

Columbia Basin Collaborative Science Integration Work Group

Meeting Summary

Monday, June 5, 2023, from 1:00 – 3:00pm PT/ 2:00 – 4:00pm MT

Attendees

Working Group Members in Attendance: Bob Lessard (Columbia River Inter-Tribal Fish Commission), Dennis Daw (Fort McDermitt Paiute and Shoshone/Upper Snake River Tribes Foundation), John Cassinelli (Idaho Department of Fish and Game), Jay Hesse (Nez Perce Tribe), Patty Dornbusch (National Oceanic and Atmospheric Administration), 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), David Moskowitz (The Conservation Angler), Gary Marston (Trout Unlimited), Haley Ohms (Trout Unlimited), Crystal Callahan (University of Idaho McClure Center), Katherine Himes (University of Idaho McClure Center), Cynthia Studebaker (US Army Corps of Engineers), Susan Camp (US Bureau of Reclamation), Charlene Hurst (Washington Department of Fish and Wildlife), Michael Garrity (Washington Department of Fish and Wildlife), Tom Iverson (Yakama Nation Fisheries)

Observers in Attendance: Paul Arrington (Idaho Water Users), Grant Waltz (Oregon Department of Fish and Wildlife), Jeff Fisher (Seattle City Light), Tracy Bowerman (Upper Columbia Salmon Recovery Board), Stuart Crane (Yakama Nation), Alex Conley (Yakima Basin Fish & Wildlife Recovery Board), Heather Nicholson

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) CBC Process Update & SIWG Work Plan Review, 2) Discuss I/RG Feedback and Path Forward on SIWG Recommendation Concepts, and 3) Confirm Next Steps and Action Items.

CBC Process Update & SIWG Work Plan Review

Liz reviewed the CBC recommendation process and provided a recap of the Spring Integration/Recommendations Group (I/RG) Meeting. Seven recommendations were brought forward from the topic specific work groups (TSWGs), and six of these achieved conceptual consensus from the I/RG with some minor revisions. One recommendation was sent back to the Habitat Work Group to revise. Liz reminded the group that these are the first round of recommendations and that additional recommendations are being developed by the TSWGs. The SIWG also sent two draft concepts to the I/RG.

Next, Liz reviewed the work plan for the SIWG for the next several months. The next I/RG meeting will take place in the fall, likely in late September or early October. Over the summer, the TSWGs will meet to revise recommendations as applicable and work to advance additional recommendations to the I/RG.

The SIWG will review these recommendations and provide additional feedback to the I/RG in advance of the Fall I/RG Meeting. If the SIWG decides to pursue one or both draft recommendation concepts, there may need to be additional meetings scheduled in this timeframe to further develop and finalize those recommendations.

Discuss I/RG Feedback and Path Forward on SIWG Recommendation Concepts

Liz shared that the I/RG discussed the two draft recommendation concepts developed by the SIWG during the Spring I/RG Meeting, but due to time constraints, they were not able to hear from all I/RG members. Following the I/RG meeting, the K&W team distributed a survey to I/RG members to provide additional feedback. A summary of the feedback shared during the meeting and via the survey was provided to the SIWG in advance of this meeting. The SIWG discussed the I/RG feedback on each of these two draft recommendations to determine a path forward.

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

Questions and Discussion:

- It seemed like I/RG members liked the idea of implementing this recommendation but were not sure whether it is the right time to complete this. One option would be to pause on this recommendation in the short term and return to it again later.
- What was the I/RG's logic behind wanting to push this out?
 - I/RG members did not feel that this was an immediate concern. They wanted to focus on undertaking actions that increase fish returns and revisit carrying capacity later.
 - Members of the I/RG felt that studying carrying capacity would not impact the actions that the CBC needs to take to achieve the Columbia Basin Partnership Task Force (CBPTF) goals. By the time carrying capacity is studied, it will already have changed since the identified actions are going to be taken anyway.
 - The I/RG expressed interest in undertaking an action like this in 4-5 years.
- The I/RG member feedback also demonstrated that the recommendation should include stronger linkages to the direct management implications of the action and clearly outline the outcomes of understanding carrying capacity.
- The I/RG feedback echoed discussion that the SIWG had internally when developing this draft recommendation concept.
- The benefit of studying carrying capacity now would be to establish a baseline. If carrying capacity is not known or measured now, then it will not be possible to know if and how much recovery actions have changed it.
- A lot of these data already exist. The first step would be to identify and collect existing data. Therefore, undertaking this study would not necessarily take away significant resources from other actions.
 - There are many actions being implemented upstream resulting in more juvenile outmigrants, but there are bottlenecks lower in this system. This study is one way to identify those bottlenecks.

