**Independent Scientific Review Panel**
for the Northwest Power & Conservation Council
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**Memorandum (ISRP 2011-23)** **November 8, 2011**

**To:** Bruce Measure, Chair, Northwest Power and Conservation Council

**From:** Rich Alldredge, ISRP Chair

**Subject:** Final Review of the Confederated Tribes of the Umatilla Indian Reservation's Proposal, *Ceded Area Priority Stream Corridor Conservation and Protection (2008-207-00)*

## Background

At the Council's September 23, 2011 request, the ISRP reviewed a response for the Confederated Tribes of the Umatilla Indian Reservation's proposal titled Ceded Area Priority Stream Corridor Conservation and Protection (Umatilla Tribe Protection and Capital Acquisition; BPA project #2008-207-00). The project intends to focus on securing permanent protection of priority anadromous fish core habitats in the Grande Ronde, Umatilla, Walla Walla, and John Day River watersheds through conservation easements and capital acquisitions of fee title. The proposal states that continued pressure from development and commodity based resource management threatens to seriously degrade watershed productivity and function.

The ISRP reviewed an earlier version of this proposal in June 2009 (ISRP 2009-20) and requested a response. The ISRP noted that the project is potentially beneficial to both anadromous and resident species, is the major project for land acquisition under the Accords, and, as the proponents' reference, land acquisition is generally more cost-effective than easements. However, the ISRP found that not enough detail was provided in the proposal to fully assess potential benefits to fish and wildlife, and the ISRP asked for a response on eight items. Our review below is organized around these eight items and the proponents' responses to them.

## Recommendation

*Meets Scientific Review Criteria (Qualified)*

The process proposed for prioritization of sites for acquisition is a reasonable starting point for an acquisition program. The response by the CTUIR to the initial ISRP review of this proposal explains with reasonable completeness how the EDT/QHA modeling exercise, in conjunction with subbasin assessments, were used to identify priority locations for conservation. Certainly, this information used in the prioritization process should not be viewed as definitive. Subbasin

assessments were completed nearly a decade ago as part of the subbasin planning process and site-specific limiting factors may have changed in the interim. In addition, the EDT/QHA modeling is based on incomplete information and the uncertainty associated with these estimates is not addressed in the scoring protocol. Nonetheless, inclusion of these estimates does indicate that there is some linkage between acquisitions and benefit to the focal fish species. Until more current habitat data are available, and the models themselves are improved or replaced with better ones, the proponents have likely done the best they could.

Qualifications are related to the inability of the ISRP to fully evaluate the adequacy of the prioritization process due to the lack of an acquisition implementation plan and an insufficient (or perhaps insufficiently described) RM&E program to assess the biological condition of the acquired sites and the contribution they make to subbasin-scale population performance. Although the CTUIR has completed the first step in developing a scientifically sound conservation plan, the second step is substantially missing from the proposal. In order for the acquisition strategy to be successful, a detailed acquisition implementation plan that specifies the sequence of priority acquisitions and contingencies for dealing with problems, such as unwilling landowners, must be developed. This plan will be critical to the success of this effort because, for example, the benefits of several upstream conservation acquisitions may be seriously compromised if a downstream "bottleneck" to productivity remains. In such instances, if the bottleneck cannot be addressed in a timely and cost-effective manner, other candidate sites may assume a higher priority. There also may be combinations of acquisitions that provide synergistic interactions, increasing the overall benefit to salmon more than would be expected based on a simple summing of the benefits of each site individually. The prioritization implementation plan should utilize the available tools (EDT/QHA or the "Hillman Method") to evaluate the relative benefit of various combinations of the high priority properties. Development of an acquisition implementation plan that provides this site-level review of the important properties for acquisition and the benefit to fish populations associated with various combinations of properties is required for the ISRP to conduct a thorough technical evaluation of the acquisition process.

The process that will be employed to assess the benefits achieved through property acquisition and how this information will be used to improve the prioritization of potential acquisitions in the future was incompletely described. Some description of how the existing monitoring efforts in these four subbasins will provide information that indicates the effectiveness of the acquisition parcels should have been included. These acquisition efforts will not be the only restoration activities occurring in these subbasins. Presumably, habitat restoration projects will be occurring throughout the area and many of these projects will not be at locations acquired through this program. Therefore, fish population metrics expressed at a subbasin or watershed scale cannot provide an adequate indication of the effectiveness of the acquisition program. Some monitoring at the acquired sites will be necessary to determine if these locations are providing the anticipated benefits to the focal species.

