



## Independent Scientific Review Panel

for the Northwest Power & Conservation Council  
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**Memorandum (ISRP 2014-5)**

**May 2, 2014**

**To:** Bill Bradbury, Chair, Northwest Power and Conservation Council

**From:** Greg Ruggerone, ISRP Chair

**Subject:** Review of Progress Reports for Upper Columbia Programmatic Habitat Restoration Projects (#2010-001-00 and #2009-003-00)

### **Background**

In response to the Northwest Power and Conservation's March 5, 2014 request, the ISRP reviewed a three-year progress report for the Upper Columbia Salmon Recovery Board's (UCSRB) project Upper Columbia Programmatic Habitat (#2010-001-00) and the Yakama Nation's Upper Columbia Habitat Restoration Project (UCHRP, #2009-003-00).

The Council's request for this ISRP review included the background and instructions below:

*Following is the specific recommendation made by the Council on November 5, 2013 for these two projects.*

*Implement with conditions through FY 2014: 1) Sponsor to submit monitoring progress report for ISRP review by March 1, 2014..... Recommendation to implement for FY 2015 and beyond, depending on favorable review of the monitoring progress report.....*

*The above recommendation is intended to confirm a past action by the Council on October 14, 2010 associated with Project #2010-001-00. This decision authorized the implementation of this project conditioned on reviews in 2013 and 2016 to address the items raised by the ISRP ([ISRP document 2010-28](#)) in order to verify that assumptions about administrative streamlining, project selection efficiency and action effectiveness are proceeding as anticipated (i.e., progress report).*

*The Council requested no additional information for review, other than the progress report, for ISRP review. The ISRP's project specific comments ([ISRP document 2013-11](#)) associated with effectiveness monitoring were deferred to*

the Programmatic Issue A (Implement Monitoring, and Evaluation at a Regional Scale) of the Council decision for the Geographic Category review (Please note that the received documents provide responses to the M&E-specific qualifications and comments made by the ISRP as part of their review. This additional M&E-related information is for your information only, no ISRP review is requested).

In the ISRP's 2010-28 review, the ISRP found the project met scientific review criteria (qualified) and stated:

*The ISRP is generally satisfied with the response documents. Our qualification is that the project proponents prepare retrospective reports for ISRP review in years 3 and 6 of this 7 year project in order to verify that assumptions about administrative streamlining, project selection efficiency, and action effectiveness are proceeding as anticipated. The retrospective summary report in year 3 should address actions outlined in Figure F-1 (page 52): Watershed Action Team(s) developing Multiyear Action Plans with the Regional Technical Team and Implementation Team subsequently developing targeted solicitations. The retrospective report in year 6 should summarize the implementation of restoration activities following the targeted solicitation, and update the ISRP on monitoring and effectiveness evaluation of restoration actions. Given the dependence on other RM&E efforts to evaluate the effectiveness of this process, these retrospective reports also should summarize results from research efforts in the project area that are relevant to project restoration plans and indicate how these results have been incorporated into the project prioritization process.*

In the Geographic Review (ISRP 2013-11), the ISRP also found that the project met scientific review criteria (qualified) and stated:

*This project covers a very large area of the Upper Columbia Basin and includes an array of restoration activities that have been reviewed and prioritized by a team of regional experts. The administrative structure differs from the traditional BPA funding approach in which the project sponsor is usually a single organization, but instead this project employs a group of partner organizations. Because of this structure the ISRP has had questions about whether the new approach would deliver the administrative efficiencies promised and whether it would lead to better planned and more effective habitat restoration actions in the Upper Columbia. The qualification to this proposal is that project staff should submit a comprehensive report summarizing their progress to date, including areas where they have experienced difficulties and areas where they have clearly achieved their objectives. This check-in report should describe the cooperative activities taking place between the project and other regional restoration efforts such as OSHIP,*

*which was not clearly identified in the proposal. The report should be completed for ISRP review in late 2013 or early 2014. In addition, the ISRP may request a follow-up site visit to better understand the project selection process, the monitoring program, and how results will be used adaptively to plan and prioritize future projects.*

The ISRP's reviews of the progress reports are provided below.

## **Recommendation**

The UCSRB check-in report on the Upper Columbia Habitat Programmatic Project (2010-001-00) partially meets the ISRP's previous qualifications, but further response and dialog are requested.

