



Independent Scientific Review Panel
for the Northwest Power & Conservation Council
851 SW 6th Avenue, Suite 1100
Portland, Oregon 97204
www.nwcouncil.org/fw/isrp

Memorandum (ISRP 2010-2)

January 6, 2010

To: W. Bill Booth, Chair, Northwest Power and Conservation Council

From: Eric Loudenslager, ISRP Chair

Subject: Final Review of the Yakama Nation's Accord Proposal, Columbia Cascade Province MOA Habitat Projects (2009-003-00)

At the Council's September 15, 2009 request the ISRP began a review of the Yakama Nation's Columbia River Fish Accord proposal titled *Columbia Cascade Province MOA Habitat Projects* (2009-003-00). The project's goal is to improve habitat for salmonids in the Wenatchee, Entiat, and Methow subbasins to a degree capable of supporting sustainable populations. This proposed project is specifically intended to restore ecological functions to stream habitat in the three identified subbasins to contribute to recovery of salmon, steelhead, and bull trout. In addition, the project is intended to be holistic in nature and thus improve habitat for other fish and aquatic as well as terrestrial species present in these areas.

On October 16, 2009, the ISRP requested a response because the proposal did not contain sufficient technical detail for a scientific review ([ISRP 2009-42](#)). On December 2, 2009, the Council forwarded the Yakama Nation's response and requested our review, which follows below.

ISRP Recommendation and General Comments

Does Not Meet Scientific Criteria

The Yakama Nation provided a thoughtful response to our request for more information. The ISRP realizes that the approach to identifying candidate sites for restoration and the kinds of restoration actions employed to address specific limiting factors is similar to what other organizations are doing in other tributary systems to remedy habitat problems that were flagged in the subbasin planning process. The reason in this instance that we are unable to state that the Columbia Cascade Province MOA Habitat projects proposal meets scientific criteria is that the project proponent has made it very clear that the Tribe will conduct no post-treatment monitoring of habitat restoration actions carried out as part of this project, and the likelihood that the implemented restoration actions will be monitored by another entity is uncertain. The value of habitat projects identified through the process described in the proposal may appear to be obvious and compelling. But unless the habitat work will be accompanied by a reasonably explicit monitoring plan, important learning opportunities will be lost and the adaptive management value of the actions will be compromised. It is primarily because of the absence of

monitoring that the ISRP finds this plan does not meet scientific criteria as specified in the Council's Fish and Wildlife Plan.

The complete reliance on limiting factors identified through the EDT analysis used in subbasin planning also indicates the critical need for monitoring. Although the EDT analysis is the best currently available, these results were necessarily based on incomplete habitat data and many untested assumptions about the relationships between habitat condition and fish response. Habitat enhancement efforts initiated under this project would provide the opportunity to test the limiting factor hypotheses developed with EDT. But to take advantage of this opportunity, an appropriate M&E effort must be developed and implemented in concert with the habitat restoration actions. A more complete understanding of the relative significance of various habitat limiting factors would provide the basis for developing a much more efficient and effective restoration program through time.

The ISRP acknowledges that cooperative monitoring agreements with other organizations may take shape as this project goes forward (the Entiat IMW work in 2011 is an excellent example). In the event that similar agreements are reached with other groups, and the Yakama Nation wishes to have these plans reviewed by the ISRP, we will be happy to do so.

ISRP Specific Comments

In our October 16 review, we requested a revised proposal that provides sufficient detail for a technical review and identified three proposal elements that need further clarification. Our review below is organized by the three items.

1. Procedures by which watershed assessments and prioritization of projects will be conducted.

The response gives an understandable description of the procedures used to select project sites. The proponent makes it clear that limiting factors will be taken from previous planning efforts within the subbasins (mostly through the EDT modeling that was part of subbasin analysis) and not through additional studies undertaken as part of this project. Responsibility for prioritization will rest heavily with local Watershed Action Teams.

2. Summary data on stock and current habitat status (productivity and capacity estimates of past and current conditions) to provide context for the slate of priority activities identified in the proposal.

The inclusion of Tables B-1 and B-2 in the proposal was very helpful. Assessments of current and potential future habitat conditions were based primarily on EDT analyses. Much of the material in the response pointed to existing planning documents, but there were no summaries for habitat similar to the stock status information in B-1 and B-2.

3. The anticipated effects of habitat improvements on fish and wildlife populations; and the details of a monitoring program that facilitates adaptive learning.

The anticipated effects of habitat improvement actions were based almost solely on EDT predictions. While these predictions provide a basis for developing testable hypotheses around habitat restoration projects, the absence of monitoring essentially forecloses the opportunity to determine whether the EDT predictions are accurate.

Other Comments

Table G-2 and Table H-1 were helpful summaries of presumed limiting factors (G-2) and ongoing monitoring efforts (H-1). The ISRP strongly encourages the proponent to work closely with other monitoring organizations to incorporate locations that will be identified in this project into existing effectiveness monitoring plans. We are quite pleased that the Yakama Nation will be heavily engaged with the Entiat IMW M&E effort and hope that similar cooperative agreements can be worked out elsewhere in the Yakima and Methow subbasins.