



9	Erik Lesko	Check with the Aquatic Coordination Committee (ACC) regarding their preference for reviewing the H&S Plan (before or after independent review).	<i>Scheduled for May ACC meeting</i>
10	Erik Lesko and Sarah Montgomery	Revise Annual Operating Plan (AOP) based on discussions today and distribute a version for the ATS to review before the May meeting, with pending items (screw trap) flagged.	
11	WDFW	Review the AOP (Phase 2) and provide edits and comments.	
12	Erik Lesko and Sarah Montgomery	Determine level of effort for literature review of methods for estimating residualism in spring Chinook and coho salmon; perform review.	<i>Update at May ATS meeting</i>
13	Tom Wadsworth	Distribute Kale Bentley's results from monitoring of the forced-release (fall) group of spring Chinook salmon.	<i>Complete</i>
14	Sarah Montgomery	Revise and distribute Parking Lot.	
15	Sarah Montgomery	Regarding the H&S Plan Objectives: <ul style="list-style-type: none"> <li>• Revise with column for how each applies to the settlement agreement</li> <li>• Distribute old objectives for comparison</li> <li>• Also include a tracking table for settlement agreement requirements and pertinent sections of the H&amp;S Plan</li> </ul>	<i>First two items distributed on April 30; last item will be distributed with the H&amp;S Plan in June after first round of edits are complete</i>

## Agreements or Recommendations

- The ATS approved the AOP Study Plan Template. (Note: the final template is posted to the PacifiCorp website).

## Review Items

- The Draft H&S Plan Objectives was distributed for review on April 30, 2019, prior to the May 30 ATS meeting.

## Finalized Documents

- The Final AOP Study Plan Template will be posted to the PacifiCorp website.

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

## A. Review Agenda

The ATS discussed the agenda and added two items, reviewing a template for study plans, and discussing the current status of the take table.

## B. Review Last Meeting Action Items (March)

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.	<i>Glaser said WDFW has an upcoming meeting to review the internal schedule for finalizing the HGMPs. He said there are some key questions regarding the steelhead program and other outstanding items.</i>
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.	<i>Lesko said this item is complete.</i>
3	Erik Lesko	Review report from Kale Bentley on abundance estimation of fall Chinook salmon.	<i>This item is ongoing.</i>
4	Erik Lesko	Develop a matrix to identify results on H&S Plan and Annual Operating Plan (AOP) objectives.	<i>This item is ongoing. Lesko said he is working from a template from Chris Karchesky, and this table will be part of the annual report and presented to the ACC. Glaser suggested discussing the format of the summary in the ATS. He said a list of objectives and deliverables plus where to find results and a general status update would all be helpful to include. Karchesky suggested that WDFW review the 2018 Fish</i>

			<i>Passage Report as an example and to provide suggestions regarding content and format. The ATS reviewed table briefly and agreed to look at it more closely before the May meeting.</i>
5	Sarah Montgomery	Add priority topics for 2019 AOP development to the Parking Lot list.	<i>This item is complete and will be reviewed today.</i>
6	Erik Lesko	Distribute Lewis River Hatchery total dissolved gas results and analysis to the ATS.	<i>This item is complete. Lesko said there is a report that was submitted to FERC and a PowerPoint summary. He said this should be reviewed with the group at an upcoming meeting, and tentatively suggested the May meeting.</i>
7	WDFW	Provide comments on Take Table and Take Table descriptions.	<i>This item is ongoing. Bryce Glaser said the Cedar Creek information was added, and WDFW is working to determine whether there are any further changes needed based on HGMP revisions. Erik Lesko said he will post the most recent version to the PacifiCorp website.</i>
8	Kale Bentley	Send 2018 smolt trapping report (Cowlitz River) to Erik Lesko.	<i>This item is complete.</i>
9	Michelle Havey and Karen Yanasak	Setup SharePoint Site to store versions of documents on PacifiCorp's website.	<i>This item is complete. PacifiCorp's website will be used for storing and distributing documents.</i>
10	Michelle Havey and Erik Lesko	Provide updated H&S Plan objectives to the ATS.	<i>This item is complete.</i>
11	WDFW, PacifiCorp, and Anchor QEA	Review Appendix E prior to April meeting.	<i>This item is complete.</i>
12	Sarah Montgomery and Michelle Havey	Provide papers noted in Appendix E.	<i>This item is complete.</i>

