



**Independent Scientific Review Panel**  
for the Northwest Power & Conservation Council  
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**Memorandum (ISRP 2010-5)**

**January 27, 2010**

**To:** Tony Grover, Director, Fish and Wildlife Division, Northwest Power and Conservation Council

**From:** Eric Loudenslager, ISRP Chair

**Subject:** Review of Idaho Office of Species Conservation's Accord Proposal, Upper Lemhi River – Acquisition (#2008-601-00) - Response Request

At the Council's January 4 request, the ISRP reviewed the Idaho Office of Species Conservation's Accord proposal, *Upper Lemhi River – Acquisition (#2008-601-00)*. The project intends to permanently protect in-stream and riparian habitat, improve river flow in the Lemhi River, and assist in reconnecting tributary streams to the Lemhi River to benefit all life stages of Snake River spring/summer-run Chinook and Snake River steelhead. Conservation easement and fee simple acquisitions are being pursued on approximately 9,086 acres of the Tyler Ranch, 1,354 acres of the Cottom Ranch, the 1,000 acre Beyeler Ranch, and the 608 acre Kenney Creek Ranch in the Lemhi River watershed.

The ISRP's review follows below.

### **ISRP Recommendation and Review Summary**

#### *Response Requested (in the form of a revised proposal)*

There seems to be a high probability that the acquisitions/easements proposed for this project will benefit anadromous fish populations in the Lemhi River. Increasing flow in tributaries and reconnecting them with the mainstem Lemhi River alone may confer very substantial benefits. However, there was not enough detail provided in the proposal to conduct a thorough technical assessment. In addition, the closely linked nature of this proposal for acquisitions and conservation easements with the project that will implement restoration actions at these sites (Upper Lemhi River Restoration Project #2008-602-00) suggests that the two projects should be reviewed in tandem or combined into a single project. In addition, the following items should be included in a revised proposal:

- A set of maps that clearly indicates the location of the project properties and the location of the restoration projects to be implemented on the properties
- More detail on the guidance given to those who participated in prioritizing acquisition/easement projects
- A list of scores for all properties assessed and an explanation why the selected properties were considered the best options

- More detail on how improvements in Chinook and steelhead egg-smolt survival rates were estimated
- A description of how the proportion of a limiting factor within the watershed addressed with the application of each restoration action was estimated and how these improvements are translated into benefits for the fish
- A better description of the linkage between this project and ISEMP and other ongoing M&E efforts in the Lemhi watershed
- A clear description of the role each participating organization plays in this project

## ISRP Comments

### *1. Technical Justification, Program Significance and Consistency, and Project Relationships (sections B-D)*

It seems likely that the acquisitions and conservation easements described in this proposal, in conjunction with the habitat restoration actions in the Upper Lemhi River Restoration Project (BPA 2008-602-00), would have a significant positive impact on anadromous fishes in the Lemhi River watershed. It would be a significant achievement to have the Lemhi system once again functioning to produce wild Chinook and steelhead. The proposal states that this project will achieve the following objectives:

“...the following environmental objectives could be achieved with the implementation of the Upper Lemhi River Acquisition Project:

- Rehabilitation of natural hydrograph
- Reconnection of tributaries throughout the watershed
- Improved irrigation efficiency
- Improved riparian habitat function
- Improved riparian habitat quantity and quality
- Reduction of sedimentation
- Improved resident and anadromous migration at diversions
- Improved irrigation conveyance”

Clearly, achieving these goals would represent a significant improvement in habitat conditions in the watershed. However, insufficient information was provided in the proposal to provide a clear picture of how the proposed acquisition actions would enable attainment of these objectives. The proposal also needs more detail on other projects planned for the Lemhi River – does the work described in this proposal and the Upper Lemhi River Restoration Project represent the bulk of activities in the watershed or is this just part of a larger effort? What’s the overall plan? What is the basis for believing that complete restoration of the watershed is achievable? The proposal does not address these questions.

The proposal proponents used a prioritization process to select acquisition/easement targets in the Lemhi watershed. The process assigns a rank to the severity of a given limiting factor and the extent to which this factor will be addressed by a given acquisition/easement project (Figure 2). There also is a score provided for the benefit to anadromous fishes. The elements included in the ranking form appear to be appropriate for prioritizing restoration projects. The scores entered into the rating form are subjective and based solely on “professional judgment.” A subjective

ranking process can be useful in prioritizing restoration actions but it is much more reliable if clear guidance regarding the assignment of scores is provided. The criteria used for prioritization should be accompanied by a detailed description of how these criteria should be evaluated and ranked in order to ensure that this process is consistent among scorers and sites. The proposal does not indicate if any such guidance for the scoring process was provided prior to the application of this process. If scorers received guidance of this type, including it in the proposal would increase the support for the validity of this procedure.

The proposal also does not present the actual scores for the prioritization process. Presumably, the sites chosen for the proposal ranked near the top of a list of sites evaluated. However, no information is provided to support this conclusion. A table that provides the scores would have helped to support the selection of the properties included in the proposal and address the concern that these sites were chosen largely because of willing landowners.

The proposal would have benefited greatly from a map that indicated the location of the acquisition/easement properties. The proposal includes multiple properties for acquisition/easements and outlines a number of restoration actions to be implemented at these sites. However, the proposal creates the impression that the sites to be obtained represent a relatively small proportion of the area in the upper Lemhi River watershed (although insufficient information is provided on this point). The proposal provides no indication of how the projects complement one another. A set of detailed maps would have greatly helped to illustrate the distribution and extent of the acquisition/easement sites.

