



Independent Scientific Review Panel
for the Northwest Power & Conservation Council
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Memorandum (ISRP 2009-31)

July 24, 2009

To: W. Bill Booth, Council Chair
From: Eric Loudenslager, ISRP Chair
Subject: Review of Idaho Department of Fish and Game's Revised Southern Idaho Wildlife Mitigation projects (1995-057-00 and -01)

Background

At the Council's July 2, 2009 request, the ISRP reviewed Idaho Department of Fish and Game's revised proposals for the Southern Idaho Wildlife Mitigation projects for the Upper Snake (1995-057-00) and the Middle Snake (1995-057-01). These proposals were revised in response to our recommendations in our May 2009 report, *Wildlife Category Review: Final Review of 2009 Proposals* (ISRP 2009-17¹).

General Comments on Both Projects

The revisions show a genuine effort to more directly address the questions posed in the original solicitation. Statements about outstanding habitat units (HUs) and calculations from tables are confusing, but it appears there is around 65% outstanding mitigation debt between the two subbasins, with the greater percentage (~ 82%) in the Middle Snake. Project justification is primarily programmatic, and the technical justification and strategy for acquisitions is adequate. The revised objectives are much more useful than previous versions. Irregular numbers and letters could be an editorial issue or could indicate missing material. It would be helpful to have this clarified. Objectives related to coordination, reporting, and acquisitions are sufficiently improved. Those relating to actual management activities, though improved are still weak—objectives are quantified, but methods and metrics are often lacking. This is more so for the Middle Snake than the Upper Snake. The proponents should consider linking vehicle-based recreation to weed management as a means of limiting future introductions and expansion of weed populations.

More complete scientific justification is needed for the management and operations components of both projects. The proponents are more explicit than previously about their lack of effectiveness monitoring to date and that no such monitoring is anticipated unless separate funding is provided in a future request. Effectiveness monitoring is a necessary component in habitat management and improvement activities. Without it, it becomes impossible to use adaptive management to inform and modify treatment actions designed to reach the project goals

¹ www.nwcouncil.org/library/isrp/isrp2009-17.htm

and objectives. Adaptive management increases the likelihood that the project will succeed and justify the original investment in the project. Finally, the proponents' statements about effectiveness monitoring and their reluctance to initiate it without direction (and additional funding) suggest that clarification on the role and importance of M&E in wildlife studies is still needed from higher up (IDFG, BPA, NPCC).

The proponents clarified their intent to use some of Unnasch et al's 2003 protocols for monitoring. Discussions of weed mapping and follow-up after treatments suggest some data are available that might document the success of these efforts, but as these are not reported, no such success can be assumed. Nor are any references cited that would help determine if the methods used are adequate. Yet, vegetation management is identified as an important component of the projects. Apparently HEP data are being relied upon for this purpose although these data are not adequate for adaptive management. Evidence of adaptive management is not provided, although some of these parcels have been under management for over a decade, nor is there evidence that the current management is achieving project objectives, especially given the current and proposed amount of herbicide use. What is the science supporting passive management?

It appears the proponents hope to negotiate a settlement of mitigation debt in the near future. If the projects move into a negotiated settlement, the ISRP expects that the issues raised in this review, particularly that of effectiveness monitoring, will be addressed in the settlement process and by the proponents of the ongoing projects.

Middle Snake Project (199505701)

Recommendation: Meets scientific review criteria (qualified)

Qualified by a request that any future proposal include a review of recent literature and monitoring data supporting proposed biological O&M activities (e.g., weed treatments, plantings, not fences). Future proposals should also provide greater detail on methods for weed control on the various properties as well as presentation of results-to-date from ongoing weed control activities and how those results (garnered through an effectiveness monitoring program) may have adaptively modified the weed control programs.

Specific Comments

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

IDFG provided a good summary of the Southern Idaho Wildlife Mitigation (SIWM) program including priorities and approach, the crediting system, and where acquisitions now stand. Most of these sections were revised satisfactorily, except that the scientific justification for management is still lacking. The project proponents reported that Tier 2 monitoring has been designed for the Idaho Mitigation Program but has not been implemented due to BPA contract limits, organizational and logistical limitations, and funding. It is noteworthy that IDFG perceives a low priority of the Wildlife Program at the Council and BPA, especially in view of the outstanding mitigation debt remaining (82% for Middle Snake).

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

Objectives, work elements, and methods are considerably improved from the earlier proposal; however, statements remain throughout that are general and sweeping, rather than providing specifics on treatments and locations. Similarly, results are not presented to support ongoing or proposed actions. Specific acres to be treated, planted, surveyed, and inspected were listed for the specific locations. Target wildlife species and general approaches to be used were listed.

