ISRP INDEPENDENT SCIENTIFIC REVIEW PANEL

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

Memorandum (ISRP 2024-1) **November 18, 2024**

To: Jeffery Allen, Chair, Northwest Power and Conservation Council

From: Richard Carmichael, ISRP Chair

Subject: Review of U.S. Forest Service Proposal, 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 September 25, 2024, the ISRP reviewed a proposal for a new 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). This is the ISRP's first review of this project, which has an existing Statement of Work and funding through the Bonneville Power Administration (BPA).

As described in the USFS proposal and proposal submittal letter from BPA, the project was formed 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 USFS and BPA 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 will be used to implement the USFS portion of already planned, ongoing, or joint projects with Tribal and other partners in the Basin.

During this agreement, BPA will provide $10 million in funding, approximately $2 million per fiscal year, over a 5-year period. The project will also leverage existing partnerships and seek cost share funding. If all goes according to plan, this proposal will fund 9 partial culvert

replacements, 4 full culvert removals, and 6 habitat/floodplain reconnection projects. The focus of these actions is to reconnect acres of floodplain and improve miles of instream habitat complexity, primarily targeting habitat for steelhead limiting life stages. The proposal lists these probable projects by subbasin:

- North Fork John Day Subbasin, in collaboration with Confederated Tribes Umatilla Indian Reservation (CTUIR):
    - Bull Run Mine Tailings, Bull Run Meadows, Lower Bull Run restoration.
- Middle Fork John Day Subbasin (MFJD) collaboration with Confederated Tribes of Warm Springs (CTWS):
    - Phipps Meadow restoration
    - MFJD bridge installation
- North Fork John Day (NFJD) Subbasin
    - Boundary and Deep Creeks floodplain restoration
    - Beaver Creek floodplain restoration
- Middle Fork John Day Subbasin
    - Camp Creek floodplain restoration
    - Idaho and Summit Creeks floodplain restoration.

Based on the contract, most of the first-year funding and work efforts are to be focused on Camp Creek. 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."

Review recommendation and comments

Recommendation: Response requested

Overall comments

The ISRP recommends that the proponents provide a revised proposal to the ISRP within six months with a brief point-by-point response to the ISRP referencing where, and summarizing how, the issues were addressed in the revised proposal. Although the project has the potential to provide significant benefits to anadromous salmonids and bull trout in the John Day Basin, the proposal is incomplete and lacks adequate detail, information, and depth for the ISRP to clearly understand and assess if the proposed actions are based on sound scientific principles and will result in the assumed benefits. The ISRP strongly believes that a complete proposal with sufficient detail is a necessary element of any project funded under the Fish and Wildlife Program and will serve the project well in the five-year duration of the project as well as future

review processes. The revised proposal should address the following primary issues (which we have presented to align with the ISRP review criteria):

1. **SMART objectives.** 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.

2. **Methods:**

    a. **Project selection:** 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?

    b. **Passage project design**: 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.

    c. **Restoration project design**: 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?

3. **Provisions for monitoring and evaluation**: 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.

4. **Project adjustment process:** 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.

We encourage the proponents to refer to 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 first is the Confederated Tribes of the Warm Springs Reservation of Oregon (CTWSRO) *John Day Watershed Restoration* project (200739700). This project is an essential component of the comprehensive habitat protection and restoration program in the John Day River subbasin. Although the ISRP found the overall project to be exemplary, the ISRP asked for an update of the project's objectives to be SMART – see page 164 of the ISRP AFHH review. A second example proposal is for the project *Columbia Land Trust Estuarine Restoration* (2010-073-00), which has SMART objectives with clear connectivity and continuity with the goals and methods – see page 79 of AFHH review.

See the specific comments below for details, guidance, and the rationales for the ISRP's request for more information in a revised proposal. The ISRP is available to discuss our review and the project with the proponents, if requested.

Specific comments

1. Clearly defined objectives and outcomes

To develop these comments, the ISRP considered the goals and objectives presented in the proposal, Camp Creek 1 Design, and the work elements described in the project's Fiscal Year 2024 Statement of Work (SOW) contract 94057 in CBfish.org.