The abstract for the proposal concludes with a statement that NOAA estimates that this project will improve egg to smolt survival in Lemhi River by 16% for Chinook and 5% for steelhead. The derivation of this anticipated benefit is not presented in Section B. Problem Statement. Instead, readers are referred to Appendix B. This appendix consists of two large, cryptically labeled tables. Apparently these tables were part of a NOAA report (possibly some of the work that was done in developing the 2008 BiOp). However, the meaning of the information in these tables is indecipherable without some description of how these values were derived and what they mean.

At a minimum the following should be added:

- a brief description in the text as to how the estimates were made
- some additional information in the legends of the Appendix B tables that would enable the reader to understand what the values represent
- a link or reference to the report from which this information was derived

The technical background section also would be improved if it provided the current abundance and survival of the focal species and what they are projected to be after acquiring the properties and rehabilitating the habitat. Representing the anticipated benefits for Chinook and steelhead using metrics consistent with the Viable Salmonid Populations protocols would provide the most complete indication of the potential effectiveness of this project relative to ESA concerns associated with the affected ESUs.

## *2. Objectives, Work Elements, and Methods (section F)*

The objectives provided in the proposal are inextricably linked with those of a companion project, Upper Lemhi River Restoration Project (2008-602-00). The ISRP recognizes and agrees that the meaningful conservation objectives related to this acquisition/easement project are those that can be achieved only after the lands are restored. Separating the objectives related to the acquisition of the land from those associated with the application of corrective actions makes it very difficult to determine whether or not the objectives provided in this acquisition proposal will be achieved. Therefore, a detailed description of the proposed restoration actions under the Upper Lemhi River Restoration Project (2008-602-00)<sup>1</sup> is needed to assess the likelihood of success of the acquisition/easement phase of this project. A revised version of this acquisition proposal and a proposal for the Upper Lemhi River Restoration Project that includes the actions to be taken on the new properties should be reviewed as a single proposal or a linked package.

The organization of the objectives section is somewhat confusing. The same objectives are repeated for multiple assessment units and limiting factors. In some cases, the same actions are predicted to provide benefits to multiple locations in the watershed. Also, the assessment units associated with the objectives are different from those that were used in the prioritization process (indicated in Figure 4). A great deal of this confusion could be addressed by including a detailed map of the Lemhi watershed that indicates where the acquisition/easement properties are located. The map also should include all the tributaries that are included in the proposal (at least two tributaries, Lee Creek and Carmen Creek are not indicated on the current map (Figure 1)). Also, detailed maps of each acquisition site indicating where the various restoration actions will be implemented would be very useful.

The objectives section also indicates the proportion of a limiting factor within the watershed that would be addressed with the application of each restoration action. Information is needed as to how these values were derived. Also needed is an indication of the extent to which specific environmental attributes (summer water temperature, winter concealment cover, etc.) would be improved. It was not clear from the proposal analysis whether marginal improvements in limiting factors at a number of locations scattered throughout the upper Lemhi River would improve conditions enough to generate benefits for the fish in life-stage survival, habitat capacity or production potential. Quantification of benefits associated with this project enhances the argument in favor of its implementation. However, without some supporting information on the derivation of these values and what they mean for fish production, it is not possible to assess the validity of these improvement estimates.

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<sup>1</sup> Habitat restoration actions in the Lemhi River were reviewed (qualified) by the ISRP in the 2007/2009 solicitation (reviewed and recommended under Project #1992-026-03, Upper Salmon Basin Watershed Project, which was subsequently merged as Project #2007-394-00, Idaho Watershed Habitat Restoration-Lemhi District, which has a broader scope than just the Lemhi and is implemented by the Idaho Office of Species Conservation). The ISRP concerns with project #1992-026-03 were largely related to inadequacies in the proposed monitoring component. The restoration work elements to be implemented under (#2008-602-00) on the lands acquired through the current project (#2008-601-00) are new and were not described in the 2007/2009 solicitation. The proposal section on relationships to other projects would be improved by a better description of this history and the relationship between the two new Accord projects and the existing restoration projects.

Involvement of The Nature Conservancy staff is a strength of this proposal. However, it is not specified in the proposal what their role will be. The role to be played by the various collaborators in the project should be clearly defined.

### *3. M&E (section G, and F)*

Description of the M&E effort that will accompany this project is incomplete. Compliance M&E for this project will be addressed using a Nature Conservancy developed process for ensuring that landowners comply with the terms of conservation easements. This approach seems very appropriate for addressing this specific monitoring need but it will not provide information on the habitat conditions that are to be protected or created on the properties included in this proposal. The Nature Conservancy form should be cross-checked with metrics developed for PISCES to ensure that the compliance assessment is comprehensive.

Effectiveness monitoring related to habitat and fish population response will be incorporated into the Integrated Status and Effectiveness Monitoring Program (ISEMP) process. ISEMP would be able to adequately assess the effect of the restoration efforts included in the acquisition and restoration of the lands included in this proposal. However, it seems likely that some alteration or expansion of the current ISEMP design would be required to ensure that the project locations are included in the ISEMP assessment efforts. No detail was provided as to what changes in ISEMP would be required and whether including the treatments associated with this project in ISEMP would necessitate an expansion of the ISEMP program. More detail on the link between this project and ISEMP project is required to assess the adequacy of the M&E effort.

It also seems that other BPA-funded projects (e.g., Idaho Supplementation Studies 1989-098-00 and Idaho Natural Production Monitoring 1991-073-00) that have been ongoing in this watershed and should be collecting information relevant to the project. However, these potential relationships were not addressed in the proposal.

Finally, a substantial effort was undertaken last autumn to coordinate fish counting and habitat condition monitoring to support the 2008 BiOp and the Fish and Wildlife Program. As this is a BiOp project, the proposal should reference the outcome of that effort and indicate how much, if any, of the monitoring is (or will be) covered by the basinwide framework.