Meeting Minutes

Lewis River Aquatic Technical Subgroup

To: Lewis River Aquatic Technical Subgroup Date: August 16, 2024

From: Larissa Rohrbach, ATS Coordinator, Anchor QEA

Re: Final Minutes of the July 25, 2024, Lewis River Aquatic Technical Subgroup Meeting

The Lewis River Aquatic Technical Subgroup (ATS) meeting was held virtually on July 25, 2024, from 9:00 a.m. to 1:00 p.m. Attendees are listed in Section IV of these meeting minutes.

Action Item Summary

- Erik Lesko and Chris Karchesky will distribute the revised ATS Workplan (Workplan) to the ATS for review.
- Larissa Rohrbach will distribute the ATS Charter to the ATS for a final 1-week review period before submittal to the Aquatic Coordination Committee (ACC) in August.

I. Welcome (Lesko)

A. Review Agenda

Bull Trout-Coho Salmon Interaction Monitoring was removed from the Updates section of this ATS meeting.

II. ATS Meeting Topics

A. ATS Workplan Priorities and Status (Lesko; 30 min)

Erik Lesko has been working internally with Larissa Rohrbach and Chris Karchesky to define priorities in the Workplan. Lesko acknowledged the progress that has been made by the ATS across several areas. A significant amount of time has been spent on the Lewis Coho Hatchery Transition Plan (Transition Plan), Hatchery and Genetic Management Plan (HGMP) updates, the Genetics Monitoring Plan, brood collection curves, Integrated Population Models (IPM), and monitoring ecological interactions within the Lewis River Basin.

One hundred and fifteen comments were addressed in the Utilities' 2023 Lewis River Annual Report (Annual Report) specific to the Lewis River Hatchery and Supplementation (H&S) program. These comments have been helpful in shaping the priority list of tasks for the ATS. Many of the comments

were related to available data and metrics analyzed under Objective 3 of the H&S Plan. Objective 3 is a large and data-intensive objective with 10 sub-objectives. Key questions include causes of mortality and determining fish size and age based on scale analysis. There is not much information available on infection rates or causes of mortality. Comments were additionally focused on bias associated with estimates gathered from monitoring strategies, such as screw-trapping. Lesko will have further discussions with Kevin Young to determine the most efficient way to obtain the data needed for the 2024 Annual Report. Young said that it is likely that data to address these metrics are available but have not been reported in the level of detail that may be needed for the Utilities' Annual Reports. A routine for providing the data that relate to these metrics can be established in the Annual Report moving forward.

Examples of metrics that are not currently being addressed in the Annual Report but are identified in the H&S Objectives include avian predation rates, smolt-to-adult return rates, and an annual review of hatchery operations. The H&S Plan also recommends that the ATS evaluate hatchery operations to determine whether there is new information or preferred operating strategies, such as feeding and rationing plans, to discuss. Discussions in the ACC are in progress related to the status of HGMPs and the need for more detailed information.

Lesko and Karchesky are working on revising the workplan. There is overlap in the data needed for the H&S Plan and the Aquatic Monitoring and Evaluation Plan for the Lewis River (M&E Plan). Kale Bentley (Washington Department of Fish and Wildlife [WDFW]) said the ATS has done a good job of discussing how to effectively link these two plans and their overlapping objectives. The rewrite of the M&E Plan in 2017 highlighted the need to link the two plans. Identifying the overlap between these two plans is an important step to understanding the recovery stages and impacts of upper basin transport and hatchery program management. Lesko said additional time is needed to combine priorities from both plans into a Workplan. Lesko proposed to distribute a revised draft Workplan to the ATS for members to review before the next meeting in August.

Rohrbach said progress has been made to updating the Workplan task prioritization list from 2020/2021 to now. Bentley said that last year, a lot of time was spent discussing hatchery updates and the Lewis River Coho Salmon IPM. These objectives must be included in the task prioritization list and reported on in the Annual Report due to their relation to the M&E Plan and the 2024 Annual Operating Plan (AOP). Discussions on fish passage will take up more of the ATS's time going forward. Establishing productivity and capacity data from the upper basin through the early results of the IPM will be a major goal for the next several years. It would be beneficial to determine how this will be integrated into future annual reporting.

B. ATS Charter Revisions (Rohrbach; 20 min)

Rohrbach shared the latest revised version of the ATS Charter. Josua Holowatz (WDFW) walked the ATS through WDFW's comments in the document. Holowatz called for increased specificity to the topic of fish passage in the "Roles" section. It would be beneficial to attach the ACC charter for reference. Jeremiah Doyle (PacifiCorp) noted that the Bull Trout Technical Working Group is the incorrect name for this group. The name was corrected to the Lewis River Bull Trout Recovery Team.