13	WDFW	Setup a meeting with PacifiCorp before the April 26 ATS meeting regarding 2020 screw trapping protocol development.	<i>This item is complete.</i>
14	Erik Lesko	Distribute the fall coho salmon monitoring reports to the ATS.	<i>This item is complete.</i>
15	Karen Yanasak	Send out latest version of AOP to ATS.	<i>This item is complete.</i>
16	Erik Lesko	Check with potential groups to provide comprehensive review of H&S Plan draft	<i>Lesko said this item is ongoing. The ATS discussed whether the ACC or the independent group should review the document first.</i>

**C. March 27, 2019 Meeting Minutes**

The ATS approved the March 27, 2019 meeting minutes as revised.

**2. Meeting Topics**

**A. Screw Trapping**

Erik Lesko said PacifiCorp and WDFW met last week to discuss screw trapping protocols. They will develop the protocols for 2020 outside of the ATS then report back to the group for approval.

**B. AOP Phase 1 and Timeline for Phase 2**

Tom Wadsworth said he has a few additional comments on the Phase 1 sections of the AOP. The ATS reviewed his comments related to the following topics, which were tracked and updated in the document:

- Hook and line collection methods for steelhead were updated
- Figure B1 should be updated for Phase 2 with 2018 data
- Spring Chinook salmon jacks: the HGMP recommendation is not more than 5% of the broodstock collection or adult supplementation, but there is potential for this to be an issue in 2019. It may need to be modified in season.
- Adult supplementation spring Chinook salmon: update release locations (Eagle Cliff in 2018), and a discussion about spawning distributions may be warranted. Erik Lesko said the distribution of spring Chinook salmon in 2018 will be presented at the next ACC meeting.
- Prioritization of returning coho salmon: the ATS discussed the minimum upstream goal for coho salmon, which is decided on a yearly basis. Chris Karchesky indicated that a combination of hatchery- and natural-origin returns should not exceed 2,000.

- Screw trapping language will need to be updated pending further discussions between WDFW and PacifiCorp.

Regarding the timeline for finalizing the AOP, the ATS set a target of completing it by June. The next steps are as follows:

- Sarah Montgomery will send the revised AOP (incorporating today's edits) to the ATS for their review of the Phase 2 sections for a 2-week review.
- The screw trapping sections will be flagged as needing to be updated after those items are finalized.
- The goal is to have work the screw trapping updates into the revised Phase 2 AOP by the May ATS meeting; however, this will depend on review timelines being kept and screw trapping pieces being finalized.

### **C. Parking Lot for 2020 AOP**

The ATS reviewed the most recent version of the Parking Lot. Notes and comments were mostly made in-text (in the new column, "Status"), but the main themes are discussed below.

Residualism: The ATS discussed if there is capacity to perform a literature review for how other programs evaluate residualism, which may help in drafting related sections of the 2020 AOP. WDFW expressed that a literature review would help determine whether a study is warranted and if so, would also help with study design. Erik Lesko noted that PacifiCorp may not have capacity to perform this review and would report back to the ATS. Bryce Glaser suggested a few decision points:

- Are fish residualizing? For each species, the known number of fish released from the hatchery can be compared to the estimate of how many pass the trap. If this appears to be an issue for a species, a study may be warranted. Smolt trapping discussions and volitional release for fall Chinook salmon (pilot study) both inform this assessment. In this step, also evaluate the quality and quantity of data, and any predation influences.
- Secondly, is the observed or estimated residualism a problem or not? Determine the ecological interactions and how residualism affects recovery objectives.

Glaser suggested that the ATS focus on the first question for 2020 using PIT tags, radio telemetry, or screw trap studies with a focus on spring Chinook and coho salmon. He said if the ATS agreed, the next step would be to determine the methods for estimating spring Chinook and coho salmon residualism within the next few months.