**Comments**

1) *2009 Request: Does this proposal constitute the "Acquisition Plan"? Will a comprehensive acquisition document be developed as a work element associated with this proposal? If this is the acquisition plan much more detail and explanation is needed. If developing a plan is a work element, clarification of that task is needed.*

While the proponents state in the response that the proposal does not constitute an acquisition plan, such a plan will be required for this program to be successful. The development of such a plan (which we refer to here as an acquisition implementation plan) was never discussed. The response indicates that this proposal simply describes a prioritization process that will enable the identification of specific properties, which if acquired, would have the greatest conservation value. The proposal does not clearly describe the process for actual acquisition of properties. This deficiency makes it difficult to assess the benefit that various acquisitions might have for salmon and steelhead. As noted above, the development of a detailed acquisition implementation plan that specifies the properties targeted for acquisition and evaluates the relative benefit of obtaining various combinations of properties will be required for a thorough evaluation of the entire acquisition process. The current proposal provides very little detail on next steps. For example, will proposals be developed for individual properties or related groups of parcels and submitted through the current BPA process? Or is the intent that the prioritization process described in this proposal will be sufficiently rigorous so that any properties identified as priorities would automatically qualify for funding through BPA? If the later is the objective, then the acquisition implementation plan becomes the critical element in the program and should receive a thorough technical review.

2) *2009 Request: In either case, within the proposal, more explanation is needed on the quantitative anticipated benefits to fish and wildlife in terms of protection or restoration of productivity, abundance, diversity, and spatial structure (presumably from EDT/QHA estimates).*

The response, especially the addendum, does provide an indication of the potential biological benefits of correcting certain habitat problems. The response also indicates that acquisition of the highest priority properties within the Grande Ronde would result in a 28% productivity improvement for spring Chinook over a 10-year period based on the application of the "Hillman Method." The fact that neither the specific parcels, nor the total acreage under consideration for acquisition, was provided for this review makes it difficult to judge whether the estimate of biological benefit is realistic. Nonetheless, in order to achieve this improvement in salmon/steelhead populations in the Grande Ronde, all the high priority properties would have to be acquired or otherwise protected. An evaluation of the likelihood of this being achieved, and of the relative benefit to the fish if only a fraction of the high priority sites can be secured, would provide a more complete and realistic perspective of the possible biological gains. In addition, an accompanying expression of uncertainty in these estimates should be provided and these expressions of uncertainty should be more explicit than the relatively undefined "high",

"moderate", and "low" certainty categories that appear in the Action Implementation portions of the restoration tables. Quantitative predictions of biological benefits are needed, but expressions of uncertainty are needed too, and it may turn out that there is considerably less doubt about the outcomes of some conservation actions than of others. In addition, benefits to abundance, diversity, and spatial structure – the other VSP components – should also be explicitly addressed.

3) *2009 Request: Some indication is needed of (a) the prioritization of the four subbasins – Grande Ronde, Umatilla, Walla Walla, and John Day – that are components of the acquisitions and (b) the anticipated extent of the acreage to be acquired.*

The response indicates that the Grande Ronde enjoys the highest priority among the four subbasins, with the others apparently considered of equal priority. Given that the Grande Ronde has the highest potential to contribute to the recovery of Snake River Chinook, this ranking seems appropriate. The inability for the project proponents to provide information on the locations being considered for acquisition does compromise the ISRP's ability to conduct a thorough technical assessment of the proposal. It would seem that an acreage total, without any indication of specific parcels, would be information that could be shared without violating confidentiality. But total acreage alone would not provide all the information required for a technical evaluation of this program.

One item in the response to this comment caused some confusion. The project proponents note, "*CTUIR is laying out a framework on how they will prioritize properties for potential acquisition throughout their Ceded Lands*." Is this proposal requesting funding to support the development of this framework or is the framework mentioned in this sentence separate from the prioritization process described in the proposal? If these are separate processes, how will activities be coordinated?

