

Avian Salmon Predation Working Group

Meeting Notes

Washington Department of Fish and Wildlife

Meeting Details

Date: Thursday, November 7, 2024
Time: 1:00pm to 5:00pm, PST
Microsoft Teams

Proposed Agenda

1:00	Group Introductions
2:00	Topic Introduction
2:30	10-minute Break
2:40	Logistics
3:00	Topical Discussion
4:20	Future Meeting Planning
4:45	Closing
5:00	Adjourn

Action Items

- The Washington Department of Fish and Wildlife (WDFW) will compile and organize data and other available information on avian predation in Washington. It will consider ways to organize the information so the Avian Salmon Predation Working Group (ASPWG) can easily find information specific to the following topics: avian species, salmon stocks at risk, “natural” vs “altered” habitats, avian diet, geography and relevant features (e.g., hatchery locations), and whether interventions have occurred. A key intention behind this compilation is to establish a baseline of information the working group (WG) will use to inform it’s thinking about population-level impacts of avian predation on salmonids, possible remedies, and management and/or policy-level recommendations.
- WDFW will schedule upcoming ASPWG meetings, keeping in mind events such as North of Falcon meetings, Pacific Salmon Commission and PFMC meetings, and the Salmon Recovery Conference that will be conflicts for many WG members. WDFW will consider adding a fifth meeting to the calendar as well to provide more time to discuss remedies.
- WDFW will design upcoming ASPWG meetings to include processes that will enable the ASPWG to engage efficiently and achieve its goals in the short period of time before June 2025; this approach will likely include “homework” for WG members between meetings to review materials, so the group can prioritize meeting time for deliberations.

Notes

1:00 Group Introductions

Jennifer Sepulveda, WDFW Communications Manager and ASPWG Lead Facilitator, welcomed WG participants to the virtual meeting and provided a meeting overview. After introducing herself, Sepulveda invited WG participants to introduce themselves and share their affiliations, roles, and brief

experience relevant to avian salmon predation. In general, WG members are enthusiastic about working together and generating recommendations that can influence management in the region.

1:45 Topic Introduction

Nate Pamplin, WDFW Director of External Affairs, reiterated Sepulveda's welcome and appreciation of WG members' participation—particularly those representing Tribal governments. Before providing a high-level overview on avian salmon predation, Pamplin described the Department's recent engagement on avian predation issues and provided context from 2024 [Substitute House Bill 2293](#), which directed the Department to convene the ASPWG to (1) identify all avian species that contribute to predation of juvenile salmon at a population level; (2) determine whether such species are adversely impacting the recovery of any threatened or endangered salmon species; and (3) identify remedies to predation.

Key points from Pamplin's overview presentation:

- Predation is a natural, dynamic, and complex ecosystem practice. The Department is invested in protecting and supporting the recovery of both birds and salmon; it recognizes the success of the two species are not mutually exclusive.
- WDFW will not solve this issue on its own; it will require the participation and dedication of many partners. The Columbia River Basin is the epicenter of current work on avian predation but there is also some work being done on the coast and Puget Sound.
- Intervening and manipulating predator-prey populations is not new to wildlife biology. Intervention is a resource-intensive part of a suite of management actions that may be used to buy some time while efforts to address the underlying problem of conserving and restoring highly modified habitats.
- A solid scientific basis for intervention is critical to navigate shifting public attitudes, monitor effectiveness, avoid unintended consequences, and truly improve recovery.
- Avian predation management is implemented in a manner and at a scale consistent with migratory bird population conservation; the Pacific Flyway Council provides guidelines that may serve as important context for this work.
- There are several active regional management plans and case studies to consider as we embark in this work (e.g. Caspian tern and double-crested cormorant management on East Sand Island).
 - [Bibliography of studies referenced in presentation](#)

Question and Discussion Topics

Caspian terns:

- The biggest boon of Caspian tern management is that predation on salmonids in the Columbia estuary was reduced from 20% to around 5% today. The con is that the regional population was primarily located on East Sand Island colony (the largest in the world) with historically high productivity...because the colony has reduced so much it's essentially collapsed. The colony has been declining for approximately eight years—likely because of bald eagle recovery and predation but events like the recent bird flu have compounded the decline.
- There is no evidence of terns historically existing in the Columbia River estuary (originally noted in interior regions of the West). One group member noted they did not observe terns in the San Juan Islands until the early 1980s (coincided with an *El Niño* year and increase in mackerel population).