Rohrbach said that a goal when drafting the charter was to prevent the repetition of topics discussed by the ATS and the Fish Passage Subgroup (FPS). Metrics and objectives that are pertinent to each committee can be identified while recognizing that the ATS must have awareness of how fish passage affects monitoring and upstream transport numbers. Bentley said the FPS has been primarily focused on fish passage facility design and evaluation. The ATS focuses on the operation of facilities and transport of fish. Karchesky agreed the FPS should not carry out work beyond the facility construction. Everything other than facility construction is integrated into the M&E and H&S plans, which are topics for the ATS to evaluate. Collection and survival rates of adult fish at the Merwin Upstream Fish Collection Facility and juveniles at the Swift Floating Surface Collector, as well as other metrics identified the Lewis River Hydroelectric Projects Settlement Agreement (Settlement Agreement), will be included in the next 5-year rewrite of the M&E Plan. The Lewis River FPS is unique to other fish passage subgroups; they have been having blended discussions between higher-level policy and engineering topics. The work of the FPS to review design and construction materials may reach a conclusion relatively soon, but the work of the ATS will continue.

Bentley said it is important to distinguish the role of the ATS in supporting and facilitating implementation of the M&E and H&S plans versus the entity that is responsible for carrying out these tasks. Lesko said the obligation to implement programs falls to utilities with a Federal Energy Regulatory Commission (FERC) license. Karchesky proposed replacing "PacifiCorp" with "Utilities" when referring to the implementation of activities under the Settlement Agreement the "Roles" section. Rohrbach said the ATS has always functioned as an open forum. Flexible participation should be encouraged through keeping the point of contact list high level for each organization. Bentley said the roles of each participating organization can be clarified in future iterations of the charter.

Currently, the ATS prepares supporting materials that are brought to the ACC for approval and review. The ATS does not need to achieve consensus votes and decisions. Rohrbach said the format for making recommendations has been left open intentionally. Format of supporting materials is dependent on the weight of the issue and how directly connected a recommendation is to the Settlement Agreement.

The goal is to have a 30-day review of the AOP in November. This will ensure the document can meet FERC obligations and be finalized in January of the following year. The AOP states that the next revision of the H&S Plan will be finalized by 2027.

In reference to the "Milestones and Measures" section, Emi Melton wanted to ensure the ATS was aware of the connection between Endangered Species Act (ESA) consultation, the HGMP approval process, and the Settlement Agreement. The FERC biological opinion describes programs that have Section 4(d) authorization under the ESA. Lesko said language that interprets the Settlement Agreement should be used with caution in the charter. Rohrbach will determine whether there is clear terminology in the Settlement Agreement pertaining to biological opinions and Section 4(d) authorization. Rohrbach will address comments and distribute the charter back to the ATS for a final 1-week review period before submittal to the ACC.

III. Updates

A. Hatchery Practices and Pathology Updates (Hatchery and Fish Health Staff; 20 min)

Sean Roon provided pathology updates. At Speelyai Hatchery, there was an increase in adult Chinook Salmon mortalities associated with *Ceratonova shasta* parasitic infections. At Merwin Hatchery, summer steelhead have been given preventative treatment for bacterial kidney disease. At Lewis River Hatchery, late Coho Salmon were split into lower densities to avoid cases of bacterial cold-water disease.

Erik Lesko asked whether cases of *C. shasta* are uncommon occurrences. Roon said cases are not uncommon and are based on flow and temperature cycles. Several years ago, eDNA sampling by the Oregon Department of Fish and Wildlife revealed high concentrations of *C. shasta* in the mouth of the Lewis River. This produced an environment where adult fish could become infected while traveling upstream. This year he has seen higher infection rates than previous years. Lesko asked whether the Cowlitz River hatcheries have had problems with *C. shasta* cases. Roon replied that hatcheries on the Cowlitz River experience less of an impact due to lower parasite concentration spread out over a larger area.

Jesse Cody provided hatchery updates. Juveniles at Speelyai Hatchery are healthy and growing well. Extra spring Chinook Salmon broodstock (two males and six females) were collected on July 17 at the Lewis River Hatchery ladder. Extra summer steelhead broodstock were collected and held at Lewis River Hatchery. Chris Karchesky said that the planned outage at the Merwin Upstream Fish Collection Facility was underway and that the facility is scheduled to be back in operation no later than by September 1.

Cody said marking and tagging has finished at Lewis River Hatchery. Speelyai Hatchery is getting ready to begin spawning spring Chinook Salmon next month. Marking at Merwin Hatchery will start at the beginning of August. Treatment for *Ichthyophthirius* will begin at the end of August.

Karchesky asked when spawning of summer steelhead begins. Cody replied that they are not spawned until the week of Thanksgiving. Karchesky noted that additional fish could then be collected after the Merwin Upstream Fish Collection Facility comes back online.

