

**Columbia Basin Collaborative
Biological Sub-Group**

Thursday, June 2, 2022, from 9am - 11:30am PT/10am - 12:30pm MT
Meeting Summary

Attendees

Participants: Casey Baldwin (Confederated Tribes of the Colville Reservation), Dennis Daw (Fort McDermitt Shoshone and Paiute), Patty Dornbusch (National Marine Fisheries Service), Pam Druliner (Bureau of Reclamation), Dan Feil (Army Corps of Engineers), Jeff Fisher (Seattle City Light) Andrew Gingerich (Benton PUD), Conor Giorgi (Spokane Tribe of Indians), Calla Hagle (Burns Paiute Tribe), Jay Hesse (Nez Perce Tribe), Charlene Hurst (Washington Department of Fish and Wildlife), Tom Iverson (Yakama Nation Fisheries), Gary James (Confederated Tribes of the Umatilla Indian Reservation), Amelia Johnson (Lower Columbia Fish Recovery Board), Tucker Jones (Oregon Department of Fish and Wildlife), Bob Lessard (Columbia River Inter-Tribal Fish Commission invited by CTUIR), Gary Marston (Trout Unlimited), Rob Masonis (Trout Unlimited), Guy Norman (Office of Governor Jay Inslee), Dan Rawding (Washington Department of Fish and Wildlife), and Ben Zelinsky (Bonneville Power Administration).

Facilitation team: Liz Mack (Kearns & West) and Samantha Meysohn (Kearns & West)

Welcome, Agenda Review, Updates, and Introductions

Liz Mack, Kearns & West, provided an overview of the agenda and meeting guidelines. The topics included: 1) Summary of the Biological Sub-group Input, 2) Approach for the Topic Specific Work Groups, 3) Updates on the Biological Matrices, and 4) Confirm Next Steps, Upcoming Meeting Topics, and Summary. The Sub-group members introduced themselves.

Summary of the Biological Sub-group Input

Liz shared a recap of the discussions from the April 28 Biological Sub-group Meeting. Liz emphasized that the Biological Sub-group had been supportive of utilizing the Columbia Basin Partnership Task Force (CBPTF) information as a starting point for the work groups, and the Biological Sub-group wanted to further discuss the process for identifying actions and projects through the Topic Specific Work Groups.

Approach for the Topic Specific Work Groups

Liz opened the session by inviting Guy Norman, Office of Governor Inslee, to share how the input from the Biological Sub-group meeting was incorporated into the proposed format for the Columbia Basin Collaborative (CBC) that was previously shared by the Project Team. Guy reiterated that the role of the Biological Sub-group is to reach a common understanding of the biological science to serve as the starting point for looking at developing actions and work towards implementation. The data will serve as a baseline for launching into the discussions and link to opportunities to fill gaps to get to meaningful actions. The Biological Sub-group acknowledges the need to move the dial on actions. Guy emphasized that it will be valuable to involve experts in the region to ensure that solid science is used to assess actions.

Liz walked through the sequential steps for the CBC. Guy noted that the Project Team proposes forming the TSWGs by threat category but does not see this approach as mutually exclusive with an integrating across the threat categories and does not preclude population-based actions. Liz invited Biological Sub-group members to share their reflections on the proposed process.

The work group members shared the following ideas:

Feedback on sequential steps

- The timeframes proposed for the work groups should reflect realistic timing.
- The work groups should develop alternative packages and determine priorities.
- It is important to identify immediate actions that could be completed first.
- The mortality factor would be calculated to understand the details of what needs to be done to address the threats. The TSWGs would develop a quantitative analysis to determine the mortality factors and can use data and tools from the CBPTF where appropriate.
- Need to determine the outcomes and deliverables for each process step.

Integration across threat categories

- Integration across the threat categories should be done iteratively throughout the TSWG process. When concepts for actions are developed, the action could be evaluated by a Science Integration Group. Feedback loops could be included in the table of sequential steps.
- Integration across the threat categories is essential to understanding investments – [A recent report](#) on Intensively Monitored Watersheds (Bilby et al. 2022) found that improvements to habitat supported increased juvenile production, but did not see increased adult returns. The report recommended that an integrated approach will be helpful to understand the holistic dynamics.
- Population-level integration across the threat categories has been done by some of the Recovery Boards. The TSWG should not duplicate efforts, but rather coordinate with existing forums/entities who have completed this analysis to leverage their work. Another member noted that not all recovery boards have done this work.
- Recovery Boards often are confronted with the practical realities of addressing impacts to salmon on the ground. Needs can be easily identified, but it is challenging to leverage resources to address these needs. Recovery boards are intimately familiar with the local needs of the fish on the ground and can identify local actions and strategies.
- In some cases, it would make sense to implement complementary actions across threat categories. The TSWG should consider additional threats to salmon that do not have obvious management authorities such as ocean conditions and climate change. The TSWGs could identify appropriate actions and priorities, and they could also look at how other threats fit when it comes to prioritizing actions.