The weed issue is important and mentioned many times; however, when it comes to specifics the standard statement was “water levels and conditions dictate methods.” The statement is probably true, but some specifics under various conditions could have been listed. In at least one case, GIS mapping of noxious weed occurrence, including treatment and results of control efforts, is mentioned (Boise River). Also mentioned is a survey of priority areas to detect new weed occurrences, and the mention of photo points to monitor vegetation change. These later points are all very positive statements. An integrated “weed” management approach is proposed only for the Boise River unit, but not the others. Why is this? No surveillance or other IPM strategies are explicit in other units. Why are cattails being sprayed? Riparian inventory data would be useful to report as a baseline from which to evaluate future conditions. Likewise, progress of 2007 willow plantings and measures or other indicators of success in ditch restoration activities should be reported. What was planted on CRP land and how successful has that planting been?

Irrigation management to restore wetland conditions is discussed for the Centennial Marsh property, but there are no data about vegetation change that might be used to evaluate the success of the sponsor’s strategy.

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

The monitoring section was rather superficial and appeared to reflect general language from the ISRP on Tier 1-3 monitoring, rather than describing an explicit coordinated monitoring plan. The project proponents indicate that a Tier 2 Monitoring Plan has been designed for the IDFG Mitigation Program but has not been implemented. There are bits and pieces of M&E listed in the report (e.g., photo plots, vegetation monitoring plots, evaluation of weed treatment, and results of control efforts), but no major efforts are being made to evaluate wildlife responses to mitigation efforts (positive or negative) or results of weed control activities (success, partial success, failure).

There does not appear to be any intent to conduct effectiveness monitoring at this time. Some bird observations were made in 2007 (see progress report). It is not clear when or if these will be repeated.

4. Overall Comments - Benefit to F&W (all proposal)

In the project’s present form, some benefits to wildlife can be assumed, but evidence is lacking that benefits are being maximized or even optimized. Most efforts are aimed at generalist and game species with some incidental benefits assumed to species that do well alongside this particular suite of species. Current management is unlikely to benefit some of the target species.

The revised project has now listed some more specific objectives for the various areas, which seem logical; however, they need to implement their M&E Program (and preferably on a broad

scale) to assess the responses (both wildlife and vegetation) to the management activities. Then, adaptive management can play the role that it needs to play for further development of the project.

Upper Snake Project (199505700)

Recommendation: Meets scientific review criteria (qualified)

Qualified by a request that any future proposal include a review of recent literature and monitoring data supporting proposed biological O&M activities (e.g., weed treatments, plantings, not fences). Future proposals should also provide greater detail on methods for weed control on the various properties as well as presentation of results-to-date from ongoing weed control activities and how those results (garnered through an effectiveness monitoring program) may have adaptively modified the weed control programs.

Specific Comments

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

The proponents' response (revised proposal) and our comments are essentially the same as for the Middle Snake proposal. The project is adequately justified, except that scientific justification for management is still lacking. More activity has taken place on the Upper Snake with only 41% of mitigation debt remaining.

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

A much more sophisticated approach to invasive plants is apparent at Deer Parks. It would be useful to quantify results. Some very specific objectives were described for specific parcels of land including provision of artificial nesting sites, control of nuisance animals, Russian olive removal, weed control efforts, cottonwood plantings, and other vegetation modifications. Included was some biological weed control that apparently was successful—it would have been useful to have some data to quantify the success! Also, some general, but not quantitative findings were reported about success and failure of tree planting activities.

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

See general comments above on the Middle Snake proposal, 199505701. IDFG should establish an M&E Program based on Unnasch et al (2003). Their basic approach is already developed for IDFG mitigation lands. The proponents also still need more efforts to evaluate weed control projects, which are expensive—especially when the long-term success or failure of the projects is unknown.

4. Overall Comments - Benefit to F&W (all proposal)

Same overall comments apply as for the Middle Snake. Some benefits to wildlife can be assumed, but evidence is lacking that benefits are being maximized or even optimized. Most

efforts are aimed at generalist and game species with some incidental benefits assumed to species that do well alongside this particular suite of species. Current management is unlikely to benefit some of the target species.

The revised project has now listed some more specific objectives for the various areas, which seem logical; however, the proponents need to implement their M&E Program (and preferably on a broad scale) to assess the responses (of both wildlife and vegetation) to the management activities. Then, adaptive management can play the role that it needs to play for further development of the project.