B. Lewis River Coho Salmon IPM (Karchesky; 10 min)

Karchesky said the Lewis River Coho Salmon IPM has been completed. The U.S. Geological Survey (USGS) is drafting a report that summarizes the progress and structure of the model. The report will be peer-reviewed and available in this fall.

Karchesky also noted that the Utilities will be retaining USGS to oversee the running of the IPM as new information becomes available in the future. The model will continue to be populated with data,

including upstream transport numbers, escapement to the upper basins, juveniles collected and produced, upper basin dynamics, and fish collection efficiency. USGS would be able to periodically present information to the ATS as it relates to program management questions and objectives. Development for a steelhead IPM will begin later this year and into next year.

Karchesky mentioned that a meeting will be held in August with regional IPM developers. The meeting will discuss how IPMs have been applied to species such as Coho Salmon on a regional scale. Bentley said there is currently not a set date for this meeting. Russel Perry and John Plumb from USGS will be in attendance. ATS members are welcome to join if they are interested in hearing more about IPM structure. Bentley will provide the ATS with a summary of the discussions, conclusions, and realizations from the meeting that are relevant to understanding how the IPM can be used as a tool for the ATS.

C. Hatchery Infrastructure (Glaser/Lesko; 10 min)

Lesko provided updates to the discourse on hatchery infrastructure upgrades required to implement the Transition Plan. PacifiCorp provided a set of policy questions to Bryce Glaser (WDFW). Once Glaser has provided rationale for implementing the infrastructure upgrades, discussions on a preferred strategy with decision makers can move forward. The goal is to implement the Transition Plan in 2025.

Bentley asked what is the main obstacle to implementing hatchery infrastructure? How do infrastructure modifications relate to HGMP stalemates? Lesko summarized that while the existing

segregated early Coho program is largely unchanged under the Transition Plan. The late Coho integrated program is being expanded to run from early October through the end of December. This proposed extension of spawn timing and number of spawning events may require significant infrastructure modifications and upgrades (e.g., chillers, pond dividers) to accommodate the new program. The proposed infrastructure upgrades identified represent substantial and ongoing investments. Decisions on whether to move forward with these investments require policy level discussions. For an ESA consultation on an HGMP, the program would need to meet the biological needs of the species. Melton said if biological needs are not included in the proposal, a consultation cannot be done on the programs. Until a consultation is done, NOAA Fisheries (NMFS) will not have authority to weigh in on program management. All infrastructure alternatives could be included in the HGMP if consultation needs to be moved forward. Lesko said discussions on infrastructure upgrades can move forward while the questions related to ESA coverage and HGMP development are being discussed and resolved. Lesko asked if there is an HGMP for the late Coho Salmon integrated program. Melton responded that there is not a full HGMP for NMFS to consult on. Anja Huff said WDFW submitted HGMPs to cover WDFW's portion of production beyond what is required in the Utilities FERC licenses and Settlement Agreement.

D. Genetics Monitoring Plan (Lesko; 10 min)

Lesko distributed the Genetics Monitoring Plan to the ATS in late June. The current focus is identifying how additional steelhead samples will be collected upstream of Swift Dam and downstream of Merwin Dam. The original goal was to conduct sampling in August, however, due to landownership logistics, sampling will likely occur in September.

Kale Bentley said the next steps will be to inventory which samples are available and cross-reference them with which samples are needed. There are no steelhead samples available for the lower Lewis River Basin. Once samples are obtained, the laboratory will run the necessary analyses. It is necessary to regroup as soon as possible to determine which samples are needed, how they will be collected, and who will be processing the samples in the laboratory. Lesko said a framework that details how sampling is conducted must be provided within the Genetic Monitoring Plan. Lesko, Bentley, Cramer Fish Sciences, and Todd Seamons (WDFW) have been the core individuals within these discussions; however, ATS members are welcome to participate in the discourse. Bentley will coordinate with ATS members who are interested in attending a meeting with him and Lesko to discuss the Genetics Monitoring Plan.

IV. ATS Administration

A. Next Meeting August 22, 2024 (Rohrbach; 5 min)

The next meeting is on August 22, 2024. A hybrid meeting may be held depending on the agenda and anticipated attendance, with the in-person attendance held at the WDFW Region 5 office: 5525 South 11th Street, Ridgefield, Washington 98642.

V. List of Attendees

Name	Affiliation
Caitlin Burd	Anchor QEA
Larissa Rohrbach	Anchor QEA
Amanda Farrar	Cowlitz PUD
Kathryn Blair	NOAA Fisheries
Emi Melton	NOAA Fisheries
Jeremiah Doyle	PacifiCorp
Mark Ferraiolo	PacifiCorp
Chris Karchesky	PacifiCorp
Erik Lesko	PacifiCorp
Levi Pienovi	PacifiCorp
Kale Bentley	WDFW
Jesse Cody	WDFW
Josua Holowatz	WDFW
Anja Huff	WDFW
Sean Roon	WDFW
Kevin Young	WDFW