The goal stated in the proposal does not adequately describe the qualitative desired biological outcomes of the project. Combining the goal stated in the Background Section with the proposal goal could produce a goal statement that better captures the projects desired outcome, such as "Implement habitat actions on National Forest lands in the upper reaches of the John Day River Basin that improve fish passage, stream complexity, floodplain reconnection and riparian condition in priority watersheds over a five-year period."

The objectives stated in the proposal are inadequate to guide the implementation of proposed actions. Information on objectives is scattered throughout the proposal and in documents the proponents cited or provided. The most complete objectives are provided for the Camp Creek Project 1 implementation plan, but objectives are not provided in the proposal for the other proposed actions. SMART objectives for these other project actions should be provided.

We appreciate that the project is about implementation. As a result, the proposal should present clear implementation objectives as SMART objectives. Time bound elements are needed for each objective. Guidance for development of SMART objectives can be found in the proposal instructions. Consider adding objectives, if applicable, for coordination, reporting and

sharing information, project adjustment and adaptive management, and outreach and education.

Although the proposal does not describe quantitative implementation objectives, the SOW does provide some implementation objectives that are included as milestones. It is difficult, however, to link the proposal's objectives and sub-objectives with the SOW milestones. The proposal would be much clearer if specific implementation objectives and sub-objectives were provided and linked with biological objectives.

2. Methods (based on sound science principles)

The proposal's methods section is general and very brief, about two paragraphs, and on its own does not provide adequate detail to gain a clear understanding of what is proposed. However, the proposal refers to two other documents for details but does not summarize the contents of those documents or their key points.

- For fish passage design, the proposal references a USFS document on design protocols, *Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-Stream Crossings*.
- For stream habitat and floodplain restoration designs, the proposal refers to the design for Camp Creek Reach 1 (M&E plan included), which can be found in Pisces under their contract 94057.

For project selection, two approaches were used to prioritize and select projects: Watershed Condition Analysis and Atlas Framework. We ask that the proponents clarify which projects were selected using each method. Do the two project selection approaches yield comparable/consistent results? Both seem to be logical, accepted approaches and have been used for some time. Describe what factors and elements of the assessments led to the high priority rankings of the restoration reaches and the specific proposed restoration actions. From these frameworks, briefly summarize the physical factors and/or processes judged to be limiting for each of the targeted species in the priority watersheds, and indicate how these determinations were made.

The Stream Simulation Protocol is an extensive document which specifies complex planning and design steps and approaches for passage issues associated with a diverse set of species. It is difficult to determine what the essential elements and analyses are that guide specific site designs for aquatic organism passage. We ask that the proponents provide a summary of the key biological and decision elements from application of the Stream Simulation Protocols that led to selecting the passage projects in the proposal and the project designs that will be used.

One key consideration for barrier removals is whether non-native species are present that would be affected by the removal, e.g., expand their range and compromise native species. Are

nonnative species present? A second important point that affects barrier removal success is the condition of the habitat above the barrier and how far upstream is the next blockage. Have these questions been addressed in project selection?

The proposal identifies the Camp Creek Reach 1 project design report as the best documentation for the approach the USFS uses to plan and implement restoration in wide valley segments. The Camp Creek 1 design report is impressive with extensive information and analyses. The design plan is described as an example of how other projects would be designed. We were not clear how the proponents will use the Camp Creek design and apply it as a template for the design and implementation of other projects, such as: Bull Run mine tailings and meadows, Lower Bull Run restoration, Middle Fork John Day bridge installation, Beaver Creek floodplain restoration, and Idaho and Summit Creeks floodplain restoration. Are the limiting factors, hydrology, physical stream characteristics, confinement, restoration needs and proposed designs similar to Camp Creek 1 for all these projects?

