

Columbia Basin Collaborative Science Integration Work Group

Meeting Summary

Thursday March 9, 2023, from 9:00 – 11:00am PT/ 10:00am – 12:00pm MT

Attendees

Working Group Members in Attendance: Bob Lessard (Columbia River Inter-Tribal Fish Commission), Casey Baldwin (Confederated Tribes of the Colville Reservation), Dennis Daw (Fort McDermitt Paiute and Shoshone/Upper Snake River Tribes Foundation), John Cassinelli (Idaho Department of Fish and Game), Steve Manlow (Lower Columbia Fish Recovery Board), Jay Hesse (Nez Perce Tribe), Michelle Rub (National Oceanic and Atmospheric Administration), David Bain (Orca Conservancy), Tucker Jones (Oregon Department of Fish and Wildlife), Art Martin (Oregon Department of Fish and Wildlife), Jay Backus (Port of Clarkston), David Doeringsfeld (Port of Lewiston), Kevin Scribner (Salmon-Safe), Conor Giorgi (Spokane Tribe of Indians), David Moskowitz (The Conservation Angler), Gary Marston (Trout Unlimited), Haley Ohms (Trout Unlimited), Katherine Himes (University of Idaho McClure Center), Cynthia Studebaker (US Army Corps of Engineers), Claire McGrath (US Bureau of Reclamation), Susan Camp (US Bureau of Reclamation), Stephen Waste (US Geological Survey), Charlene Hurst (Washington Department of Fish and Wildlife), Michael Garrity (Washington Department of Fish and Wildlife), Tom Iverson (Yakama Nation Fisheries)

Observers in Attendance: Dennis Rohr (D. Rohr & Associates, Inc.), Paul Arrington (Idaho Water Users), Mark Martin (Idaho Outfitters and Guides Association), Jeff Fisher (Seattle City Light), Ted Knight (Spokane Tribe of Indians), Stuart Crane (Yakama Nation), Tracy Bowerman (Upper Columbia Salmon Recovery Board), Kevin Malone

Facilitation Team: Liz Mack (Kearns & West), Angela Hessenius (Kearns & West)

Welcome, Agenda Review, and Updates

Liz Mack, Kearns & West (K&W), provided an overview of the agenda and meeting guidelines. The topics included: 1) Round 1 Review of Recommended Actions from Topic-Specific Work Groups, 2) Check-in on SIWG Recommendations, and 3) Confirm Next Steps and Action Items.

Liz also reviewed the Columbia Basin Collaborative (CBC) recommendation process. The Science Integration Work Group (SIWG) will review and provide additional feedback on the recommended actions developed by the topic-specific work groups (TSWGs). The Integrations/Recommendations (I/RG) will review and discuss the recommended actions and feedback from the SIWG and strive to come to consensus on the recommendation. Recommended actions that achieve consensus from the I/RG will become an official recommendation of the CBC and will be sent to sovereigns for implementation. Recommendations that do not achieve consensus from the I/RG may be sent back to the TSWGs to revise. Liz reminded the group that per the CBC charter, consensus is reached when it becomes evident through deliberation that every Member, at the very least, does not oppose a decision. Recommendations from the work groups will be sent to I/RG members for review in early April and the

I/RG will discuss and seek consensus on these recommendations during the next I/RG meeting in the spring.

Liz also noted that the recommendation process will be iterative, and the recommendations shared today are part of an initial round. Additional recommendations will be needed to achieve the Columbia Basin Partnership Task Force (CBPTF) goals. The work groups have initially focused on actions that had agreement and would provide benefit across the basin.

Recommended Actions from Topic-Specific Work Groups

The SIWG reviewed the three recommended actions that have been completed by the TSWGs. Liz provided a brief overview of each recommendation and the SIWG discussed the recommendations with a focus on the following questions: 1) How do the actions integrate with other efforts and limiting factors in the basin? 2) Which stocks are being benefited in this round of actions? And which limiting factors are being addressed? 3) Are there stocks or limiting factors that need more attention in future recommendations?

Recommendation 1: Fund and implement the Phase 2 Implementation Plan (P2IP)

This action was developed by the Hydropower/Blocked Areas Work Group. The recommended action would fully fund the Upper Columbia United Tribes (UCUT) and their project partners to implement the Phase 2 Implementation Plan (P2IP) to evaluate the feasibility and strategies for fish passage at five hydroelectric dams on the upper Columbia and Spokane rivers and reintroduce anadromous fish to historically occupied habitats.

