

Columbia Basin Collaborative Predation Work Group

Meeting Summary

Wednesday, March 1, 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), Tom Skiles (Columbia River Inter-Tribal Fish Commission), Holly McLellan (Confederated Tribes of the Colville Reservation), Tim Copeland (Idaho Department of Fish and Game), Jay Hesse (Nez Perce Tribe Department of Fisheries Resources Management), Lynne Krasnow (National Oceanic and Atmospheric Administration), Michelle Rub (National Oceanic and Atmospheric Administration), David Bain (Orca Conservancy), Grant Waltz (Oregon Department of Fish and Wildlife), James Lawonn (Oregon Department of Fish and Wildlife), Michael Brown (Oregon Department of Fish and Wildlife), Art Martin (Oregon Department of Fish and Wildlife), Sean Tackley (US Army Corps of Engineers), Tammy Mackey (US Army Corps of Engineers), Gary Marston (Trout Unlimited), Chris Donley (Washington Department of Fish and Wildlife), John Edwards (Washington Department of Fish and Wildlife), Tom Iverson (Yakama Nation Fisheries), Keely Murdoch (Yakama Nation Fisheries)

Observers in Attendance: Doug Hatch (Columbia River Inter-Tribal Fish Commission), Mark Martin (Idaho Outfitters and Guides Association), Chris Magel (National Oceanic and Atmospheric Administration), Jerry Klemm (Port of Lewiston), Jerry Rigby (Rigby, Andrus & Rigby Law, PLLC), Tracy Bowerman (Upper Columbia Salmon Recovery Board), Jennifer Urmston (US Fish and Wildlife Service), Mitch Silvers (US Sen. Mike Crapo (ID)), Stuart Crane (Yakama Nation), Heather Nicholson, Sharon Grace

Facilitation Team: Amira Streeter (Kearns & West), Angela Hessenius (Kearns & West)

Welcome, Agenda Review, and Updates

Amira Streeter, Kearns & West, provided an overview of the agenda and meeting guidelines. The topics included: 1) Consensus on Recommendations (Double-crested Cormorants, Pinniped, and Piscine), 2) Review of Systemwide Recommendations, and 3) Confirm Next Steps and Upcoming Meeting Topics. Amira also outlined the desired outcomes for the meeting to review and finalize the short-term recommendations.

Consensus on Recommendations

Amira reminded the group that consensus is reached when every work group member, at the very least, does not oppose a decision.

Pinniped: Marine Mammal Protection Act (MMPA) Section 120 Pinniped Removal Program

Bob Lessard, Columbia River Inter-Tribal Fish Commission (CRITFC), shared that minimal changes have been made to the recommendation since the last time the work group discussed it, including minor edits that work group members suggested. Overall, the recommendation recognizes that the MMPA

Section 120 Pinniped Removal has been a successful program and the goal of the recommendation is to maintain the program's stability.

One work group member suggested editing the language of the recommendation to clarify the geographic scope and specify that the program has reduced predation at two key locations. Another work group member added that predation has been evaluated throughout the Columbia River estuary and this action is supported by that information, since up to half of the salmon mortality observed occurs at these locations and that these areas are places where actions to reduce predation can occur. It is important to keep in mind the broader scope, but there may not be a practical means to address mortality lower in the river.

Decision Outcome: Pending the addition of minor edits to incorporate suggestions heard during this meeting, the work group agreed to forward this recommendation to the I/RG for review.

The Pinniped subgroup will also continue to draft a second recommendation on nonlethal removal research and the work group will revisit this second recommended action in a future meeting.

Avian: Double-Crested Cormorant (DCCO) Management

James Lawonn, Oregon Department of Fish and Wildlife (ODFW), shared that the substance of the recommendation is the same since the last time the work group discussed it. The main change made was that the Avian subgroup elaborated on the uncertainties section in response to feedback from the work group. Others noted that the Avian subgroup tried to represent all the viewpoints and comments that were received in the recommendation. James added that this recommendation is specific to double-crested cormorants in the estuary, and that other DCCO colonies in the basin could be considered for future management. The Avian subgroup has not yet discussed potential actions to address avian predators above Bonneville Dam. Work group members noted that they appreciated that this recommendation was defined by spatial scope.

