ISRP INDEPENDENT SCIENTIFIC REVIEW PANEL

FOR THE NORTHWEST POWER AND CONSERVATION COUNCIL PORTLAND · NWCOUNCIL.ORG/ISRP

Memorandum (ISRP 2026-2) **June 10, 2026**

To: Mike Milburn, Chair, Northwest Power and Conservation Council

From: Pat Connolly and Tom Turner, ISRP Co-Chairs

Subject: Follow-up Review of a Revised Proposal for the U.S. Forest Service Project, Pacific Northwest Aquatic Restoration Partnership in the John Day River Basin (#2023-004-00)

Background

In response to the Northwest Power and Conservation Council's request on March 20, 2026, the ISRP reviewed a revised proposal for a project from the U.S. Forest Service (USFS), titled *Pacific Northwest Aquatic Restoration Partnership in the John Day River Basin* (BPA project #2023-004-00). The USFS revised the proposal in response to the ISRP's review of the project's original proposal (ISRP document 2024-1; November 18, 2024).

As described in the original USFS proposal and proposal submittal letter from BPA (September 18, 2024), the project was funded to implement a 2022 Memorandum of Understanding (MOU) between BPA and the USFS to work toward recovery of salmon, steelhead, and bull trout populations in the Columbia River Basin through targeted habitat restoration actions in the John Day River Basin, Oregon. The John Day River is the fourth longest free-flowing river in the contiguous United States, providing habitat for Chinook salmon, steelhead, bull trout, westslope cutthroat trout, and Pacific lamprey. The project's goal is to increase the scale of active habitat restoration and fish passage restoration within selected priority watersheds of the John Day Basin over a five-year period with up to $10 million investment while leveraging existing partnerships and cost share funding. Project delays have extended the project timeline to six years from FY 2023 – 2028.

The USFS and BPA have identified priority fish passage barriers and floodplain reconnection projects in the upper John Day Basin, using the USFS Watershed Condition Framework and BPA Atlas Framework assessments. The USFS and BPA agreed to apply resources to support design and implementation of these prioritized projects across three

National Forests (Malheur, Umatilla, Wallowa-Whitman) in the John Day Basin. In some cases, the funding provided is used to implement the USFS portion of already planned, ongoing, or joint projects with Tribal and other partners in the Basin. The USFS-BPA agreement focuses on implementation and does not provide research, monitoring, or evaluation funding because the agreement states that those efforts "shall be funded by the USFS or coordinated with other BPA funded monitoring projects in the basin."

In its November 2024 review, the ISRP found that although the project had the potential to provide significant benefits to anadromous salmonids and bull trout in the John Day Basin, the proposal was incomplete and lacked adequate detail, information, and depth for the ISRP to clearly understand and assess if the proposed actions were based on sound scientific principles and will result in the assumed benefits. Consequently, the ISRP requested a response and a revised proposal addressing comments related to SMART objectives, methods, provisions for monitoring and evaluation, and a project adjustment process. The ISRP identified two proposals from the ISRP's Anadromous Fish Habitat and Hatchery Category Review (ISRP 2022-1) as examples as to what is an appropriate amount of detail for their proposal: the Confederated Tribes of the Warm Springs Reservation of Oregon (CTWSRO) *John Day Watershed Restoration* project (2007-397-00) for its overall approach to restoration in the John Day Basin, and *Columbia Land Trust Estuarine Restoration* (2010-073-00), for its SMART objectives.

On March 19, 2026, the USFS provided the following response review materials to the Council:

- Cover email from USFS, copied with Bonneville COR (reflecting review by Bonneville) – containing the following.
    - Revised proposal template for Project #2023-004-00, *Pacific Northwest Aquatic Restoration Partnership in the John Day River Basin*. (Word, 29 pages)
    - Camp Creek Reach 1 Channel Reconstruction Project: ARBO II Restoration Review Team Project Documentation. (pdf, 60 pages)

Our review of the revised proposal and supporting documentation follows the organization of our original 2024 review highlighting the critical review elements.

ISRP Review Recommendation

Meets scientific review criteria (conditional)

The proponents provided a complete re-write of the proposal but did not provide the requested point-by-point response identifying how each ISRP response comment was

addressed in the revised proposal or supplemental documents. It was challenging to identify where the ISRP comments were addressed in the new proposal, the supplemental material provided, and additional documents that the ISRP tracked down and reviewed.