Questions and Discussion:

- This action has cross-cutting implications related to hydropower, hatcheries, and habitat.
- Work group members discussed whether the funding mechanism for this recommendation would be additive or come at the expense of funding for other initiatives in the basin. The I/RG will consider the policy implications of recommended actions during their review, including funding.
- This action could impact predation since northern pike are present above the blocked areas. If this predator species were to enter the system downstream of the dams, this would have negative impacts on salmon. The Phase 2 Implementation Plan (P2IP) discusses this issue noting that providing downstream fish passage would likely enable the interception of non-native piscivorous fish. Therefore, this action could also serve as a mechanism to prevent northern pike from getting downstream.
- An additional potential benefit of this action is that when access for anadromous fish is improved, resident fish can reestablish anadromy, which could benefit Upper Columbia steelhead.
- The benefits provided by this recommendation also depend on efforts to improve conditions for salmon in the lower Columbia. The I/RG should consider this as they prioritize the implementation of various recommended actions.

Recommendation 2: Management of Double-crested Cormorants (DCCO) in the Columbia River Estuary

This action was developed by the Predation Work Group. The recommended action would implement a sustained management effort using primarily non-lethal techniques which could be implemented to reduce double-crested cormorant abundance on the Astoria-Megler Bridge colony and other colonies that lie upriver of East Sand Island, while minimizing double-crested cormorant dispersal to undesired areas.

Questions and Discussion:

- Any avian predation proposal should be coordinated regionally.
- One work group member noted that avian predator management has a history of relocating rather than eliminating the problem and suggested that this recommendation should include utilizing the take permit that USFWS has increased. Others shared that this initial recommendation from the Predation Work Group is very focused, and that more coordinated and comprehensive recommended actions are currently being developed. This includes a recommendation looking at cross-cutting actions to reduce predation success and change the predation ecosystem systemwide.
- This recommended action was prioritized because Oregon Department of Transportation (ODOT) and Washington Department of Transportation (WDOT) are undertaking a public process to develop solutions to the safety and structural integrity concerns caused by the DCCO colony on the bridge. This creates an opportunity for the DOTs to fund components of this action and requires the two processes to develop on a similar timeframe.
- Work group members also noted that predation efforts, if successful, can produce near-term gains for fish recovery, and that these recommendations that have been developed so far have emerged as a high priority.
- The recommended action identifies key uncertainties, including the potential distribution of birds upriver, which would not be beneficial, and the presence of bald eagles on East Sand Island.
- The benefits of this action will be extensive throughout the basin since all stocks swim through the estuary, so every stock will benefit to some extent. Lower river stocks and steelhead are likely to benefit the most.

Recommendation 3: Enhance/modify the Marine Mammal Protection Act (MMPA) Section 120 Pinniped Removal Program

This action was developed by the Predation Work Group. The recommended includes the following enhancements and modifications to the existing Marine Mammal Protection Act Section 120 Pinniped Removal Program: 1) Extend authorization and fully fund the status-quo 120(f) permit scope with inflationary costs through 2035 to provide stability to the program's effectiveness. 2) Provide one-time funding for new sea lion removal equipment and to replace outdated equipment. 3) Provide additional funding to increase the capacity to remove sea lions and process animals, including a program to maintain an on-call veterinarian roster for euthanasia processing, and a program to train more state and/or tribal biologists and technicians for seasonal work. 4) Extend and fully fund pinniped abundance estimation and kill rate monitoring programs, e.g., USACE Bonneville monitoring. 5) Pursue research and development into lethal tributary removals and the use of lethal darts.

Questions and Discussion:

- This program has been successful, but the funding is still inconsistent. Consistent funding and the ability to continue to build on progress is important from the states' perspective.
- Available data indicate that sea lions in this vicinity are responsible for 25-50% of mortality for spring and summer Chinook. Removing the sea lions at these locations would have a significant benefit for adult returns.
- All the stocks travel through the Columbia River in the spring when California and Steller sea lions are present, so this action would benefit all stocks. Spring and summer Chinook are likely to benefit the most. Lower Columbia River chum should also be captured as receiving benefits from efforts that reduce pinniped predation.
- Additionally, because this predation occurs on adult fish rather than juveniles, the predation benefits are likely additive rather than compensatory.

SIWG Recommendations

Liz shared that recommended actions that will be included in the first round of I/RG review during the spring I/RG meeting need to be completed by the end of March. The group discussed the recommended actions that have been drafted by the SIWG and clarified next steps for moving them forward.

Recommendation 1: Study carrying capacity and density-dependent effects in the Columbia River

Gary Marston, Trout Unlimited, shared updates that the subgroup made to this recommended action since it was last discussed by the SIWG. In response to feedback from the work group, the authors broadened the recommendation from focusing on the estuary to include the entire system. Gary noted that some sections of the recommended action form still need to be refined, including the budget.

