

Columbia Basin Collaborative Science Integration Work Group

Meeting Summary

Thursday March 30, 2023, from 9:00am – 12:00pm PT/ 10:00am – 1:00pm MT

Attendees

Working Group Members in Attendance: 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), Patty Dornbusch (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), Crystal Callahan (University of Idaho McClure Center), Cynthia Studebaker (US Army Corps of Engineers), 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.), Mark Martin (Idaho Outfitters and Guides Association), Patty O'Toole (Northwest Power and Conservation Council), Grant Waltz (Oregon Department of Fish and Wildlife), Stuart Crane (Yakama Nation), Heather Nicholson, David Wegner

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) Review of Recommended Actions from Topic-Specific Work Groups, 2) Check-in on SIWG Concepts/Recommendations, and 3) Confirm Next Steps and Action Items.

Liz also reviewed the Columbia Basin Collaborative (CBC) recommendation process. During the previous SIWG meeting, the work group reviewed and provided feedback on three recommended actions developed by the topic-specific work groups (TSWGs). During this meeting, the SIWG reviewed five additional recommendations from the TSWGs. The Integrations/Recommendations (I/RG) will review and discuss these recommended actions and feedback from the SIWG and strive to come to consensus on the recommendation during the Spring I/RG Meeting on April 19-20. Products from the SIWG that the I/RG will review with the recommended actions include a feedback narrative accompanying the recommendation and a report card for each recommendation that illustrates which stocks will be most benefitted and which will secondarily benefit from the recommendation. Recommended actions that achieve consensus from the I/RG will become an official recommendation of the CBC and will be sent to implementers. Recommendations that do not achieve consensus from the I/RG may be sent back to the TSWGs to revise.

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

Recommended Actions from Topic-Specific Work Groups

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: Support, implement, and enhance the recommendations from the NMFS 5-year reviews.

This action was developed by the Habitat Work Group. The recommended action would fully fund and implement specific habitat related actions identified in 2022 5-year status reviews. Benefits of this action include decreasing tributary and estuary habitat impacts by expanding or increasing habitat opportunities, capacity, and function. This should result in increased smolt survival, productivity, and life history diversity of the targeted stock, if other impacts are also addressed.

SIWG Feedback and Discussion:

- Thus far, funding has not been sufficient to implement the actions identified in the NOAA recovery plans. More discussion is needed at the I/RG level to look at all potential sources of funding.
- The table included in the appendix of this recommendation, which identifies ongoing programs, coordination entities, and current federal funding, needs to be populated. When completed, this table will help identify where additional federal funding could be allocated.
- The set of actions included in this recommendation is a subset of the actions in the NOAA recovery plans. In the context of the CBC goals, these actions are focused on addressing the bottlenecks that are preventing endangered species delisting. This recommendation is seen as an initial step to address these bottlenecks in order to reach minimum targets for salmon abundance. Part of this recommendation calls for improvements to different grant programs to distribute available funding more efficiently to projects on the ground.
- This recommendation should not replace existing restoration efforts. The existing habitat restoration network and infrastructure in the basin are grounded in the recovery plans, so this recommendation is complementary to ongoing efforts.
- The Habitat Work Group is also considering other more systemic recommendations which will give the I/RG an opportunity to consider reforms to funding and governance processes.
- This recommendation would benefit all listed stocks, with secondary benefits to any unlisted stocks that share habitat and watersheds with listed species. The recommendations would also benefit other species and improve water quality.
- Some members of the SIWG believe this recommendation is too broad. An action that simply reiterates the need to do all the things in all the 5-year status reviews without prioritization is simply a continuation of the current ineffective strategy. Status review recommendations are

already actions that have already been identified but are not being implemented because of a combination of a lack of human bandwidth, lack of funding, and lack of prioritization.

Recommendation 2: Develop and initiate testing of a comprehensive piscine predator monitoring and evaluation program (PPMEP) for the Columbia River Basin.

This action was developed by the Predation Work Group. The recommended action would include the design and initial testing of a flexible study to generate unbiased predator abundance estimates that can be used for adaptive management. Benefits of this action include reducing the uncertainty in the responses of predator populations to management actions and climate change, identifying data gaps, and providing actionable information to resource managers.

SIWG Feedback and Discussion:

- There are many data gaps in predator-prey dynamics in the basin. This recommendation is intended to look systematically at piscine predation in the basin and use data collection and analytical tools to monitor and understand the effectiveness of piscine predator management actions that will be proposed in the future.
- This recommendation will allow managers to better evaluate future actions and understand which predation actions provide the greatest return on investment.
- This proposal does not replace but rather expands on the experience and struggles of the existing northern pikeminnow management program's ability to fully track complex piscine predator-prey dynamics among the predator community that is funded through Bonneville Power Administration mitigation.
- This recommendation would help prioritize habitat restoration efforts by showing where predators are most effective.
- Understanding when predation events occur could help inform hydropower system management and there is overlap with the natural origin run timing recommendation developed by the Hydropower Work Group.
- There are also implications for hatcheries, since piscine predators consume hatchery as well as wild fish.
- The benefits of this recommended action will depend on the specific geographic range and actions that are ultimately applied and implemented. This proposal is to develop that detailed project study design plan. The intention is for the study design to be modular and scalable, allowing for portability to different parts of the basin, including currently blocked areas. Over the long-term and depending on specific follow-on predation suppression actions, this has the potential to benefit all stocks. The framework would monitor predation baselines, assess suppression action effectiveness, and inform predation related adaptive management into the future.

Recommendation 3: Develop and fund a robust Columbia River Northern Pike and invasive non-native fishes monitoring project.