3. Provisions for monitoring and evaluation of results and project adjustment process

Monitoring and Evaluation

As noted by the proponents, the project is focused entirely on implementation. The project does not include objectives or work elements for monitoring beyond reporting on implementation metrics such as number of miles or acres treated. We understand that there is no funding provided for effectiveness monitoring and that such monitoring will be conducted by the USFS or other partners. The proposal should describe how the USFS and other monitoring efforts will provide information on implementation. How will the Camp Creek 1 RM&E Plan be used for developing RM&E plans for the other proposed restoration projects? What implementation monitoring information of each project will be collected by which agencies? An understanding of what monitoring information will be collected and how it will be used is needed for an effective adaptive management program, e.g., modification of any future project selection and design approaches. The proponents should provide a summary of who will monitor their projects, how the monitoring will be done, who will be funding it, and how information will be analyzed and shared.

For example, the proponents describe that they work indirectly with project 2023-007-00 *ODFW East Region Salmonid Life Cycle Monitoring*, which provides status and trends for ESA Viability and status assessments for salmon and steelhead in the basin. They state that the ODFW project also works with partners to monitor the response of the steelhead population to watershed-scale habitat restoration. If the ODFW project will be doing monitoring relevant to this BPA/USFS project, how will information be shared?

The Middle Fork John Day is the location of a long running Intensively Monitored Watershed (IMW) program and has significant ongoing restoration and monitoring efforts. However, the ISRP saw no mention of the IMW in either the proposal or contract. Given the importance of

this process to the John Day system, we ask the proponents to describe how this project is related to the IMW and how the USFS will coordinate their efforts with IMW partners.

In addition, the proponents might find useful the RM&E-Habitat Matrix produced by ODFW's *John Day River Salmonid Monitoring to Inform Recovery* project, project #1998-016-00, as part of the Council's Anadromous Fish Habitat and Hatchery Project Category Review. The project's revised proposal includes a map (Figure 22, p. 57) and table (Table 8, p. 59) showing the relationships between implementation actions and the associated monitoring.

The Columbia Basin Tributary RM&E Strategy (October 2022, page 19) specifies that implementation monitoring should be done for all projects, and thus an implementation monitoring plan with goals, objectives, metrics, and methods is needed. The proponents are encouraged to review the Tributary RM&E Strategy to assist with implementation monitoring, planning, and coordination.

Project Adjustment Process

The ISRP requests details on the project adjustment process. The proponents describe a post project evaluation process that will be used to guide future work. We appreciate the example that was provided for the Camp Creek project that illustrated the adaptive management process used to address unanticipated sediment limitations that resulted in the need for alternative actions to maximize floodplain connectivity. However, this was quite specific to the Camp Creek project. We request 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. How will the project adjust ongoing projects or future projects?

The proponents describe an extensive evaluation and adjustment process for the planning phases from concept to design. This process is led by the USFS in coordination with fish and wildlife management agencies, tribes, and the public. Although this process is effective for the planning process, it does not address the needs for project adjustment and adaptation after the implementation phase has begun. Will the separately funded RM&E projects be flexible enough to adapt to and incorporate new information needs throughout the habitat restoration project? Please provide details on how the project adjustment process will occur including what information is expected and how it will be used.

There was no specific timeline provided, and the proposal would be improved with a clear timeline. Use Table-1 as a framework for the actions and provide a timeline for each objective and sub-objective to illustrate, implementation, planning, and project completion time periods.

4. Results: benefits to fish and wildlife

This is a new project, and thus the proposal does not include information under the section "Progress to Date." However, this project builds on past assessments, and the proposal describes some projects that are in the design stage or completed (e.g., Table 2). Overall, the potential for the project to provide benefits could be characterized based on the proposed actions, focal species, results of past actions, importance of the targeted habitat to the recovery and sustainability of the focal species, and the degree of habitat impairment.

The proposed actions address some key limiting factors in the Upper John Day Basin. The project clearly has the potential to provide benefits to bull trout, spring Chinook salmon, and summer steelhead. If implemented successfully, it is reasonable to assume that the suite of projects proposed here will benefit habitat, and by implication fish. However, benefits in this system need to consider the complicating effects of climate change, stream temperature increases, species interactions, and density dependence. In addition, how will the planned habitat restoration efforts increase resilience to climate change? These factors need to be considered in any assessment of benefits.