- Developing a centralized database would also help with redundancy. Gathering this information in one place could be helpful for future efforts.
- If the study process is relatively quick and inexpensive, then it would be worth doing. If the study can identify areas with high carrying capacity and low returns, it could indicate places where additional work should be focused.
- What decisions would be made differently with this information? If the proposal can be presented in a way that more clearly shows which decisions would be made differently, then there could be more support for it.
 - The information gathered from this study would identify which actions have diminishing returns and provide a finer scale understanding of actions that will be taken, but it would not necessarily lead to different decisions.
 - The proposal already includes some examples of actions and decisions that could be done differently with the information from this study. One example is shifting hatchery release timing, which would improve smolt-to-adult ratio (SARs) for Chinook. Other examples of how this study could inform management actions include prioritizing certain habitat actions if specific bottlenecks are identified and efforts to improve forage fish availability in the estuary.
 - If the recommendation is further developed, it should clearly outline how it would lead to achieving the CBPTF goals.
- A lack of tools and infrastructure could be a limitation. For example, sample sizes are currently lower than desired to evaluate survival using PIT tagging.
- Another consideration is that there are already existing efforts underway in various parts of the basin to develop models to understand carrying capacity and the linkages to habitat, ocean survival, and hatchery effects. It is important to be cognizant of existing efforts to make sure any proposal that this group develops is not duplicative.
 - The Northwest Fisheries Science Center (NWFSC) would be a good place to start to share ongoing efforts.
 - Other ongoing work includes [Integrated Rehabilitation Assessment \(IRA\) method in the Upper Salmon River subbasin](#), work by Columbia River Inter-Tribal Fish Commission (CRITFC) in the Grand Ronde subbasin, and work by Washington Department of Fish and Wildlife (WDFW) in the Upper Columbia River.
 - Work group members noted that most of these efforts are focused on the upper basin, and they are not aware of any efforts in the lower basin or the estuary.
 - It would be better to tailor the recommendation to complement existing efforts.

Next step: The work group will hear a presentation on ongoing efforts and then decide how to move forward. The facilitation team will coordinate with the NWFSC to schedule this presentation.

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

Questions and Discussion:

- Work groups members expressed support for a decision-making tool but were not clear on how such a tool could be developed in six months when it will be needed by the CBC. The Salmon Slider has been presented as a first step forward and could still be used by the CBC to guide decision-making, though there has been feedback that this tool is not broad and integrative

enough. This group has also been using a coarse version of the biological matrices from the CBPTF, which does a good job of visually giving a sense of which actions will benefit which stocks.

- Other work group members shared that they see this recommendation as valuable because the actions that are being proposed by the CBC will not be implemented in the next six months, they will be ongoing for years and decades.
 - The SDM framework can serve as a tool for adaptive management. It could help managers in the basin learn as they go and reprioritize actions as the landscape changes.
 - Having this tool would be valuable beyond the scope of the CBC process for long-term management in the basin.
- This group would not need to create the SDM tool or framework, but it would be helpful to have I/RG support for it.
- When scientific understanding does not provide clear answers, it is important to use the precautionary principle to guide decisions. If the SIWG continues to develop the recommendation, this concept should be included.
- It will be important to make sure that the group can show a strong tie to the CBP goals.
- One work group member circulated an article to the group that described a [similar effort in the Fraser River watershed](#).
 - This decision-making tool was tied to the cost of actions per year and allows users to look at a suite of different actions each year.
- A useful place for this group to start could be establishing what the objectives and metrics would be for an SDM framework in the Columbia River basin.
 - If the group does pursue developing this recommendation, it could be useful to outline what this would look like for the CBC.
 - The tool and objectives should be transparent about what is technically and politically feasible.
 - The SDM framework may not need to be a fully developed model as in the article, but could be a relatively simple decision tool.

Next steps: The work group will hear a presentation on similar efforts and then decide how to move forward. The facilitation team will coordinate with the Fraser River study authors to schedule this presentation. A small group of volunteers (Bob Lessard, Cynthia Studebaker, Haley Ohms, and Jay Backus) will also work on drafting potential objectives and metrics for an SDM framework for the Columbia River Basin.

Confirm Next Steps and Action Items

Action items from this meeting included the following:

- **K&W:** Coordinate a presentation from the Northwest Fisheries Science Center on ongoing carrying capacity efforts.
- **K&W:** Coordinate a presentation from Chalifour et al. on their methodology in the Fraser River watershed.
- **Bob Lessard, Cynthia Studebaker, Haley Ohms, & Jay Backus:** Meet to draft potential objectives and metrics for a Columbia River Basin SDM tool.

- **K&W:** Schedule placeholder times for SIWG meeting(s) to review recommendations from the topic-specific work groups later this summer.

Liz thanked everyone for participating and adjourned the meeting.