Although a considerable number of project issues and challenges remain, the ISRP is optimistic that the project has the potential to provide significant benefits to anadromous salmonids and bull trout in the John Day Basin for numerous reasons:

- The project is being implemented in critical habitat for anadromous salmonids and bull trout in the John Day Basin, an important stronghold in the Columbia River Basin.
- The project is a component of an extensive multi-entity partnership and large-scale restoration and monitoring efforts in the John Day River Basin (e.g., Intensively Monitored Watershed (IMW), Mid-Columbia Steelhead Recovery Plan implementation, and the Council's Fish and Wildlife Program).
- The Aquatic Organism Passage (AOP) projects are being designed with the Stream Simulation Manual, which represents a solid approach to road culvert replacement.
- The project prioritization and selection methods appear to be solid (Atlas and USFS) even though the proposal lacks detail on specific project prioritization results.
- There is extensive habitat restoration effectiveness and population status and trends monitoring underway associated with other projects including the IMW.
- A number of the partners with whom the project collaborates are knowledgeable and have been involved in restoration in the John Day Basin for many years.
- The ISRP Habitat Retrospective Report (ISRP 2025-2) assessed eight restoration methods and concluded that: "removing barriers to restore connectivity and reconnecting side channels, including the estuary, have a strong likelihood of positive benefits for anadromous salmonids."

The project is beyond the half-way point in the total funding time period (FY 2023 – 2028) with only 2.5 years remaining to complete the planned scope of work. Thus, there is limited time available for additional interactions with the ISRP to address the weaknesses that remain with the project proposal. It is important to note that this project did not proceed through the normal sequential review process. Instead, the project was funded and well underway before the project proposal was developed and submitted for review by the ISRP. This deviation from the typical review sequence created significant challenges for the proponents and the ISRP. Consequently, the revised proposal does not adequately convey

many of the sound planning and implementation elements of individual restoration projects that compose the project as a whole.

Some ISRP response requests were adequately addressed in the revised proposal and the extensive supplemental documents that we reviewed (Camp Creek 1 design, Bull Run 80% design, AOP designs, Atlas and USFS prioritization processes, CBFish contract information, Stream Simulation Manual, and the John Day Partnership). However, other important comments were not addressed adequately. The following issues and specific conditions need to be addressed for the project to fully meet scientific review criteria. The ISRP recommends that these issues and conditions be addressed in the project's next annual report.

1. **SMART Objectives.** Goals, biological objectives, and implementation objectives for the floodplain/process-based restoration and AOP projects are scattered throughout multiple planning documents and are not well described in the project proposal. SMART objectives for implementation were not formulated as requested. **Condition – In the next annual report, consolidate the goals, biological objectives, and develop SMART objectives for the overall project and individual restoration projects where appropriate.**
    - No objectives were added for reporting, coordination, adaptive management, and outreach and education. **Condition – In the next annual report, add objectives for these key project elements where applicable.**
2. **Project Selection**. There remains a need for clarity on the factors and elements that were important and justified selecting the specific passage improvement and habitat restoration sites and reaches. **Condition – In the next annual report, include a chapter that describes the biological basis for prioritization and selection of the restoration reaches and passage improvement projects.**
3. **Monitoring and Evaluation.** We recognize that this project is not funded to conduct monitoring and evaluation and these efforts "shall be funded by the USFS or coordinated with other BPA funded monitoring projects in the basin." There is considerable confusion and uncertainty remaining with monitoring and evaluation coordination within the project and implementation by other BPA projects, the IMW, and the USFS. There was no mention of the Columbia Basin Tributary RM&E Strategy or how the Strategy was used to inform monitoring and evaluation conducted by other USFS and BPA projects. It is unclear what monitoring and evaluation is underway or planned for the future and what entities are or will be conducting the monitoring and evaluation. **Condition – In the next annual report, provide a table that lists each AOP and floodplain/natural process restoration project, implementation monitoring metrics, monitoring entity, and time frame.**

Briefly describe how the monitoring plans are consistent with the Columbia Basin Tributary RM&E Strategy.