Decision Outcome: The work group agreed to forward this recommendation to the I/RG for review.

Piscine: Piscine Predator Monitoring Program

Grant Waltz, ODFW, and Holly McLellan, Confederated Tribes of the Colville Reservation, presented the Piscine subgroup's recommended actions. The first recommendation includes combined actions for northern pikeminnow, smallmouth bass, and walleye. Overall, the recommended action proposes to design a thorough and comprehensive Columbia Basin system-wide monitoring program to assess the current state of piscine predation and identify data gaps and enable adaptive management of piscine predators.

The second recommendation focused on other non-native fishes and included five sub-actions. These include determining which water bodies are contributing to the increase of non-native fish, implementing a wide scale eDNA monitoring program that includes northern pike and other species, and exploring opportunities to reduce non-native fish entrainment.

Grant noted that the problem statement had been removed from the recommendation document, and work group members requested time to review this section. Work group members requested that the recommendation authors provide a clean copy of the recommendation document and give the work group an opportunity to review this updated version.

Decision Outcome: The work group agreed that the Piscine subgroup would reconvene to revise the two draft recommended actions and discuss and seek consensus on an updated version of the recommendations during the next work group meeting.

Questions and Discussion:

- One work group member shared that when interventions manage one predator in a food web, other predators respond, and suggested that any recommendation for piscine predator management should stress the importance of systemwide monitoring.
 - Grant agreed and noted that the recommended action aims to leverage expertise to design a program that will effectively monitor current conditions and be flexible as conditions in the basin change.
- Other work group members commented that while monitoring is important, the recommendation should be tied to an action that will provide benefits related to the Columbia Basin Partnership Task Force (CBPTF) goals. This is a piece of the recommended action that is currently missing. What will be done with the knowledge gained through this proposed monitoring program and how will that increase survival of fish in the system?
 - Grant and Holly noted that the recommended action proposes a planning phase for a monitoring program. It is necessary to determine where the problems are before any specific actions can be recommended to address them. There is some language about suppression included in the recommendation. Regional fish biologists will have to take the lead on any eradication efforts in specific locations.
 - Other work group members shared that they appreciate the need to capture baseline data that will allow them to make specific recommendations.
 - Other work group members added that the intent of the standard recommended action form was to provide every recommendation with equal footing by putting the benefits of each recommendation in comparable terms. They emphasized that it would be helpful to add more information that quantifies the threat from various predator species. In some cases, the exact percentages of salmon mortality may be unknown, but other information may be known, such as if the population has been reduced significantly and how those efforts could be improved. It is helpful to frame the comparative magnitude of effects to the greatest extent possible.
 - While this recommendation is primarily focused on monitoring, it is important to frame the impact in terms of how it will help reduce salmon mortality by explicitly stating what is unknown and how much could become known by implementing this monitoring program. The Piscine subgroup should outline the steps to reducing salmon mortality in order to provide the I/RG enough information to gauge the relative benefit of this recommendation. Others also expressed concern over how the I/RG will react to this recommendation and suggested revising the recommendation to clarify what the action is and what the benefits would be.
 - Others shared that the proposal includes both monitoring and the development of an analysis tool. These modeling and analytics are equally as important as the monitoring component. This recommendation is informed by lessons learned from the Northern Pikeminnow Management Program (NPMP), which did not collect all the data that should have been collected and did not have the analysis tools needed. As a result, they

were not able to measure the impact of the program at geographic scale as they could have.