Data considerations

- Other forums have additional data that could be contributed to this forum, and collaboration could leverage other data.
- A member proposed that the work groups look at a variety of life cycle models to see if another tool could more effectively look at integration across threats than the slider model. Analysis

should be done at DPS / ESU levels to determine how stocks are limited by various factors. A few work group members shared that this approach will be a large undertaking.

- The heat maps do not capture the spatial or temporal structures of the threats to the various stocks.
- A member stated that the work groups should involve specialists with the requisite technical knowledge to understand the biology across threats and needs. It will be helpful to pull in regional experts to dive into specifics.

Implementation

- A Sub-group member highlighted the importance of considering capacity to fund actions.
- A Sub-group member suggested that it would be helpful to have work groups focused on addressing policy constraints and building funding support for actions.
- A member highlighted that recovery plans have many suggested actions, and it will still be challenging to drill down to specific population-level needs.
- A member stated that the group should prioritize actions that will benefit all species and stocks.

Several Sub-group members emphasized the importance of looking at integrated impacts across the threat categories, noting:

- Concern about creating silos by threat category
- Existing forums do not integrate across the threat categories and the CBC should not replicate past mistakes.
- Concern that the threat category approach will risk not being able to dig into finer details that effect the stocks. A member expressed interest in taking a regional approach by ESU/DPS level. Another sub-group member reiterated that working by threat category can include digging into ESU-level data.
- The CBC process needs to have a clear plan for integrating across the threat categories.
- CBC needs to make regional effort to support doing more for salmon recovery.

Some members expressed the opportunities for creating TSWGs by threat category:

- Each threat category has specific linkages to authorities and forums, and this organization can allow for greater coordination, and targeting relevant entities.
- A Sub-group member highlighted that TSWGs by threat category could be helpful for identifying short-term opportunities. Actions can be done quickly that could lead to big improvements. An integrated approach could be fitting for long-term or broader goals.

A few members wanted to see a more predominant role for the salmon slider model. The work group discussed the opportunities and limitations with the tool. Some feel that the slider incorporates the CBPTF data into a comprehensive model and was developed as part of extensive efforts within the CBPTF process. Some sub-group members feel strongly that the slider should be used within this process. Several members encouraged its use in appropriate ways, acknowledging the sliders limitations: it does not capture temporal context or synergies among the threat categories; however, it can still be a piece of information that is considered during the work groups' discussions.

Liz confirmed that for next steps, KW will incorporate feedback into the Sequential Steps table and circulate the updated document to the group for their review before sending to the I/RG.

Updates on the Biological Matrices

Guy summarized the changes to the Biological Matrices. Guy worked with others to correct errors in the matrices, make the acronyms consistent, and note where stocks were not included due to lack of data. The work group discussed the following:

- Some members noted that the CBPTF heat map data had fundamental flaws, such as not capturing temporal or geographic dynamics in the threat categories.
- Another member reiterated that the nuances of the impacts were lost in the matrices. A few members emphasized that the Snake River and Upper Columbia stocks' nuances are missed because of how blockages impact upstream and downstream stocks.
- Several members reiterated that the Biological Matrices are starting points for deeper technical work that can guide the TSWGs. Several members were supportive of using the matrices as a starting point.
- Work group members emphasized the importance of using the information from the heatmap as a part of the information to be considered by the TSWGs.
- A request was made to add in ESA listing into the heatmap to emphasize that none of the threatened and endangered stocks are in "good shape".

Confirm Next Steps, Upcoming Meeting Topics, and Summary

Liz confirmed that Gary James, CTUIR, Rob Masonis, Trout Unlimited, and Tom Iverson, Yakama Nation Fisheries, will provide a report out on the Biological Sub-group meetings and proposed process for the Work Groups. A sub-group member suggested creating several work groups in the very near term. Liz suggested that first, the group discuss the proposals thus far with the I/RG to get their input before convening work groups.

Liz reviewed the following action items:

- CBPTF authors: Follow up on how hydropower in the tributaries is included in the threat categories
- KW: Update the Sequential Steps table to match the discussion from the Biological Sub-group
- All: Review the updated the table and reply if you have any outstanding concerns and feedback
- Guy/KW: Update the Biological Matrices with additional feedback, including updates to Jay's and Tom's summary tables, and circulate to the Biological Sub-group
- Rob/Gary J/Tom: Report about the discussions at the Biological Sub-group at I/RG meeting
- KW: Coordinate with Biological Sub-group members to prepare for the report out at the I/RG Meeting

Liz thanked everyone for their hard work in the Biological Sub-group.

Meeting adjourned at 1:00pm PT/ 2:00pm MT