4. **Adaptive Management.** The project adjustment and adaptive management processes are not clearly described. **Condition – Provide a brief description of the project adjustment and post-project adjustment decision processes in the next annual report.**
5. **Project End Date and Potential Future Review.** Even though this project is scheduled to end in FY 2028, it may be continued to implement some of the postponed projects or implement new projects**. Condition - If this project continues beyond its current timeline, a new complete project proposal that addresses all the ISRP's original comments and the conditions in this review should be completed as needed for future work.**

More detail regarding these issues and conditions is provided below.

Comments on the Revised Proposal Organized by Response Items

The ISRP's 2024 review identified four items for the proponents to address in a response and revised proposal. Our 2024 response request comments are presented below followed by our 2026 comments on the revised proposal. As noted above, the USFS did not provide a point-by-point response to address our response requests.

1. **SMART objectives**

   ISRP 2024 Comment: *Present clear implementation objectives as SMART objectives (see proposal instructions). These objectives should describe the specific steps needed to achieve the project's biological objectives. The proponents should consider adding objectives for coordination, reporting and sharing information, project adjustment and adaptive management, outreach and education, and post project evaluation, if applicable to the project scope.*

ISRP 2026 Comment on Revised Proposal:

A majority of the text in the Goals and Objectives Section of the original proposal was replaced except for the Goal Statement. The stated goal represents an administrative funding objective and provides no information related to the desired qualitative biological outcomes of the project. There are goal statements provided elsewhere in the proposal that better characterize the project's biological goals including: "Restore natural ecological processes that give rise to habitats that are more resilient to annual and long-term environmental stochasticity" and "Reestablish physical processes and proper ecological function that will be essential to reverse declines in native species."

The revised proposal and the Camp Creek 1 report provided SMART objectives for the Camp Creek project. It is difficult to assess if the Camp Creek targets and time frames are overly optimistic or realistic. In particular, channel reconnection/floodplain projects can require a long time frame for effective responses and 5 years is likely too short to measure a response. For example, a stated objective is "increase wetted area or volume during annual peak flow (3,000-5,000 cfs) and during base flow (approx. 250-350 cfs) by at least 50% within 2 years of project completion." It is unclear what the basis is for the establishment of the targets.

The proposal did not provide SMART objectives for the AOP or Bull Run Meadows projects. The proposal states that the Bull Run Meadow project SMART objectives are still in development. Past USFS restoration projects have included SMART implementation objectives for river processes, habitat characteristics, and biological community responses. The example objectives provided in the proposal for primary, secondary, and tertiary responses represent a sound basis for developing SMART objectives for the Bull Run Project. In addition, the 80% Bull Run Meadows Design contains both biological and implementation objectives (called goals) for hydrologic, habitat, geomorphic, riparian, and infrastructure. These objectives along with the example objectives in the proposal should have been synthesized, finalized, and included in the proposal as a coherent set of biological and implementation objectives for Bull Run Meadows.

Regarding the AOP projects, only reporting the number of stream miles reconnected as the sole objective seems shortsighted and limited because numerous differences in geomorphology and biology among the habitats above the barriers will influence the responses and benefits of the individual projects.

We emphasize that SMART objectives are important because they provide an orderly way for project proponents to structure and think about project actions and establish milestones and targets so that progress can be tracked and reported. Most project proposals identify a set of biological and implementation objectives during the planning stages concomitant with selecting and designing specific restoration projects. It is imperative that SMART objectives be developed soon because the project is well underway with only 2.5 years remaining until completion.

We remain concerned that the revised proposal does not include objectives for reporting, coordination, information sharing, adaptive management, outreach and education, and monitoring and evaluation coordination. These work elements are important for project success.

2. **Methods**

    a. **Project selection**

    ISRP 2024 Comment: *Clarify which projects were selected using the USFS Watershed Condition Analysis and BPA Atlas Framework. Do the two project selection approaches yield comparable/consistent results? What factors and elements of the assessments were important for the high priority rankings of the restoration reaches and the specific proposed restoration actions?*

ISRP 2026 Comment on Revised Proposal:

The revised proposal did not provide clarification to address the specific ISRP comments: "Do the USFS and Atlas selection and prioritization approaches yield similar results?" and "What factors and elements of the assessments were important for high priority rankings of the selected restoration reaches and identifying the specific proposed restoration actions?" The Camp Creek 1 Project report does highlight that Camp Creek is identified as a high priority watershed in the Oregon Mid-Columbia Recovery Plan and the John Day Basin Subbasin Plan. In addition, the Camp Creek watershed is one of the highest priority watersheds for protection and restoration in the Pacific Northwest for the USFS.

