

Meeting Minutes

Lewis River Aquatic Technical Subgroup

To: Aquatic Technical Subgroup Date: April 25, 2019

From: Karen Yanasak, Anchor QEA, LLC, ATS Coordinator

Re: Final Minutes of the March 28, 2019 ATS Meeting

The Lewis River Aquatic Technical Subgroup (ATS) meeting was held at the Washington Department of Fish and Wildlife (WDFW) office in Ridgefield, Washington, on March 28, 2019, from 9:00 am to 12:45 pm. Attendees are listed in Section 5 of these meeting minutes.

Action Item Summary

Item #	Responsibility	Action Item	Status
1	Sam Gibbons, Bryce Glaser, Mike Chamberlain, and Kevin Young	Revise Hatchery and Genetic Management Plans (HGMPs) to include new modeling information when available.	This item is ongoing.
2	Erik Lesko and Michelle Havey	Add an additional column to the crosswalk objective table indicating suggested revisions to the Hatchery and Supplementation (H&S) Plan objectives to ensure consistency with HGMP development.	This item is ongoing.
3	Erik Lesko	Review report from Kale Bentley on abundance estimation of fall Chinook salmon.	This item is ongoing.
4	Erik Lesko	Develop a matrix to identify results on H&S Plan and Annual Operating Plan (AOP) objectives.	This item is ongoing.
5	Sarah Montgomery	Add priority topics for 2019 AOP development to the parking lot list.	This item is ongoing.
6	Erik Lesko	Distribute Lewis River Hatchery total dissolved gas results and analysis to the ATS.	This item is included in the 2018 draft annual report.

7	WDFW	Provide comments on Take Table and Take Table descriptions.	This item is ongoing.
8	Bryce Glaser	Send 2018 smolt trapping report (Cowlitz River) to Erik Lesko.	This item is ongoing.
9	Michelle Havey and Karen Yanasak	Setup SharePoint Site to store versions of documents or on PacifiCorp's website.	
10	Michelle Havey and Erik Lesko	Provide updated H&S Plan objectives to the ATS.	
11	WDFW, PacifiCorp, and Anchor QEA	Review Appendix E prior to April meeting.	
12	Sarah Montgomery and Michelle Havey	Provide papers noted in Appendix E.	
13	WDFW	Setup a meeting with PacifiCorp before the April 26 ATS meeting regarding 2020 screw trapping protocol development.	
14	Erik Lesko	Distribute the fall coho salmon monitoring reports to the ATS.	
15	Karen Yanasak	Send out latest version of AOP to ATS.	
16	Erik Lesko	Check with potential groups to provide Comprehensive review of HS plan draft	

Agreements or Recommendations

Review Items

• The ATS is reviewing current versions and supporting documents of the 2019 AOP and H&S Plan in preparation for updating these documents in 2019.

Finalized Documents

• Phase 1 of the 2019 AOP is final

1. Review Agenda, Review Last Meeting Action Items, and Approve Previous Meeting Minutes (Yanasak/Lesko)

A. Review Agenda

B. Review Last Meeting Action Items (February)

Item #	Responsibility	Action Item	Status
1	Sam Gibbons, Bryce Glaser, Mike Chamberlain, and Kevin Young	Revise HGMPs to include new modeling information when available.	
2	Erik Lesko and Michelle Havey	Add an additional column to the crosswalk objective table indicating suggested revisions to the H&S Plan objectives to ensure consistency with HGMP development.	This item is ongoing.
3	Erik Lesko and Larissa Rohrbach	Distribute morphology data summary out to the group after spring Chinook salmon forced release group sampling scheduled for October 29, 2018.	This item is ongoing. Lesko and Rohrbach will summarize the data and send it out to the group.
4	Erik Lesko	Review report from Kale Bentley on abundance estimation of fall Chinook salmon.	This item is ongoing.
5	Erik Lesko	Develop a cheat sheet to evaluate results on H&S Plan and Annual Operating Plan (AOP) objectives.	This item is ongoing.
6	Sarah Montgomery	Add Priority Topics for 2019 AOP development to the parking lot list.	
7	Kale Bentley, Tom Wadsworth, and Bryce Glaser	Review the assumptions and special concerns with Erik Lesko. Method for estimating steelhead proportion of hatchery-origin spawners (pHOS) will be starting in February (tagging), model would be run this summer.	This item is ongoing.
8	Erik Lesko	Distribute Lewis River Hatchery total dissolved gas results and analysis to the ATS.	This item is included in the 2018 draft annual report.