The ISRP appreciates that the Confederated Bands and Tribes of the Yakama Nation (YN) and the Upper Columbia Salmon Recovery Board (UCSRB) submitted their requested progress reports in a timely fashion. The YN report states that it addresses the condition for a monitoring progress report, although it is limited to expressing support for existing monitoring programs. The UCSRB Three Year Check-In report responds to several of the Council's concerns: *administrative efficiency, project selection efficiency, and restoration action effectiveness*. The UCSRB report provides a current snapshot of the effort to implement habitat improvement actions under a programmatic umbrella, and, in general, it adequately addresses progress in gaining administrative and project selection efficiencies. Their description of highlighted actions yielded enough detail for the ISRP to believe that the showcased projects were based on sound restoration principles.

However, the progress report does not provide adequate information for the ISRP to verify to Council, BPA, the Governors, or Congress that these specific programmatic efforts are on track for achieving BiOp, Recovery Plan, or Fish and Wildlife Program objectives with regard to action effectiveness. Several important ISRP questions remain substantially unanswered in the check-in document, and additional clarification is needed:

1. How, specifically, is this project coordinated with, and informed by, existing effectiveness monitoring programs in the Upper Columbia region? The monitoring programs include the Integrated Status and Effectiveness Monitoring Program (ISEMP), Columbia River Habitat Monitoring Program (CHaMP), and the Okanogan Basin Monitoring and Evaluation Program (OBMEP; a programmatic companion to the Okanogan Subbasin Habitat Implementation Program [OSHIP]). Some of these programs have been in place for a decade or more. Despite this work, the ISRP's overall impression from the check-in report and accompanying letters of support is that available data should be better utilized in project planning and in demonstrating the biological effectiveness of the ambitious suite of restoration actions undertaken by UCSRB. The ISRP understands that issues specific to RM&E are linked to larger ongoing

basinwide RM&E efforts.

2. How have the findings from these RM&E programs been incorporated into project selection, restoration planning, and implementation under the UCSRB umbrella? The ISRP would like to see specific examples of how coordination with action effectiveness monitoring programs has improved, how monitoring results have been factored into restoration planning, and how monitoring data have been used to demonstrate restoration success to concerned stakeholders.
3. How have limiting factor assumptions and the way in which subbasin plans and models, such as EDT, been used in setting restoration priorities – apart from administrative efficiency? And how will they be used in future priority setting efforts?
4. Evidence is needed that these actions are on track for achieving BiOp, Recovery Plan, and Fish and Wildlife Program objectives. This will require evaluating restoration action effectiveness and adopting suitable metrics of success.

The ISRP requests that the UCSRB and ISRP engage in a direct dialog over the next six to nine months so that clarification regarding these questions can be reached. The exchange could be in the form of a presentation to the ISRP that covers all aspects of the project, one or more conference calls with project staff from the UCSRB and YN, or a visit to some of the restoration sites coupled with attendance by some ISRP members at an appropriate UCSRB meeting in 2014.

## **Comments**

The Yakama Nation Fisheries report asserts that the YN role in the Upper Columbia Habitat Programmatic Project is limited to implementing habitat restoration actions and does not include biological effectiveness monitoring. The YN state that they firmly support existing monitoring programs in those areas where YN projects and monitoring co-occur, but they do not participate in monitoring activities directly. Monitoring organizations mentioned in the YN report include ISEMP, US Forest Service PNW Research, AEM (Tetra Tech), and USGS-BRD. The YN report does not include effectiveness monitoring details, although it does include a table summarizing categories of “useful results.” There are not enough details in the YN report for the ISRP to comment on the scientific soundness or utility of monitoring information for planning restoration, and we request that additional discussions between UCSRB and the ISRP will also include representatives from the Yakama Nation.

The balance of this review is devoted to the UCSRP Three Year Check-In report.

### ***1. Administrative Efficiencies***

We read with interest the UCSRB’s description of its attempt to replace the BPA contracting process with one of its own, and the observation that after two years (Fiscal Year 2011 and

FY12) it has become clear that the substitute contracting procedure did not produce the administrative efficiencies that were anticipated. While the return to normal BPA contracting procedures in FY13 shows that UCSRB recognized that unrealized efficiency improvements meant defaulting to the status quo, we are sympathetic to the consequences of lost flexibility due to restrictions on multi-year contracting, especially with regard to large, complex restoration actions. The Three Year Check-In Report describes how the UCSRB is actively working within the funding and administrative constraints imposed by BPA to strategically plan and phase-in projects so as to improve efficiency and implement projects at a larger spatial scale. The increased emphasis on “larger, more complex reach scale or process-oriented projects” is commendable and consistent with the ISAB Landscape report ([ISAB 2011-4](#)). The ISRP also applauds UCSRB for incorporating implementation data from other programs (e.g., OSHIP, UCHRP) into a common data base – the Habitat Work Schedule – which should result in improved coordination among restoration actions.