This action was developed by the Predation Work Group. The recommended action would leverage current suppression, monitoring, and research activities with new projects to fill data gaps. Benefits of this action include basin-wide reduction of Northern pike and invasive non-native fishes will increase overall salmonid abundance.

SIWG Feedback and Discussion:

- This proposal focuses on developing a systematic approach for minimizing the risk of spread and planning for suppression and eradication as non-native invasive species enter the system, including an early warning system in place and the ability to detect predators as they arrive and respond to those invasions.
- This recommendation builds upon individual efforts to develop rapid response plans within the basin and would complement ongoing efforts and coordination such as the Northwest Pike Regional Forum.
- Since northern pike is the primary invasive fish species of focus right now, the upper Columbia stocks are likely to benefit the most in the near term. As pike move downstream, there will be benefits for other stocks as well.
- There are ties between this recommendation and reintroduction efforts. For example, this effort would benefit fish being reintroduced above Grand Coulee Dam. Future reintroduction efforts can utilize the baseline information that is established to inform decisions.

Recommendation 4: Assess run timing and entry timing of natural origin juvenile salmon and steelhead from natal tributaries into the Columbia River.

This action was developed by the Hydropower/Blocked Areas Work Group. The recommended action would provide information that can be used in adaptive management of spill and/or bypass operations to ensure safe passage routes for early migrants. These data would inform whether spill and other means of passing juvenile fish begins early enough to provide the same migratory benefits to both wild and hatchery fish.

SIWG Feedback and Discussion:

- While this recommendation is focused on juvenile salmon, there is also substantial impact on adults (particularly for steelhead) due to issues related to overshoot and fallback. The Hydropower work group may develop a separate recommendation on this topic; the I/RG could weigh in on how to best package these recommendations.
- While the title of this recommendation is focused on determining run timing, the information gathered through this action would be broader. This recommendation could be viewed more as an expansion of an existing monitoring program rather than a new program. PIT tagging fish and expanding monitoring capabilities will allow managers and stakeholders to learn more about various aspects of salmonid migration and behavior.
- This recommendation integrates with predation since fish are exposed to more predation the longer time they spend in reservoirs. Information collected through this action could be used to prevent some predation.
- Prioritizing stocks might be appropriate for this recommended action. This prioritization could focus on the most imperiled stocks and those stocks that benefit less from spill due to their run timing.

Recommendation 5: Develop an outreach strategy to advance the recommendations from the CBC.

This action was developed by the Hydropower/Blocked Areas Work Group. The recommended action would develop an outreach strategy to advance the recommendations from the CBC. This outreach

would include meeting with stakeholders to understand what people would like to see with salmon, educate people, understand impacts to stakeholders, and build support for recovery actions.

SIWG Feedback and Discussion:

- This recommendation is focused on community involvement, education, and building relationships with stakeholders that extend beyond the members of the CBC. There is a need to carry forward the outreach and relationship-building components of the Columbia Basin Partnership and the CBC to work towards implementation of recommendations.
- The I/RG will need to consider where the resources for this effort would come from.
- This recommendation is cross-cutting across all the threat categories because it would create a forum for interacting and communicating with the public on all these topics.
- One way to help achieve this could be leveraging CBC representatives of specific stakeholder groups to lead communication and outreach efforts to those communities.

Overall Reflections

SIWG members noted that overall, many of these recommended actions are ideas that had already been identified and that many of the recommendations are high-level and could be more specific. As the work groups continue developing recommendations, there should be more focus on developing new approaches. Others noted that the work group members were tasked with identifying these immediate actions rather than thinking strategically and systematically about prioritizing and sequencing actions based on impact. A member suggested that restructuring the work groups or bringing in additional experts who represent a broader perspective could help to address some of the more complex challenges and stock-specific bottlenecks in different parts of the basin.

SIWG Recommendations

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

During the previous SIWG meeting, the group decided to develop this recommendation into a concept statement for the I/RG to review and provide direction on. Gary Marston, Trout Unlimited, provided an update on how the authors distilled the draft recommendation to focus on the key issues. The draft concept statement proposes a two-staged approach to studying carrying capacity. Phase 1 would utilize existing data available to understand where density dependence and carrying capacity might be exceeded and key areas for juvenile growth. Phase 2 would evaluate potential interactions with hatchery fish and identify actions that could be taken to reduce impacts and increase survival of both wild and hatchery fish.

Questions and Discussion:

- Drawing connections to how existing plans have identified carrying capacity as a gap and critical uncertainty would strengthen the proposal.

- Carrying capacity is an important issue and this proposal would address a long-term gap that has cross-cutting implications for many threat categories including Habitat, Predation, Hatcheries, and Hydropower.
- This is a complex scientific topic that would take significant additional time and effort to develop into a full recommended action. The full suite of expertise needed to complete the full recommendation is not currently represented in the group so they would need to consult with external experts.

Decision Outcome: The work group agreed to forward this recommendation concept to the I/RG for review to provide direction on next steps.

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

Liz asked whether the group preferred to share this draft recommendation developed by the SIWG as a recommended action or as a recommendation concept for the I/RG to weigh in on.

Questions and Discussion:

- This recommendation may be relevant to other work groups, so it could be valuable to gather their input at some point during the recommendation development process.

Decision Outcome: The work group agreed to forward this recommendation concept to the I/RG for review to provide direction on next steps.

Confirm Next Steps and Action Items

Action items from this meeting included the following:

- **All:** Review the draft SIWG Narratives and Report Cards and the two draft SIWG recommendation concept statements that will be provided to the I/RG for direction and feedback.

Liz thanked everyone for participating and adjourned the meeting.