9	Erik Lesko	Schedule meeting with WDFW to review Cowlitz screw trapping and develop lower Lewis River trapping protocol (2020).	
10	Erik Lesko	Distribute paper on genetics to the ATS.	Complete; Sent to Karen Yanasak.
11	Erik Lesko	Schedule a meeting with PacifiCorp and WDFW to review spring Chinook salmon broodstock priority use as drafted (by WDFW) in the 2019 AOP.	
12	Sean Roon	Update bacterial kidney disease sampling protocols for spring Chinook salmon release groups.	
13	Erik Lesko	Develop timeline and identify independent reviewers for the H&S Plan.	
14	WDFW	Review steelhead pHOS for 2016.	
15	WDFW/NOAA	Provide comments on Take Table and Take Table Descriptions	
16	Bryce Glaser	Send 2018 smolt trapping report (Cowlitz River) to Erik Lesko,	

C. February 28, 2019 Meeting Minutes

Currently under review

2. Meeting Topics

A. Finalize Phase 1 2019 AOP

- Erik Lesko determined that the Settlement Agreement requires a final AOP be submitted by April each year. He said we could still proceed with the goal to finalize Phase 1 by January 1 and Phase 2 by March 31.
- Lesko's concern is that for 2019 and 2020 the draft spring Chinook broodstock priority list
 appears to have equal priority for upriver supplementation and additional broodstock needs
 for the resident killer whales. However, returns in 2019 and 2020 are from utility-funded
 production and therefore should have a higher priority for upstream supplementation.
- Bryce Glaser asked what is the minimum number of fish needed to assess collection efficiency? What are the criteria we would use to determine the number of fish that would go

- upstream vs. other in-basin programs? Do the 50 pairs for the minimum supplementation goal make sense?
- Chris Karchesky said there have been issues with fish condition in the holding ponds for the acclimation program. We've learned that hatchery adults distribute well on the spawning grounds, but we don't know yet how successful they have reproduced. He said 50 pairs seems sufficient this year but encouraged the group to think about reassessing those numbers for next year. They need to have enough fish to allow for evaluation of successful reproduction.
- Tom Wadsworth said juveniles from adults that were put upstream in 2017 should be out of the system, so this summer would be a good time to evaluate production from those fish.
- Karchesky asked if broodstock will be taken first and then the 50 pair of fish, or would the 50 pair be selected throughout the run distribution? Glaser said his understanding is the agreement was to start off by holding fish, and once they reach their broodstock goal then the 50 pair will be selected.
- Karchesky asked if a portion are going to Speelyai and a portion going to Lewis River Hatchery?
- Sam Gibbons indicated that all broodstock would be transported to Speelyai and surplus would be held and treated with formalin at the Lewis River Hatchery.
- Glaser said before the fishery opens, they will have a discussion about achieving the minimum number to transport upstream. Karchesky said if the run gets to that point this year, he would ask for a round table discussion before WDFW opens the fishery.

B. 2020 Screw Trapping Protocol Development

WDFW is going to have an internal meeting with Matt Sturza (Cowlitz screw trap lead) in the
next week or two. Afterwards they will set up a meeting with Erik Lesko to discuss ideas and
options to explore before the April ATS meeting.

C. H&S Plan Update

- The 2019 timeline was sent to the ATS to illustrate the deliverable due dates. PacifiCorp and Anchor QEA will make updates to the H&S Plan in track changes and provide them to the ATS. Erik Lesko said there is a 60-day Aquatic Coordination Committee (ACC) review required, so the ACC need to have it in-hand by October 1 so they can get it back to the ATS by December 1.
- Lesko suggested that the ACC and the independent review group could conduct their reviews simultaneously.
- Bryce Glaser suggested the ATS provide a presentation to the ACC to highlight changes and major updates to the H&S Plan. This was agreed to as a necessary step at the meeting.
- Glaser asked if there are any guidelines on the review process? The independent review group may also want to review the final AOP as part of the "comprehensive review."

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- Lesko said the Independent Scientific Review Group was mentioned at the last meeting as a
 possible group that could conduct the review.
- Tom Wadsworth suggested that ideally the ATS would review the plan and then send it for independent review before the ACC reviews it. There will be more discussion on the process of the review in upcoming meetings.
- Glaser said there are problems with the objective numbers and cross-referencing was an issue, so updating the objective numbers should be Step 1, then Step 2 would be reviewing and updating the objective descriptions.
- Lesko will provide a revised section of the HS plan objectives using the crosswalk table and send out to the ATS prior to our next meeting.