- One group member noted the majority of avian predators in the Dungeness River estuary are Caspian terns.

Data referenced in the overview presentation:

- The 2019 table on avian predator risks already appears to be out of date. In the Columbia Basin, the highest predation by birds is on steelhead, but also Spring Chinook and sockeye...we are just learning American white pelicans have high predation on Chinook as well. The science is advancing – we don't know everything especially in terms of smolt mortality (unclear how this translates to adult returns)...The snapshot below is from a [NOAA report](#) (Figure 1)
- [Bird Research Northwest's publications page](#)
- Discussion of white pelican population trends over time (Figure 2)

Figure 1: NOAA snapshot of stock-specific estimates of current predation impacts.

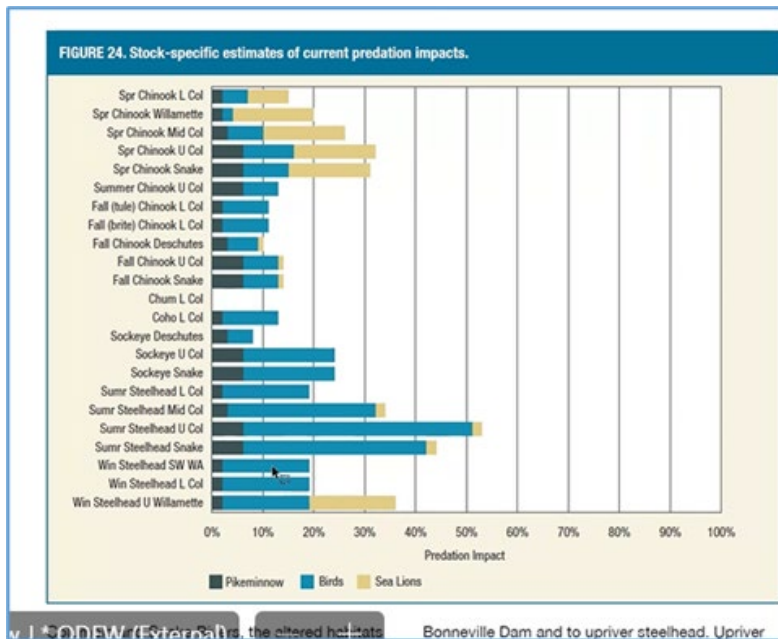
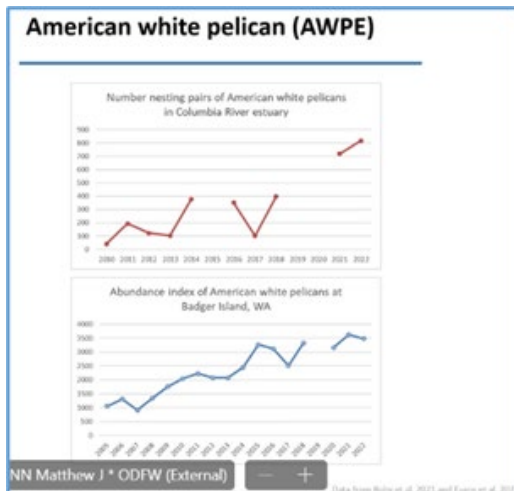


Figure 2: White pelican population trends over time



Cultural resources.

- One unintended consequence of the impounded Columbia is that there are cultural resources being damaged and desecrated by bird colonies that did not exist historically; fish need to be present in these locations to uphold treaty obligations.