More clarity is needed regarding why Bull Run Meadows and the specific AOP projects were selected over other options. Clear articulation of the rationale (including the expected benefits to viability of the target species) for selecting the restoration reaches and specific AOP projects is important for reviewing the project merits.

    b. **Passage project design**

    ISRP 2024 Comment: *We appreciate that that the USFS Manual, Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-Stream Crossings will be used for design of passage projects. Summarize the key biological and decision elements from the Stream Simulation Approach protocols that are relevant for each of the passage project's assessment and design in the proposal.*

ISRP 2026 Comment on Revised Proposal:

The decision documents provided for Coxie, Whiskey 1, and Whiskey 2 AOP projects provided additional detailed design information. However, the proponents did not provide summaries of biological and decision elements relevant to each passage project's assessment and design protocols. The Stream Simulation manual is detailed and has been widely used by the USFS. We believe the guidance provided in the manual is solid and will result in successful passage project design and implementation. Given its long use, the simulation method has a substantial amount of monitoring and evaluation documenting

effectiveness.

c. **Restoration project design**

ISRP 2024 Comment: *We understand that the Camp Creek restoration design approach will be applied to the other restoration actions proposed. What elements of the Camp Creek design apply to the other projects? For example, will all other projects follow a similar approach, if not how will the approach be modified and adapted?*

ISRP 2026 Comment on Revised Proposal:

The Floodplain/Process Based Restoration Design and Implementation Section, the 80% Bull Run Meadows design, and the Camp Creek 1 ARBO 11 Restoration Review Project Documentation provided additional information that addressed most of our response comments adequately. The reference to using the Camp Creek design for other projects was removed from the proposal.

The Camp Creek restoration design is a large scale and complicated design specific to unconfined valley bottom habitat. The planned restoration for Reach 1 appears complete, and the Project Documentation Report is comprehensive and provides details covering all elements of the project from planning through implementation stages.

The 80% design report for Bull Run Meadows was also informative and provided information on the biology and hydrology of the site, as well as design components for each of the six diverse restoration reaches. The proposed actions planned for each of the six reaches are highly variable and seem appropriate given substantive differences in habitat characteristics and types of degradation observed across this reach.

The proposal would be much improved if the relevant information provided in the Camp Creek 1 Report and the Bull Run Meadows Design was included in the proposal instead of the lengthy general description of floodplain restoration.

3. **Provisions for monitoring and evaluation**

ISRP 2024 Comment: *Please describe what implementation and effectiveness monitoring information will be collected and evaluated by the USFS and the project's monitoring partners that is relevant to the assessment of this project. Summarize who will monitor the project actions, how the monitoring will be conducted, what data will be collected and how it will be analyzed, who will be funding it, and how the information will be shared. Describe how the monitoring addresses the guidance in the Columbia Basin Tributary RM&E Strategy.*

ISRP 2026 Comment on Revised Proposal:

It is our understanding that the project is not funded to conduct monitoring and evaluation; instead, these efforts are identified as the responsibility of the USFS and other BPA funded projects. We appreciate the additional detail provided for the post-project monitoring and evaluation of the AOP projects using methods described by Herada et al. (2020). Additional detail on who is conducting the AOP monitoring and the time frame for completing and reporting results would be beneficial.

There was limited new information provided to address the multiple ISRP comments related to monitoring and evaluation of the floodplain/process-based restoration. The proposal does not identify monitoring and evaluation coordination objectives or mention the Columbia Basin Tributary RM&E Strategy. The monitoring and evaluation activities planned for the restoration and the AOP projects by the USFS, ODFW, Tribes, and others are confusing and should be described with greater clarity and certainty. We are aware of numerous other RM&E projects underway in the John Day Basin. For example, ODFW Project #2023-007-00 conducts extensive monitoring throughout the John Day system and includes both project/site scale as well as population/basinwide scale monitoring. This large-scale monitoring project could provide insight into the habitat and fish responses at multiple scales.

