salmonids is proposed. Since there is no direct access to this site, a rock expansion technique, using a commercially available and non-hazardous material such as Bustar, will be used to fracture the boulders to manageable size pieces. This will eliminate the need for constructing a road and disturbing the hillside for equipment access. A standard rock drill will be used to bore holes into the boulders selected for removal. To ensure that the compound is not spilled during placement into the drilled holes, a PVC funnel and plastic liner will be used. The material expands in the holes and fractures the rocks. Once the product is set-up and cured, it becomes an inert substance. Once reduced to proper size, the resulting rock will be left in place or moved in consultation with the regulatory agencies. Alternatively, or in combination with the approach described above, placement of smaller

diameter rock upstream of the obstruction may be used to fill in the spaces between the side-cast boulders. This would have the effect of pushing water up and over the obstruction into an effective migration path, while maintaining the upstream pool feature.

Preliminary Scoping Issues - Below are preliminary issues related to the proposed actions that have been identified, and a brief summary on how the proposed plan will minimize potential impacts:

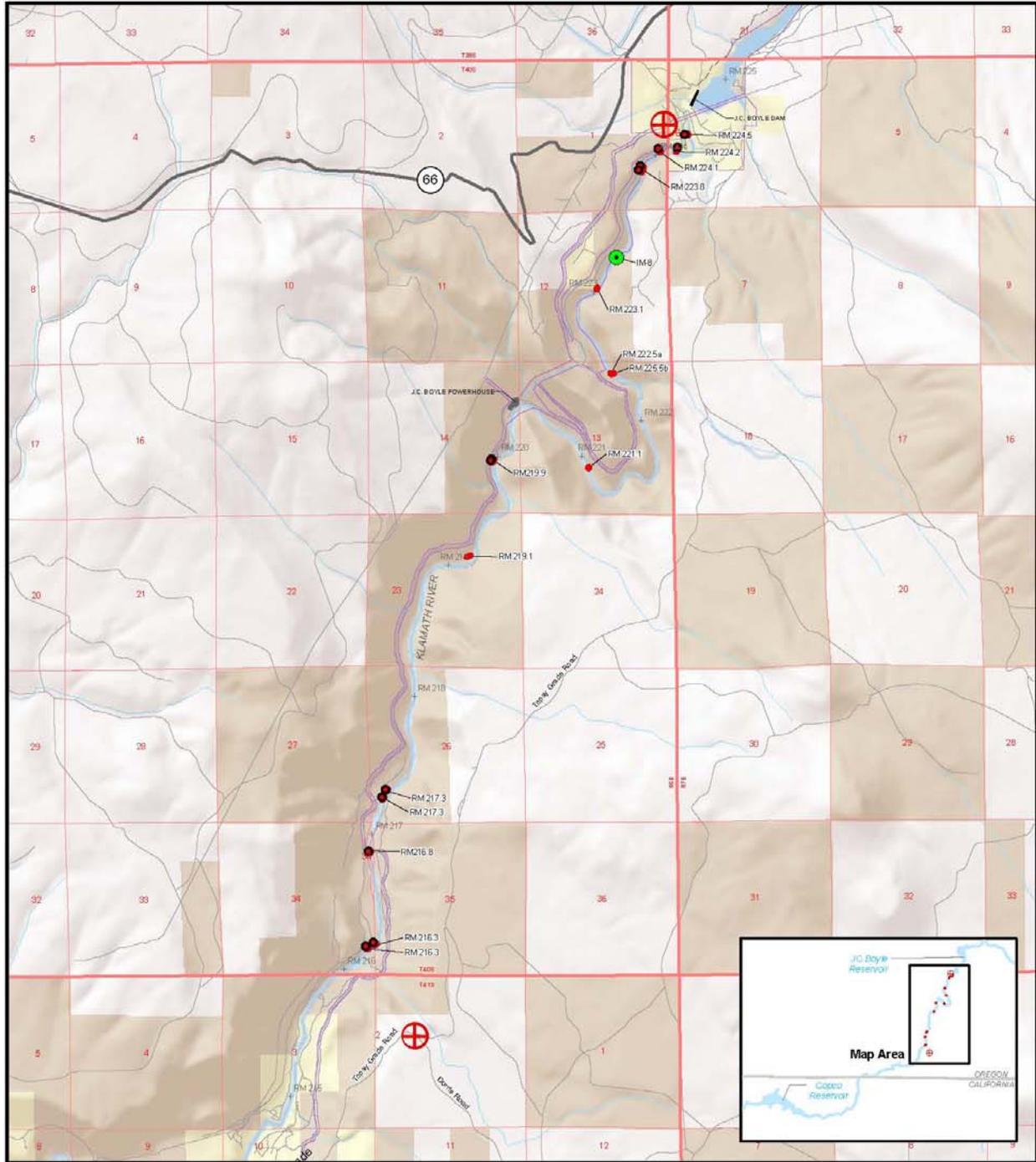
- Aquatic Resources/Fisheries (*Maintenance of fish passage, Effects on habitat quality*)
Gravel placement will occur evenly over selected sites and is expected to improve spawning habitat for resident trout, provide additional habitat for macroinvertebrates; and increase habitat complexity. Gravel placement will not be performed in a manner that impedes fish passage or habitat accessibility.
- Water Quality/Quantity (*Increased turbidity, Localized changes to water velocity, Scour Potential*)
Work will be conducted during approved in-water work periods to minimize any potential adverse impacts. The proposed monitoring will provide feedback to adapt/change site locations to minimize any adverse water quality impacts.
- Public Safety (*Impacts to Road Use, Boater/fisherman avoidance*)
If trucks are used to haul gravel, temporary closure of road sections may be necessary for short durations (1-2 hours). Signs will be posted alerting the public, and flaggers will be placed at the top and bottom of that section of road. Work is planned to occur in the fall after the peak recreation season.
- Recreation and Scenic Resources (*Constraints during placement, i.e., boating/camping, and Visual/aesthetic impacts*)
Work is planned to occur in the fall after the peak of the recreation season
- Cultural Resources (*Resource Surveys and Tribal and SHPO coordination*)
Any lands where ground disturbing activities are planned will be surveyed, and PacifiCorp is coordinating with Tribes and the OR State Historic Preservation Office.

Timing, placement, and monitoring of the proposed gravel placement and sidecast treatment will be defined based on site-specific resource constraints, cost, and effectiveness. Your comments, ideas, and concerns regarding the proposed actions and the related scoping issues to be assessed are important to the analysis of these interim measures. For comments to be most beneficial we need to hear from you by May 26, 2011. Please mail, fax or email your written comments to Donald J. Holmstrom, Manager at the office or email addresses listed in the above letterhead.

Sincerely,

/s/DK Hoffheins, Acting For:

Donald J. Holmstrom
Field Manager



Klamath Hydroelectric Project
Interim Measures 7 and 8

- IM-8
- Truck Sites
- Gravel Placement Area
- ⊕ Gravel Stockpile
- FERC Boundary
- HIGHWAY
- ROAD
- TRAIL
- TOWNSHIP/RANGE
- SECTION
- STREAM
- LAKE, RESERVOIR, OR RIVER
- PACIFICORP PROPERTY
- BLM
- PRIVATE PROPERTY