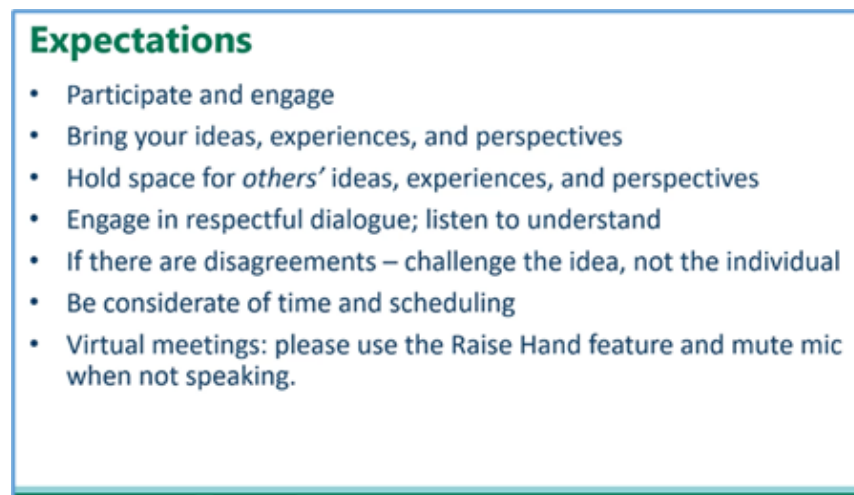
2:30 10-minute break

2:40 ASPWG Norms

Sepulveda invited Bryce Devine and Michelle McDowell to introduce themselves (they joined late).

Sepulveda reviewed highlights from WDFW Advisory Group Handbook, which the ASPWG was asked to review ahead of this meeting. Specifically, she shared working group member expectations.

Figure 3: ASPWG member expectations



She acknowledged there may not always be full consensus decisions, which is okay because the WG is not tasked with developing a management plan or a funding request. The Department will strive to secure agreement and will capture the diversity of perspectives when consensus is not obtained.

2:50 ASPWG Purpose and Objective

Sepulveda began the conversation by reiterating the ASPWG is meant to provide a report to the Washington Legislature that provides information about bird species predation on salmonids and whether or not it impacts their recovery. This group is likely able to have more in-depth conversations than what's legislatively mandated. There is an opportunity to take a further step and explore management questions associated with the topic.

This is a complex topic with parallel issues that impact recovery, but ASPWG was not asked to address those other threats inhibiting salmon recovery. We can identify the "givens," or things everyone agrees on, and identify knowledge gaps.

Question and Discussion Topics

Data and information compilation

- A lot of information is readily available and compiling it is a large portion of our task – the sooner we get that out of the way and we have a common understanding of what’s going on, the sooner we can get to the other part that we’re eager to discuss...
 - WDFW plans to assemble information. In terms of establishing a WG baseline, we might benefit from some presentations.
 - Question about why the group did not adopt the [Avian Predation Synthesis Report](#) findings and proceed with work from that starting point ... acknowledgement that there are WG members newer to the conversation and that level-setting needs to occur.
- Questions about process: Has the group fully grounded ourselves in identifying avian species that predate on salmonids? Don’t want to move past this important step.
 - A member noted that they were new to the avian side of the salmon recovery equation...it’s important to have a common understanding of baseline information – we’re representing others who are not in the room and need to be able to answer questions.
- What does it mean to “determine whether species adversely affect recovery?” What do we mean by that?
- Group identified that it is important for WDFW to be able to compile and bring back to the group information on the following:
 - Identify knowledge gaps related to species and geography
 - Consider the geographic scope of this task/group vs. the Columbia Basin focus of a lot of other parallel conversations.
 - Where in Washington are natural habitats and how are those colonies doing?
- Recognition that the introduction to the topic in Meeting 1 was a high-level overview; want to make sure the Department compiles the information for the benefit of the group. Want to note the idea in the legislative assignment is very complicated –
 - E.g. In an unaltered system where the smolt survival rate might be one to three percent...think about avian predation and whether it is additive or compensatory mortality... Avian predation is going to occur - what percentage of avian predation are fish and wildlife managers comfortable with that doesn’t hinder salmon recovery?
 - The ASPWG will likely end up with a qualitative summary of relative impacts of avian predation compared to other sources of mortality, and then include a qualitative analysis about what we think relative to whether avian predation is additive or compensatory...or identify the management questions that researchers might need to investigate.
- The idea that at the end of the day the group will define some geographies where action may be needed and not others...
 - Do not want this effort to be exclusive to the Columbia.