## 2. Project Selection Efficiency

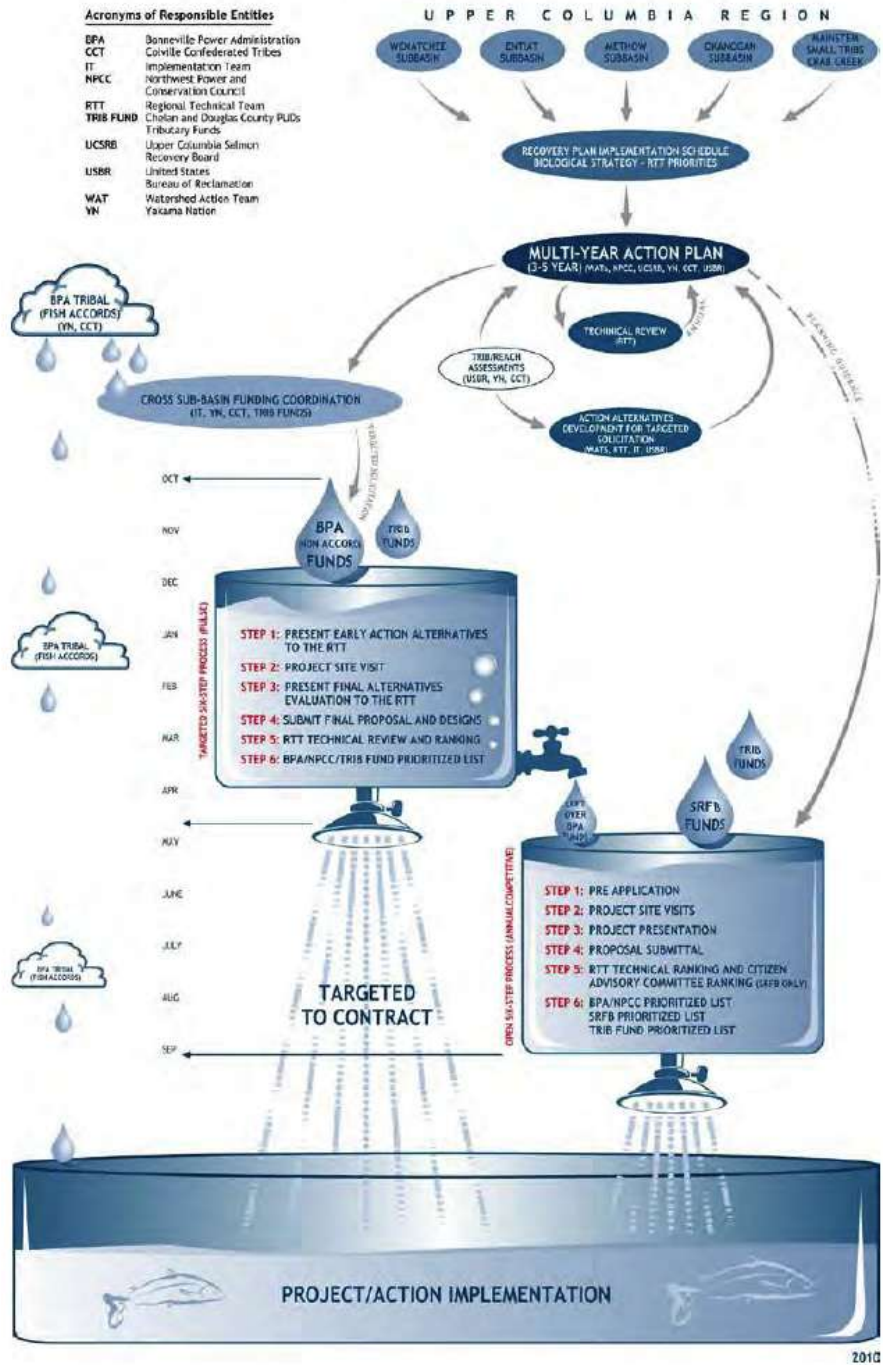
The final 2010 programmatic proposal established a framework for developing proposals for habitat restoration that involved Watershed Action Teams (WATs) in each subbasin, an Implementation Team (IT), and a Regional Technical Team (UCRTT). The WATs were to use the Biological Strategy developed by the UCRTT to update Multi-Year Action Plans (MYAPs) and develop potential actions that were to be reviewed and refined by the UCRTT, and moved into a six-step targeted solicitation process. The diagrammatic schemes from the proposal are presented below:



Figure F-1. Annual Multi-Year Action Plan development process

Annual Multi-Year Action Plan development Process (p. 52, 2010 proposal).