Physiological indicators of precocity and smoltification: the ATS discussed whether more information is needed regarding precocity issues with spring Chinook salmon. Lesko noted that Kale Bentley has some data regarding smoltification from sampling efforts conducted in the fall. This was also

discussed in April as it relates to morphology. One suggestion would be a lethal sampling study. The ATS determined that they need to evaluate current methods and determine a sampling or study plan for 2020. Glaser summarized that there are two questions here: how to quantify the percent of release that is showing signs of precocity, and what hatchery practices can alleviate precocity if it is related to release strategies?

Spring/fall Chinook salmon stock assignment estimation: Glaser asked whether this is a method to back up the visual inspection information that is used in these assignment estimations? Lesko identified that there is some difference between how WDFW and how PacifiCorp differentiate spring from fall Chinook salmon, so those discrepancies can be worked out for the next AOP. In addition, the ATS discussed whether mark-recapture work could make estimates of the spring portion of the run more robust. This discussion is ongoing.

#### **D. Residualism**

Erik Lesko said the ATS should consider not just the issues surrounding residualism in the Lewis River programs, but what should be done in 2020 to address or study the issue. In addition to what was discussed during review of the Parking Lot, the following items were noted:

- Bryce Glaser said it's important to determine who will be working on the plan for the 2020 AOP. If there is a portion that needs to be implemented in the fall of 2019 then that should be determined now, especially in relation to screw trapping efforts.
- There was indication that a review of how residualism has been studied or addressed in other systems would be helpful, but no determination of who would perform that review.
- Greg Robertson said there was some work in Oregon conducted by the U.S. Army Corps of Engineers that may be helpful.
- Tom Wadsworth volunteered Kale Bentley to discuss this with WDFW staff from Olympia, who may have suggestions.

Lesko said this item should be discussed in May in relation to the H&S Plan objectives.

#### **E. H&S Objectives**

Erik Lesko said the H&S Plan will be reviewed independently in addition to the ACC review period. He said the ATS can provide input on the sequencing of these review periods, but the intent is to finalize the plan by the end of 2019. Lesko noted that one option is for the ACC to review the plan concurrently with the independent reviewer. ATS members present had no input on this timeline but suggested that the ACC should be asked for their preference. Lesko said he will check with the ACC regarding the review timeline for the H&S Plan.

The ATS reviewed the draft H&S Plan Objectives. Suggestions were made in-text during the meeting, and Sarah Montgomery said she will distribute the revised version for further review prior to the May meeting.

#### **F. Fall Coho Salmon Reports**

Erik Lesko said the North Fork Lewis River Coho Salmon Abundance Reports from 2016 to 2018 were sent to the ATS as requested. He said this work is conducted based on the same protocols that have been used in the past. He asked that the ATS please provide any comments on these reports as needed.

#### **G. Study Protocol Template Review**

Erik Lesko shared the document, ATS Study Plan Template, which he said is a template that should be used for drafting any study plan that is related to work conducted under the AOP. He said the bulleted sections identify pieces that must be included and asked for feedback regarding the template. Tom Wadsworth suggested adding a bullet for reporting (type and timeframe), and Bryce Glaser suggested adding a bullet for which management decisions could be affected by the study, or how the study will be used to inform management. Those revisions made, the ATS approved the ATS Study Plan Template, and Lesko said he will post it to the PacifiCorp website.

### **3. Review May Meeting Topics (Montgomery)**

The ATS discussed adding the following topics to the May agenda:

- 2020 screw trapping
- Residualism
  - Prioritize list of groups to focus on
  - Develop questions or concerns on releases
  - Discuss metrics and methods to evaluate residualism
- H&S Plan Objectives
- Fall coho salmon monitoring reports for 2016 to 2018

### **4. Aquatic Technical Subgroup Administration (Montgomery)**

The next meeting will be on May 30, 2019, at the WDFW Ridgefield, Washington, office.

## 5. List of Attendees

<b>Name</b>	<b>Affiliation</b>
Erik Lesko	PacifiCorp
Jeremiah Doyle	PacifiCorp
Chris Karchesky	PacifiCorp
Tom Wadsworth	WDFW
Kevin Young	WDFW
Kale Bentley	WDFW
Aaron Roberts	WDFW
Sean Roon	WDFW
Bryce Glaser	WDFW
Greg Robertson	U.S. Forest Service