Natural vs. unnatural habitat

- Members expressed sentiments related to historic range, what’s natural/unnatural, and human modification.

- There's a lot underneath that – everything's that happening is because of anthropogenic intervention...birds are responding to their environment the same way other species do.
- Can we identify where predation is excessive due to human alteration of habitats?
- It's important to understand what's natural and what isn't because it could influence our recommendations on whether to intervene or not.
- Clarification that all the bird species being discussed are “native.”
- If we need to dial in on natural vs unnatural – certain group members consider everything altered by the hydrosystem as unnatural.
- As we get down the line, considering the ownership of structures and lands where colonies exist is important to think about when we think about unintended consequences and the logistics/feasibility of conducting the work.
- It seems that in our inventory of quantitative and qualitative information about bird colony sizes, salmon stocks by area, etc., that we could include a column for natural versus altered habitat as it will influence where we invest resources.

Management Questions

Policy Limitations

- An issue we talk about a lot is the “whack a mole” problem – managing in Spot X means the birds may move to Spot Y...and the predation impacts at Spot Y might be worse given the imperiled species present.
- Migratory Bird Treaty Act works well in hotspots but not well in a huge area...
 - Does the MBTA always give us the options we need to recover fish?
- Do we need a change of authorities? In different advisory groups, the recommendations made have to be within bounds of existing statutes... WDFW is okay with identifying recommendations on federal or state statutes related to this issue if it has a known impact preventing/inhibiting ability to address solutions...investigate the policy arena.
- An interest was expressed by some members to have separate conversations about MBTA limitations.

Salmon/Hatchery Management

- What other ways are there to limit predation risk / impact...change how we manage fisheries? Hatchery releases and timing? Think about broader ways to reduce predation.
 - Appreciation of comments about including considerations of hatchery fish management.
- Example: Oregon prefers to not manage birds, but several species of fish are going extinct and centerpiece actions aren't happening – ODFW promotes bird management as a way to keep fish alive until those centerpiece actions (i.e., salmon habitat projects) are done, not in lieu of them.
- Avian predation does not exist in a vacuum; important to address this context in the legislative report.
- How far are we in Washington re: accomplishing these centerpiece actions for salmon recovery?
 - We're in okay shape – for example, the recent Columbia Basin Agreement. Avian predation is exacerbated by an impounded Columbia River...we need to change those impactful conditions we see ...in some cases, estuary and river systems in Puget Sound are more intact than the Columbia.
 - How much progress have we made on key elements in salmon recovery plans? It varies across the state and Puget Sound...there are a number of places that have made

significant progress (Elwha, Nisqually,) but we're not seeing full anticipated benefit in terms of fish return due to marine mammal and avian predation.

Knowledge Gaps

- Surprise that the positive impacts of avian management on fish populations hasn't been quantified much. Perhaps an opportunity for the WG to come up with best management practices (e.g. similar to Pacific Flyway Council principles).

Takeaways

The ASPWG values the opportunity to participate in knowledge level-setting at the beginning of this process; they will rely on WDFW to compile and organize the information by the second ASPWG meeting (paying close attention to factors such as natural vs. altered ecosystems, avian diet, and geography), as well as initially identifying knowledge gaps for the ASPWG to consider. WG members believe that "getting on the same page" is critical to then being able to discuss what "impact at population level" means, and possible remedies.

In general, meeting participants agree their scope of work must be contextualized – avian predation is not happening in a vacuum. It's possible some remedies will be inadequate without addressing bigger-picture policies, especially those that relate to "centerpiece" salmon recovery actions.