There are numerous references across multiple sections in the revised proposal and supporting documents that contribute to the confusion including:

- "Post project monitoring is ongoing" – Progress to Date Section, page 5 – Camp Creek Reach 1. No additional detail is provided.
- "Methods used to measure the effects of this action are still in development …" and "See Flitcroft et al. (2020) for more examples of possible monitoring and metrics." – Methods Section, page 12
- "Effectiveness monitoring is ongoing as described in Armichardy et al. (2024, pg 26) – Progress to Date Section, page 5
- "Comparisons of "pre" and "post" habitat and biological conditions within Camp Creek if feasible utilizing Region 6 stream habitat data." – Armichardy et al. (2024). No clear description if this pre-post project monitoring is underway in Camp Creek and what "if feasible" means.

All of these projects should have implementation/compliance monitoring at a minimum and should use Columbia Basin Tributary RM&E Strategy guidance (see page 13 and 14 of the October draft for this guidance) to define appropriate metrics for each restoration project. Likewise, the proposal should be more specific about what implementation and compliance monitoring will be conducted for each project, what entity will be conducting

the monitoring, what metrics will be assessed, what monitoring designs will be used, and what the time frames are for monitoring each project. A tabular presentation showing this information would substantially improve the proposal, help address our concerns, and clarify the confusing statements in the proposal and supporting documents. The ISRP's comments relating to provisions for monitoring and evaluation remain unanswered, and this information is essential for assessing the scientific merits of the proposal.

4. **Project adjustment process**

   ISRP 2024 Comment: *Provide a general description of how project adjustment would occur during the five-year project time frame to address changing priorities, unanticipated outcomes, delays, climate change, wildfires, other unanticipated challenges, and information gained from monitoring of the project's actions. The proposal would be improved with a clear timeline. Provide a timeline for each objective and sub-objective to illustrate implementation, planning, and project completion time periods.*

ISRP 2026 Comment on Revised Proposal

Most of the response regarding project adjustment was devoted to an overview of the complexity of AOP and floodplain restoration projects. The proponents did not provide much in the way of new information that addressed our specific concerns including how project adjustment will occur over the six-year project timeline, how unanticipated outcomes and challenges would be dealt with, and what the timelines are for each step in the planning and implementation process.

The revised proposal provides an extensive description of evaluation and adjustment processes used by the USFS Region office and the Pacific Northwest Research Station in support of research and monitoring to minimize uncertainty and document restoration effectiveness. The proposal indicates that "All projects of this type undergo review by the Aquatic Restoration Biological Opinion (ARBO) and the Restoration Review Team (RRT). One of the RRT's tasks is to ensure that project designs and monitoring plans include the most recent information from ongoing research and management activities across the Region and Nationally." The process is led by the USFS and staff from BLM, USFWS, NOAA, Fish and Wildlife Management Agencies, Tribes, the public, and other subject matter experts. It is unclear how these pre-project review processes inform project adjustment during implementation and adaptive management including follow-up restoration actions.

The proposal also references a technical guide that uses structured decision making and modeling for adaptive resource management; however, it is unclear if this guidance and process will be used in the future for the AOP projects or floodplain/process-based restoration in Camp Creek and Bull Run Meadows. The Bull Run Meadows 80% design

report does not provide any discussion of adaptive management planned for the implementation phases of the project. For the AOP projects, it was stated that “The design for each structure also undergoes multiple reviews at different stages during their development. Review teams include hydrologists, fish biologists, soil scientists, geologists, civil engineers, and regulatory partners. These reviews are an opportunity to consider new information and incorporate into the AOP design and implementation in a shorter time frame relative to the peer-reviewed technical guides and permitting instruments.” More detail on how these reviews are implemented, what is considered in the review, and how the timeline for reviews factors into the implementation phase of the project would be beneficial.

We reviewed this proposal one year and half ago, and the project had been underway for nearly two years prior to our review. Since then, we found two adjustment examples: (1) specific Camp Creek Project 1 adjustments to address unanticipated sediment limitations resulting in the need for alternative actions to maximize floodplain connectivity; and (2) overarching adjustments to Wallowa Whitman and Malheur National Forest projects to address capacity issues. This ultimately resulted in refining the list of projects for the next few years. Are other examples of adaptive management available? If so, their inclusion would strengthen the proposal by providing more detail about decision-making and adaptive management processes.