4) *2009 Request: Priority areas identified in the Subbasin Plans and by EDT need to be discussed in some detail, including expected gains in production and abundance resulting from the acquisitions.*

The addendum to the response does provide additional information regarding limiting factors and restoration or preservation potential, but these possible benefits are expressed qualitatively. As noted above, the "Hillman Method" was used to assess potential benefits for the Grande Ronde if all high priority areas were acquired and restored. However, it is not clear whether an estimate of benefit associated with the acquisition of a subset of priority properties in the Grande Ronde was conducted. Nor is there any indication of whether or not a quantitative assessment of potential biological benefit was conducted for the John Day, Walla Walla and Umatilla subbasins. As priority will be placed on acquisitions within the Grande Ronde subbasin, potential biological benefit estimates for the other three subbasins is not as critical. But if projects are to be implemented outside the Grande Ronde subbasin, this type of

analysis would be valuable in the prioritization process and very useful in the development of an acquisition implementation plan.

5) *More detailed discussion is needed of how scoring of criteria would be done (expert opinion, data analysis, EDT or QHA, etc.)*

The response indicates that the third tier scoring will be conducted by a group with local knowledge of the project area and EDT or QHA are tools that may be employed. There will necessarily be some subjectivity involved in the scoring process as complete data for all the criteria (or EDT/QHA parameters) are not available for all possible acquisition locations. This approach is reasonable as a starting point but an RM&E program assessing the effectiveness of these projects should be established to adaptively improve the scoring criteria and process over time. The RM&E program will need to address questions specific to the acquired sites to enable the prioritization process to improve over time.

6) *More details and definitions are needed for Criteria 3.*

The detail provided in the response about this criterion clarifies "long term defensibility of the conservation values" for an acquired site. Likely future status of a site, given the land-use context in which it is located, is an important consideration for the long-term contribution an acquisition will make to salmon and steelhead recovery.

7) *A list and relatively detailed description of sites that will be acquired or have the potential for acquisition, in so far as they are known, should be provided in the proposal or an acquisition plan. This list would aid in understanding the general characteristics of the types of areas that would be acquired under this project, and why they have been selected. (If necessary this list could remain confidential and will not be distributed beyond the ISRP.*)

The inability to provide examples of the types of properties that are likely to be considered for acquisition makes an evaluation of the potential value of this program to anadromous fish difficult to assess. The ISRP appreciates the confidentiality concerns of including specific information in the proposal. As noted above, a possible remedy for this problem would be to generate individual proposals for acquisitions of each parcel, or groups of related parcels, once negotiations with landowners have progressed to the point where confidentiality is no longer an issue. It may be that this was the intent of the project sponsors, but the proposal does not clearly indicate that technical review of each acquisition target in the future was a component of the acquisition process. If a description of the potential sites, their priority, and anticipated quantitative benefits for spring Chinook is unavailable for independent review before acquisition because of concerns that this might jeopardize sale negotiations, then at minimum this information needs to be recorded in the final acquisition justification and documentation.

This will facilitate retrospective evaluation and review of the success of the acquisition program.

*8) Develop a monitoring and evaluation framework.*

The response to ISRP concerns about RM&E associated with acquisitions is incomplete. Some description of how the existing monitoring efforts in these four subbasins will provide information indicating the effectiveness of the acquisition parcels should have been included. These acquisition efforts will not be the only restoration activities occurring in these subbasins. Presumably, habitat restoration projects will be occurring throughout the area and many of these projects will not be at locations acquired through this program. Therefore, fish population metrics expressed at a subbasin or watershed scale cannot provide an indication of the effectiveness of the acquisition program. Some monitoring at the acquired sites will be necessary to determine if these locations are providing the anticipated benefits to the focal species. The site-specific data collection should be coordinated with larger-scale assessment programs to provide some indication of the contribution the acquired sites are making to overall population performance. The final proponent/BPA documents authorizing acquisition should include quantitative expectations regarding fish habitat conditions and salmon VSP metrics from acquisition, along with an explicit method of assessing whether the physical habitat and salmon VSP metric objectives were achieved.