4:15 Future Meeting Planning

Comments on logistics

- Need to avoid salmon season setting processes like Pacific Fisheries Management Council, North of Falcon, and Pacific Salmon Commission meetings as well as the annual Salmon Recovery Conference this year at end of April.
- Hybrid option will be necessary.

Meeting timeline

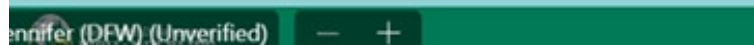
- WG agrees with the general mileposts WDFW proposes...hoping to have some additional work done between meetings 2 and 3.
- WG members want DFW to share the compiled information ahead of meeting 2 to be able to dive into generative conversation (as opposed to review).
- There is a possibility that we can add a 5th meeting...be adaptive? It would be good to plan for at least one extra meeting to discuss remedies and to incorporate a structured decision making component to focus our deliberations.

Figure 4: Proposed timeline for future ASPWG meetings

Proposed timeline

- **Meeting 1: November 7**
- **Meeting 2: February**
 - In person? Full day? Location?
 - Science/data presentations – level setting
 - Review report outline
 - Information sharing/gathering
- **Meeting 3: April**
 - In person? Full day? Location?
 - Review draft report
 - *Additional topical discussions*
- **Meeting 4: Early June**
 - Virtual? Part day?
 - Finalize draft report

June 30, 2025 – Report finished, ASPWG adjourns



Facilitation thoughts

- Acknowledgement of the task we've been assigned and the time we have to do it. Ask for facilitated decision-making exercises in future meetings to help aim towards success.
- WG members are reassured that WDFW will compile information – the added value of this group is to digest that information and move it along.
- It's a huge step between the outline and the issuance of a draft report and it's unclear to some members how the value of the group will be fully realized unless the facilitation approach leads to decision-making conversations.
- Consult with Tribes before a product becomes final – Columbia River Inter-Tribal Fish Commission and NWIFC are good options to pursue.

4:50 Wrap Up

Pamplin invited non-ASPWG attendees to share a comment or observations in the agenda time remaining:

- Public comment: It's important to recognize we attribute a lot of salmon smolt mortality on poor ocean conditions, but avian predation can be a significant factor. By volume, tons of salmon are getting eaten...this is really important work...

5:00 Adjourn

Attendees

ASPWG Members, Roles, and Affiliations

- Aaron Brooks, Fisheries Management Biologist, Jamestown S’Klallam Tribe
- Bill Sharp, Klickitat Coordinator, Yakama Nation
- Bryce Devine, Columbia River Commercial Fisherman
- Chris Magel, Fisheries Biologist, NMFS West Coast Regional Office
- Clark Watry, Project Leader, Nez Perce Tribe
- David Troutt, Natural Resources Director, Nisqually Tribe
- Emma Sands, Harvest Management Biologist, Quileute Tribe
- James Lawonn, Avian Predation Coordinator, Oregon Department of Fish and Wildlife
- Jessica Stocking, Marine Coastal Flyway Section Manager, Washington Department of Fish and Wildlife
- Joy Lee Waltermire, Senior Fish Biologist, Long Live the Kings
- Michelle McDowell, Permits Branch Chief, Migratory Bird Program; U.S. Fish and Wildlife Service
- Robert Sudar, Commercial Salmon Fishing Industry
- Ron Garner, President, Puget Sound Anglers
- Sean Tackley, Fish Policy Program Manager; U.S. Army Corps of Engineers, Northwestern Division
- Todd Hass, Special Assistant to Director, Puget Sound Partnership
- Trina Bayard, Interim Executive Director and Director of Bird Conservation, Audubon Washington

Project Team and ASPWG Role

- Jennifer Sepulveda, Communications Manager, Washington Department of Fish and Wildlife – ASPWG Facilitator
- Nate Pamplin, Director of External Affairs, Washington Department of Fish and Wildlife – ASPWG Support
- Shelby Thomas, Ross Strategic - ASPWG Support

Others in attendance

- Allison Anholt
- Butch Smith
- David Blodget
- Trenton De Boer
- Jennifer Urmston