



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 2010-32)

September 29, 2010

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

From: Eric Loudenslager, ISRP Chair

Subject: Response Request for Montana Accord Proposal, Secure and Protect Core Fisheries Habitat in the Swan River Valley (#2008-800-00)

Background

At the Council's August 26 request, the ISRP reviewed a proposal by Montana Fish, Wildlife and Parks' (MFWP) titled *Secure and Protect Core Fisheries Habitat in the Swan River Valley*. MFWP proposes to acquire fee ownership on spawning and rearing tributaries within the Swan River Valley and thus to provide BPA with mitigation credits for approved fish losses caused by construction of Hungry Horse Dam.

ISRP Recommendation

Response Requested

The ISRP requests a response that provides the following:

1. More background information regarding the status of the two focal fish species specifically related to scales of a) major population group (MPG), b) distinct population segment (DPS), and c) local watershed.
2. A clearer statement of scientific rationale for the particular parcels to be acquired in relation to life histories of the focal species and of watershed ecological function.
3. The protection prioritization of the chosen watersheds for bull and west-slope cutthroat trout in state or federal recovery, management, or subbasin plans.
4. Metrics that can be used to evaluate the acquisition in terms of watershed ecological function and fish species status, and a monitoring plan to collect and evaluate the metrics. The response should also give some indication of the crediting provided for the losses attributed to the Hungry Horse mitigation.

Summary

This proposal outlines an important effort that would likely provide important habitat stability for bull trout, cutthroat trout, and several other key species in a sensitive area potentially threatened with imminent development. The threat of development in the area suggests that a timely response is needed while the habitat remains largely intact. The proponents outlined general factors justifying acquisition but should better link the selected parcels to specific needs of the focal species. This linkage can and should be accomplished to more effectively present the ecological (i.e., scientific) rationale for the proposed acquisitions. For bull trout, there is a long-term data base of annual redd counts, but nothing is included for cutthroat other than the statement of the risk of hybridization with rainbow trout and a map of existing populations. The justification in the current proposal is that this watershed is one of very few that has a creel for bull trout. Insufficient justification is provided for west-slope cutthroat trout. The proposal should establish the importance of this watershed to existing management plans for these focal species. The authors state that this acquisition will address many limiting factors identified in the subbasin plans, but the detail is insufficient to evaluate the level of remediation that might be accomplished.

An additional concern is the issue of the very real potential of logging on the land to be purchased and the lack of supporting evidence that timber harvesting methods (leave strips, etc.) will protect ecological values. An assumption is made that “modern” timber harvesting practices will prevent habitat degradation; however, no citations or data are provided to support that assumption.

Insufficient information is provided on monitoring. More information is needed on the baseline status of bull and west-slope cutthroat trout. The metrics used for monitoring needs to be included, along with the methods to collect and analyze the data and how responses may be detected. The only monitoring mentioned was ongoing annual redd counts for bull trout. No specifics are given for monitoring westslope cutthroat status related to hybridization risk with rainbow trout or other population status metrics.

ISRP Comments

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

This proposed effort appears to have the potential to provide important habitat acquisition for bull trout, cutthroat trout, and other aquatic and terrestrial biota in a basin where significant populations of sensitive species remain. In particular, bull trout have been shown in numerous studies in Montana and elsewhere to be often migratory (fluvial potamodromous, adfluvial, etc), thereby using a range of habitats, from larger waters (lakes, main channel habitat) for feeding and overwintering to the smallest headwater tributaries for spawning. The checkerboard land ownership and resulting checkerboard of land management objectives may be anathema to effective management of such migratory species with complex habitat

requirements at different life stages. Based on this rationale, the proposed activities would be of benefit to bull trout and many other species as well.

The actual justification as presented by the proponents could be improved significantly by more clearly outlining these specific benefits, especially linked to the life histories of the species in question. This was done only in the most general way.

The program fits in with subbasin planning and additional fish habitat conservation agencies in the Flathead Valley. Protection of bull trout and westslope cutthroat habitat is a priority issue for the Columbia River Basin. The proponents have good working relationships with a variety of conservation groups working in the area.

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

The proposal could be greatly improved by presenting a clearer picture, on an appropriately scaled, well thought out map or two, of exactly where the parcels to be obtained are located within the Swan River Drainage (if not confidential). It appears that, in all, 4,300 acres are involved. It is clear where the 640 acre parcel in the Elk Creek drainage is located, but it is not clear where the others are, except through their coordinates. There are several maps presented in the proposal, but they are generalized, pasted maps, and do not clarify the situation. Are the lands in the lower areas of basins and subbasins or higher up?

Secondly, it would have been very useful if the proponents would have included a few well-chosen photos of not only the habitats in question but perhaps a few photos of key habitat features critical to the species of interest, i.e., at least bull trout and cutthroat trout.

Third, it would have been useful if the proponents had specifically outlined not only the kinds of habitat that are associated with the specific parcels but what role these parcels play in the life history of the bull trout and cutthroat trout (at least those species, if not other aquatic and terrestrial species). For example, it seems reasonable, from the map at least, that the 640-acre parcel on Elk Creek includes some typical staging water for bull trout and perhaps for cutthroat trout. We cannot tell if they are high enough for spawning habitat, but that could be the case and that information could have been provided also. Although it is clear that these species are often migratory and may move through these areas, some information on their role in the life histories of key species is important in clarifying and specifying the importance of these parcels. That is, in the words of the proponents, what exactly makes this core habitat? Some information must be available (after years of redd surveys) on the typical and primary usages of these habitats by key life stages of the species of interest.

The proposal would also benefit greatly from a more precise description of methods used to obtain the data used to justify the plan. For example, Figure 1 caption states that poor survey conditions in 2004 and 2008 resulted in low bull trout redd counts, but no information on how the surveys were done is presented. Figure 7 (which should be labeled Figure 6) shows a recent increase in substrate score, but it is not clear if this is an improvement. The proposal

emphasizes spawning habitat as a limiting factor. However, it is also likely that juvenile rearing habitat is important, but no information is given on this.

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

More specific information is needed on how the benefits of acquiring these parcels would be assessed. The proposal discusses this only in the most general way. Are there any such assessment plans? The North Fork and Middle Fork are mentioned as “reference” streams for Swan Valley bull trout redd counts, but insufficient information is provided on the three streams similarities. Statistical methods such as power analyses and spatial analyses (e.g., how station locations were chosen) are not provided.

A time frame is not given for the monitoring. Will MFWP continue funding for this component after acquisition?