## PROJECT/PROGRAM DEVELOPMENT AND IMPLEMENTATION - PROJECT IDENTIFICATION AND SELECTION -



Upper Columbia Project Planning, Identification, and Selection Process Diagram (p. 54, 2010 proposal).

The original proposal indicated that the development and implementation process would take place annually.

One qualification in the 2010 ISRP review was that UCSRB should submit 3- and 6-year reports describing how well the process was working. The ISRP needs evidence that each stage in the process diagrammed above was being properly executed, that selection of projects had a demonstrable scientific basis, and that the final step of establishing contracts and undertaking restoration actions was proceeding on schedule. Neither the 2013 Geographic Review proposal nor this check-in report provides the ISRP with sufficient technical information to judge whether the process is likely to succeed over time. We hope that further discussion between UCSRB and the ISRP will lead to increased clarification and understanding.

In the 2013 Geographic Review proposal and in this Three Year Check-In Report, the UCSRB indicates that in years 2010 – 2013 habitat restoration using UC Programmatic project funding through the Council’s Fish and Wildlife Program implemented some projects developed by the Bureau of Reclamation. The 2013 proposal and this check-in report state that these “on the shelf” (perhaps better described as shovel-ready) projects were consistent with UC Biological Strategy priority reaches and restoration actions. It is understandable that the Upper Columbia Programmatic project would choose to move these actions directly into the targeted solicitation pipeline, but this leaves the question of whether the process of WATs, MYAPs, IT, and UCRTT review was able to properly review the projects prior to bringing them to implementation.

On page 7 the check-in report states: *“After these initial projects were identified, fed into the process, and funded, the regional conversation turned to building a better understanding of how future projects get on the “on-ramp” for targeted consideration. The original plan was that once we moved past the first group of Bureau-launched projects and moved into out-year planning that the Upper Columbia Implementation Team would be the venue for reviewing candidates for programmatic funding.....Unfortunately, the IT did not have all the information necessary for productive conversations.....and ended up not being the forum for moving candidate projects forward.....Instead, we started a process to solicit/select targeted-track projects in collaboration with the Bureau of Reclamation and BPA.”* Additionally, the ISRP understands from the 2013 proposal and discussions during the site visit that the UCRTT was unable to estimate potential benefits for solicited projects and that in the end BPA decided which reach scale actions to pursue – largely based on whether BiOp credit would be derived from the action.

The information linking salmon and steelhead VSP/life-stage survival, habitat features, alternatives assessments, and final conceptual project selection was not adequately presented in either the 2013 proposal or this check-in report. This leaves the ISRP unable to establish whether the individual or suite of projects meets subbasin objectives, species recovery plans, or BiOp requirements. Because the review and selection process in the 2010 proposal was not used to develop some proposals for the target track, it is not clear if project selection efficiency actually improved and resulted in priority restoration actions.

The hierarchical stair-step design, which emphasizes different subbasins in turn, does make sense from the standpoint of improving project selection efficiency, although we are not sure

whether this approach is sufficient to meet BiOp and ESA priorities. The next progress/check-in report should provide more detail about how the degree of biological imperilment of focal species is considered during project prioritization. Figure 4 in the check-in report (number of actions by ecological concern priority) is a useful start, but more details are needed. For example, how does the regional technical team decide which projects to pursue in the first place? How well is the six-step process (p.7) for moving projects forward for programmatic funding achieving its goals? Additional description of the processes described in the second paragraph on page 8 (especially cost, risk, and benefit models) would be useful to the ISRP as well.

The individual project descriptions, a subset of the total, provided in the progress report are reasonably complete and for the most part seem well-founded in ecosystem restoration theory. According to the cover letter, the original 14 projects (prior to consolidation into this programmatic umbrella) have increased to 19 priority habitat actions and two programmatic (“reach-scale”) actions, nine of which are complete (although Figure 2 shows 12 completed projects). The projects spanned a variety of restoration actions, with an emphasis on side channel and wetland reconnection. A summary of the Upper Columbia Regional Technical Team’s Biological Strategy would have been helpful and should be included in the next check-in report.