D. Morphology Data Summary

- Larissa Rohrbach gave a presentation on morphology data.
 - Spring Chinook Salmon Preliminary Conclusions
 - The majority of spring Chinook salmon to be released in the fall had smolted
 - In spring, the largest fish appeared to have left volitionally
 - Precocious males were observed in January, 4 months after 2018 spawning and
 9 months prior to 2019 spawning
 - Lewis Natural-Origin Return Steelhead Preliminary Conclusions
 - No precocious males observed (sampling at typical spawning time)
 - Smolt index was related to size but not condition factor
 - Fully smolted fish were the largest fish and some moved volitionally—closer to an optimal size identified in literature for steelhead smolting (~200 mm)
 - Chambers Steelhead Preliminary Conclusions
 - No precocious males observed (sampling at typical spawning time)
 - Most fish were fully smolted
 - No differences in the size distribution between the total population and the forced-out group
 - Lewis Coho Salmon Preliminary Conclusions
 - No size differences between late and early coho salmon
 - Similar proportion of transitional and fully smolted fish between groups
- The ATS recommended Erik Lesko continue to collect morphology data for 2019.

E. Take Table Update (WDFW)

 Tom Wadsworth said WDFW is still working on the updates for the Take Table and Take Table descriptions.

F. Residualism Discussion

- There was a literature review completed for volitional release (currently Appendix E in AOP).
 Tom Wadsworth said this is somewhat related, but there may be additional studies specifically related to evaluating residualism.
- Kale Bentley commented that a literature review asked why is it an issue? What do we know
 and not know about residualism in the Lewis River and other basins? Seems like this would be
 a good place to start.
- Before the April meeting, Wadsworth, Bentley, and Bryce Glaser will discuss a plan for a
 proposed approach. The literature review (AOP, Appendix E) is focused on strategies to
 minimize residualism rather than how to evaluate residualism. Wadsworth said release
 strategies need to be measured to see if they are working.
- Glaser said Objective 4 in the H&S Plan is to, "Estimate juvenile release behavior after release from hatcheries downstream of Merwin Dam." He said there should be a plan for a periodic evaluation of residualism for residency time and behavior post-release.
- Erik Lesko said he would like to target one or two groups to focus on for now.

G. Fall Monitoring

- Erik Lesko needs to know what to do about fall coho salmon monitoring this year (adult coho salmon estimates for Lower Lewis). We want to get an abundance estimate and a pHOS estimate so we should discuss if we change the process or keep it the same.
- Bryce Glaser asked if WDFW has all of the reports for fall coho salmon monitoring.
- Lesko has the 2016 to 2018 reports and will send those out to the group for a check-in at the April meeting. He said he may have Jason Shappart of Meridian Environmental come to the May meeting for a discussion.
- Glaser said they would like to review the reports and bring any concerns to the ATS meeting and then determine if it would be beneficial to have Shappart attend a discussion.
- WDFW will review the reports prior to the April ATS meeting.

H. Total Dissolved Gas Report Update

Erik Lesko will send this report out before the April meeting.

I. Wild Winter Steelhead Collection Update

- Kevin Young said they have collected 3 fish so far and they should be at 18 for brood. One fish is in broodstock, and one is pending tomorrow. Both are females. One more was in the trap today, and it is also a female.
- Erik Lesko and Jeremiah Doyle haven't seen any on the spawning grounds, and the peak spawn time is typically the first week of April.
- Bryce Glaser asked what is water temperature compared to prior years?

- Lesko said the water is lower than average and a few degrees colder right now. Lesko said as soon as the flows bump up, the fish tend to move.
- Flows were increased by another 200 cubic feet per second on Saturday; Doyle saw a little bump in fish early this week.
- Glaser asked if there are any returns on production from the upper river? Chris Karchesky said they have exceeded expectations of the program since 2012; they generally average 1,000 fish upstream, and there were about 8,000 juveniles that came out last year, which was their best year.
- Glaser said maybe they should have a check-in in another week or so. WDFW is dealing with a similar situation on the Kalama River right now. The fish aren't showing up, and the Cowlitz River is in a similar position but has started to pick up.

3. Review April Meeting Topics (Lesko/Yanasak)

- 2020 screw trapping (WDFW)
- Review parking lot document
- Discuss residualism
 - Prioritize list of groups to focus on
 - Develop questions or concerns on releases
 - Discuss metrics and methods to evaluate residualism
- Discuss H&S Plan objectives
- Review fall coho salmon monitoring reports for 2016 to 2018

4. Aquatic Technical Subgroup Administration (Yanasak)

The next meeting will be on April 26, 2019, at the WDFW Ridgefield, Washington, office.

5. List of Attendees

Name	Affiliation
Erik Lesko	PacifiCorp
Jeremiah Doyle	PacifiCorp
Chris Karchesky	PacifiCorp
Karen Yanasak	Anchor QEA
Michelle Havey*	Anchor QEA
Larissa Rohrbach*	Anchor QEA
Tom Wadsworth	WDFW
Kevin Young	WDFW
Kale Bentley	WDFW
Aaron Roberts	WDFW
Sam Gibbons	WDFW
Sean Roon	WDFW
Bryce Glaser	WDFW
Amanda Froberg*	Cowlitz PUD

Notes:

^{*}Joined via phone