Questions and Discussion:

- Differences in life history type will be a substantial challenge for the bioenergetics approach.
- The carrying capacity of the system has been altered, and hatchery fish are mitigation and compensation for the lack of carrying capacity. Work group members suggested adding clarity to the recommended action by stating why this study is being done and which decisions would be informed by the results. For example, it would be beneficial if the study results are used to better manage hatchery release timing but work group members did not want to see this information being used to target fewer hatchery fish releases in the future.
 - The goal of the hatchery release time studies is not to reduce hatchery releases but to optimize them by broadening or shifting the timing to benefit wild fish and improve hatchery fish survival. Broadening the times that fish are using the habitat can increase carrying capacity by allowing fish at different life stages to predate on available food resources at different times.
- Work group members shared that across the basin, the ability to release hatchery fish is highly variable based on where they are released.
- Work group members also noted that some of these research questions are possibly being addressed through other research efforts. For example, a researcher with NOAA Fisheries has been modeling ocean survival based on hatchery release timing.

- Others noted that this is a complicated topic and that there has been a lot of research in the Columbia River with respect to fish survival and release timing, but this has mostly been studying returning hatchery fish, so it would be valuable to look more specifically on the effects on wild stocks.
- One work group member suggested narrowing and focusing the recommended action on optimizing hatchery release timing for maximum growth and survival. Other work group members felt that studying hatchery timing and release would yield valuable information, but the other components of the recommendation are also important and should not be lost. The hatchery release component could be a standalone recommendation.
- This recommendation cuts across multiple limiting factors. For example, density dependence relates to habitat and predation. When an area is restored, does that improve salmon habitat or improve habitat for predators?
 - The recommendation is integrated, but it is important for the other groups to engage with their expertise.
- One work group member suggested broadening the recommendation further to consider carrying capacity in the ocean.
- Some work group members expressed support for the recommendation because it is important for the CBC to understand the challenges to meeting the CBPTF goals, and there is uncertainty and a gap in understanding on carrying capacity in the lower river and emerging evidence that there could be a major concern with overall carrying capacity.
- Some work group members expressed concern that the draft recommended action does not have a clear recommendation and may not be aligned with the scope and scale of the CBC. Within the CBC process, there is a strong emphasis on programmatic-level recommendations. At this point, the recommendation may be trying to incorporate too many elements and is focused on finer scale targeting. Is there a way to reshape into something broadly programmatic?
 - Liz reminded the group that there is a strong interest from the I/RG in ensuring that the recommendations have strong tie to the CBPTF goals.

The group agreed that it would be valuable to get feedback from the I/RG based on the direction of this recommended action before contributing the additional effort needed to finalize the draft recommendation. A few work group members volunteered to develop a one-pager providing some background and context on the recommendation to share with the I/RG to determine if they have interest in pursuing this recommendation.

Recommendation 2: Develop a Structured Decision-Making (SDM) Framework

Liz asked the subgroup that was tasked with further developing the SDM Framework recommendation to share a report out on its status. One member of the subgroup shared support for having an SDM framework but expressed concern regarding whether the SDM framework was being recommended as an internal tool or as a tool that would be developed as a CBC product. It is likely too late to develop an SDM tool for internal decision-making. The recommended action forms are intended to fill this gap by consistently asking a few targeted questions and encourage the CBC work groups to focus on the CBPTF goals. Other work group members agreed that it is unreasonable to complete the development of an SDM framework in the next year and that it would not be used as part of this process. However, it would be valuable in the longer term to have such a tool to reassess actions and support adaptive

management, and that the group could develop a recommendation to pursue funding and invest in this now for future use in the basin.

There are two options for the next steps for this recommendation. The group can either revise the recommendation to the point that the group is comfortable moving it forward to the I/RG, or they can follow a similar approach as the carrying capacity recommendation to gauge interest in the concept from the I/RG. The group decided to discuss and decide on the approach for this recommendation during the next SIWG meeting.

Confirm Next Steps and Action Items

K&W will draft a narrative for each recommendation based on the discussion and a report card connecting the recommended actions to the CBPTF goals and showing which stocks would benefit the most. K&W will share this draft document with the SIWG for their review. The final version will accompany recommended actions that are reviewed by the I/RG.

Action items from this meeting included the following:

- **K&W:** Draft narrative feedback and benefits report card for each recommendation discussed on March 9.
- **All:** Review and provide feedback on recommendation narratives and report cards once they are circulated.
- **Michelle Rub, David Bain, and Gary Marston:** Develop a one-pager on the recommendation to study carrying capacity that can be shared with the I/RG for their input.
- **K&W:** Distribute completed recommendations from the TSWGs for review by SIWG members prior to the next SIWG meeting on March 30.
- **All:** Discuss the recommendation to develop and SDM framework and decide on approach for moving forward during the next SIWG meeting.

Liz thanked everyone for participating and adjourned the meeting.