- Work group members asked if the group is planning to develop additional recommended actions on suppression.
 - Grant and Holly replied that this recommendation is intended to develop these recommended actions. They first need to implement these monitoring and analytical components to better understand several dynamics of piscine predation, including diet composition, before they can recommend specific suppression actions. Additionally, without the monitoring and analytical framework, they would not be able to measure the effectiveness of any actions that are implemented.
- Work group members felt that the “other non-native fishes” should be a separate, standalone recommended action.
 - This recommendation can also be renamed since the term "non-native" can create confusion.
 - Grant and Holly shared that there is a lot of overlap between the actions that would be taken for different species, which is why they combined the recommended actions how they did.
 - Given the unique considerations for American shad (not a direct predator) and northern pike (not currently present downstream), work group members suggested pulling out the northern pike monitoring and rapid response planning and American shad components into separate recommended actions.
 - Grant noted that the Piscine subgroup needs to discuss shad in more detail. There are numerous unknowns related to food web dynamics and the impacts from this species are probably much different than other piscine predators.
- Work group members supported making the monitoring recommendation comprehensive given the benefits of a systematic monitoring program.
 - Work group members also suggested establishing the spatial scale of the recommendation and expressed that the scale of monitoring should be for species and stocks, not by individual populations.
 - This recommendation is important as a first action to identify the problem and its extent. The monitoring component will examine a suite of species that includes all the piscine predators that may impact salmonids.
- In the future, single recommendations can be captured in separate documents to avoid confusion.

Review of Systemwide Recommendations

Gary Marston, Trout Unlimited (TU), provided an overview of the list of potential actions developed by the Systemwide subgroup. These included implementation actions and research, monitoring, and evaluation (RM&E) actions. A summary of these potential actions is included below.

Implementation Actions	RM&E Actions
Decrease transit time	Long-term monitoring of avian colonies (predation rates, bird abundance)

Increase flow	Long-term study of effects of predators on reach, system-wide, and life-cycle survival (especially for steelhead)
Promote cooler temperatures to reduce consumption rates by warmwater fish species and reduce disease incidence that may predispose fish to predation by birds and other predators	Increase spill
Promote policies to limit climate warming	Investigate the role of light reflection on water from structures (bridges, dams, piers, etc.) to decrease visibility at night
Modify hatchery releases to discourage subsidization of predators	Food web changes due to American Shad and Siberian Shrimp for non-native predator populations
Restore rearing habitats in estuary	
Promote efforts to conserve marine forage fish, which serve as an alternative food source for many predators in the estuary	
Reduce water transit time, increase migration speed and reduce predation risk [all projects do not exceed minimum operating pool elevation (MOP)]	
Develop of a formal set of best practices and guiding principles for predator management that can be used to guide future work	

Questions and Discussion:

- Work group members were supportive of this comprehensive list of actions that collectively would make the conditions for predation much worse and reduce predation risk throughout the whole system.
 - For example, transit times can vary year-to-year from 15-30 days depending on flow conditions. If predation rates are proportionate to predation risk or exposure, then there is the potential to reduce predation by half.
- Work group members also noted that several of the actions could be bundled with each other.
 - Work group members suggested thinking about how best to package these recommendations and present them in a way that will appeal to the I/RG.
 - One idea is to preface the table of actions with a cover letter.
- Work group members asked whether the Systemwide subgroup considered an action related to turbidity.
 - The work group decided not to include this for a couple reasons. It was assumed that increasing flow would likely have some turbidity benefits. The literature is also mixed regarding the costs and benefits of turbidity, particularly in relation to steelhead.

Confirm Next Steps and Upcoming Meeting Topics

Amira reviewed the next steps for this work group based on the group's discussion and confirmed upcoming meeting topics.

Next Steps:

- **Avian Subgroup:** Send finalized version of Double-Crested Cormorant Recommendation to K&W to pass on to SIWG for review by March 6.
- **Pinniped Subgroup:** Send finalized version of Section 120(f) Recommendation to K&W to pass on to SIWG for review by March 6.
- **Pinniped Subgroup:** Prepare non-lethal recommendation and send to K&W to distribute to the full work group for review by March 21.
- **Piscine Subgroup:** Revise draft recommendations based on work group feedback and send to K&W to distribute to the full work group for review by March 21.
- **Systemwide Subgroup:** Review survey results and develop draft recommended actions to discuss with the full group prior to the next Predation work group meeting on March 27.

Amira thanked everyone for participating and adjourned the meeting.