

Northwest Power Planning Council  
Response to ISRP  
851 SW 6<sup>th</sup> Avenue, Suite 1100  
Portland, OR 97204

Attn: Kendra Phillips

Subject: Proj. ID #30017 ISRP response

Dear Sirs:

We are providing our responses to comments made by the ISRP regarding project #3001 – Columbia River Tidewater Assessment for Recovery Planning. The questions and comments by the ISRP are in italic our responses follow each question. The question have been re-arranged to facilitate responses that address more than one question.

*A response is needed. This proposal is to characterize productivity relationships between habitat and fish for steelhead, chum, Chinook (5 listed ESUs) in the lower Columbia and upper Willamette. The project would also identify factors limiting recovery, identify needed actions and research.*

*The proposal presents an extensive rationale in which it acknowledges other related projects that may produce similar or overlapping information, but isn't specific as to how this project's focus is distinct from others. It states that coordination with other projects will take place once this project is funded.*

*Does this project duplicate ongoing efforts? For example, has existing habitat information already been summarized in the subbasin summary? The response should discuss potential overlap between this proposal and proposal #30001 (NMFS) that will evaluate the role of river flow on habitat opportunities and food web structure for juvenile salmon.*

No, we will to the extent possible utilize any available data, reports, and publications. The sub-basin planning process and proposed research concern the same geographic area and generally relate to similar management information needs and questions. This project addresses specific near term needs of the recovery team. The development of delisting criteria and recovery plans for the listed species will both inform and complement the planning/management process' ultimate goal of developing management plans for the regions sub-basins. The research (proposed project 30001 and related Corps of Engineers funded studies) hopefully will lead to numerical models of flows and food web energetics that will improve our scientific understanding of the ecosystem. And lead to reduction of un-certainty in future management actions. This project relies on existing knowledge to inform the development of delisting and recovery plans.

*What is the relevance of historical benchmark conditions when irreversible changes have occurred decisions?*

The starting point for conservation planning is knowledge of the pre-degradation conditions. This serves a similar role as a control in a formal experimental design. It enables the analyst to determine how diverged the ecosystem is from the historical productive system with its diversity of species and life histories and assess the potential for recovery. There may be ecological, political, social, and economic factors that may prevent full restoration of degraded habitat. But an analysis of historical conditions, current condition and how we got to the present will enable a determination of how much habitat can be protected and restored. This analysis is essential in determining the potential for reaching delisting goals.

*What is the interpretation of “historical” in this context? Does this mean at different points in time? Before fishery exploitation? Before European-American exploitation?*

The best time to initiate historical reconstruction would be pre-development and pre-exploitation. Historical records of the Hudson Bay Company, early land survey data, biological reports and other written works will be consulted. Change habitat conditions due to fishing and land-use practices will be described from earliest time possible. Most of the watershed assessment methods including those sub-basin programs that utilize the Ecosystem Diagnoses, and Treatment (EDT) approach, and hydrologic model development (i.e. proposed project 30017) require historical reconstruction. Because the objectives of each program is different their data needs and usages are different. However, they often utilize the same data source documents. Our goal will be to start by utilizing existing information and collaborate in gathering new information where source information overlaps. For example historic hydrographic (“H-Sheets”) and topographic (“T- sheets”) information will combined with historic vegetation and land use data (township surveys) to reconstruct wetland habitat. Proposed project 3007 will be seeking the H and T sheets for their needs and at least one watershed assessment (Scappoose Bay) has collected and summarized the township survey data in their area. We anticipate that most of the township data has been un-tapped and we will have to seek out that information.

The Lower Columbia River sub-basin summary is general and does not meet the detailed needs of the recovery team. The sub-basin documents do list potential data sources that we will obtain and examine for relevant information.

Funding for proposed projects with similar data needs is uncertain, thus we can not rely on those sources for this work. If however, any projects (i.e. 30001) are funded we would recommend full collaboration to facilitate a historical reconstruction, degradation trend, and current status document that meets the needs of each project.

*Task 1.c.: Are watershed assessments necessary or have they already been completed?*

No, we will seek original literature. However, if a watershed assessment has been completed and provides an adequate historical reconstruction and trend of wetland habitat condition we will use that information. Most watersheds' in the Lower Columbia River domain have not had a full assessment or focused on non-tidal influenced tributary and mainstem habitats. The Scappoose Bay Watershed however did a historical reconstruction of the tidal flat areas.

*Other tasks raise similar questions. The overall question raised by this proposal is whether it identifies needed research or duplicates ongoing research or existing knowledge.*

We will be able to identify data gaps and assess research needed to further develop an understanding of tidal-fluvial processes and how they affect salmon abundance and life history diversity.

*At least three in-text citations are not included in the list of references.*

Bottom, Daniel L., Charles A. Simenstad, Antonio M. Baptista, David A. Jay, Jennifer Burke, Kim K. Jones, Edmundo Casillas, and Michael H. Shiewe. 2001 Salmon at River's End: The Role of the Estuary in the Decline and Recovery of Columbia River Salmon. U.S. National Marine Fisheries Service, Seattle, WA.

Lichatowich, J. 1999 Salmon without Rivers: A history of the Pacific Salmon Crisis. Island Press. ISBN 1-55963-360-3

Rich, W.H. 1939. Local populations and migration in relation to the conservation of Pacific salmon in the western states and Alaska. Contribution No. 1, Res. Rep. Fish. Comm. Oregon.

Simenstad, C.A., C.D. McIntire, and L.F. Small 1990. Consumption processes and food web structure in the Columbia River estuary. Prog. Oceanogr. 25:271-298/