Funding for targeted reach level restoration tasks is allocated through 2018. The project sponsors state that individual restoration actions are selected on the basis of (1) priority area, (2) priority ecological concerns, and (3) completed reach assessments. Elsewhere in their Geographic Review proposal they state that it requires three to four years to transition from restoration planning to completion. The 2013 Biological Strategy indicates that some reach assessments (tributary assessments and reach assessments) have yet to be completed. The UCSRB also intends to perform additional EDT or other modeling of habitat conditions in the future. If this programmatic project intends to use monitoring data and employ completed assessments that include restoration alternatives for work beginning when the programmatic cycle concludes in 2018, then the UCSRB should identify now who will take on the planning/assessment responsibility and propose a timeline for completion to guide post-2018 project selection.

### ***3. Action Effectiveness***

The check-in report provides a list of implemented projects and a general overview of results for various subbasins. The results as presented are mostly expressed in generalities, making it difficult to evaluate them scientifically. Nevertheless, the implication was that projects were effective. As noted above, there are other options for encouraging coordination in restoration planning. This information has not been provided in this check-in report and should be included in the next one and discussed with the ISRP.

While the check-in report acknowledges a number of other action effectiveness monitoring efforts in the five Upper Columbia subbasins, greater clarification is needed on how information



on action effectiveness is exchanged and used by both restoration practitioners and monitoring organizations. There was little explicit description of how ongoing monitoring efforts applied to the majority of the 19 restoration actions sponsored by the UCSRB, although we assume that the UCRTT played a strong role in assuring that these actions addressed BiOp requirements. We also assume that periodic science conferences serve as a useful venue for exchanging data and conclusions. Nevertheless, the ISRP feels that coordination with existing regional monitoring programs such as ISEMP, CHaMP, OBMEP, and the WDFW, USGS, and Yakama Nation fish monitoring programs should be improved wherever possible. For example, ISEMP Entiat IMW monitoring results have indicated that engineered log jams benefit juvenile Chinook salmon, but there has not been a demonstrated benefit to juvenile steelhead (although these results are preliminary). If this observation holds up over time, how can this finding be applied to restoration planning in other UCSRB projects?

Two statements in the results section of the report refer to instances where habitat restoration has produced benefits for fish populations. On page 10, *“Projects implemented during the reporting period benefited ESA-listed spring Chinook, steelhead, and bull trout”*; on page 12, *“the project benefitted the Okanagan steelhead population as well as unlisted summer Chinook.”* Little explanation is given or referenced for how these benefits have been determined. Supporting information should be provided in the next report.

Check-in reports need to indicate the scale of restoration that has been achieved to date and that is expected by the end of the project (expressed as a proportion of accessible fish habitat, or habitat that is in need of improvement). These estimates are likely needed to determine how much additional habitat restoration would be required to achieve landscape-scale recovery objectives. The report seems focused on habitat restoration actions as an end in themselves, and it would benefit from more consideration of how these actions are expected to contribute to the overall goal of improving the status of fish populations. Addressing this issue would be one way of demonstrating integration and coordination with the RM&E efforts.

#### **4. Expanded discussion on RM&E related to project selection and results**

The UCSRB response to the last ISRP review indicates that there are several efforts underway to monitor fish and habitat in the Upper Columbia region. In addition, it is expected that the new Action Effectiveness Monitoring Program will include some project-specific evaluation of projects being undertaken by the UCSRB program. There should be oral and written coordination in experimental design, methods, sampling timing, and sampling frequency to ensure that evaluations conducted throughout each watershed will generate compatible information relevant to the habitat actions being implemented in the region. The response documents suggest that improvements in communication among RM&E entities have occurred, thus increasing interaction between habitat restoration practitioners in the region and those responsible for the RM&E efforts. However, the response does not provide a detailed description of how monitoring information will be incorporated into the decision-making process being used by the UCSRB and other habitat restoration programs active in the Upper Columbia. It would be very worthwhile for the UCSRB Program to develop a formal, transparent

process for incorporating RM&E information into project selection. A formal process, with guidance indicating when RM&E results are sufficient to alter restoration priorities and approaches, could help avoid conflict. In future check-in reports on the UCSRB Program, please include a detailed description of the process being employed to incorporate information being generated by the RM&E efforts into project prioritization and implementation.

It is encouraging that UCSRB science staff are in the process of completing a report summarizing what is known about habitat quality and the results of habitat actions in the Upper Columbia as part of an integrated recovery reporting effort (p. 20). It is also encouraging that the UCHRP is now working to build relationships and information-sharing forums to participate more closely with all monitoring efforts in the Upper Columbia (letter from Confederated Tribes and Bands of the Yakama Nation re: UCHRP 2009-003-00). The ISRP looks forward to hearing more about these efforts in future discussions.