

**FINAL Meeting Notes  
Lewis River License Implementation  
Aquatic Coordination Committee (ACC) Meeting  
July 9, 2020  
Skype Meeting Only**

**ACC Representatives Present (16)**

Kim McCune, PacifiCorp  
 Erik Lesko, PacifiCorp  
 Jim Byrne, Trout Unlimited  
 Bryce Glaser, WDFW  
 Peggy Miller, WDFW  
 Josua Holowatz, WDFW  
 Aaron Roberts, WDFW  
 JD Jones, USFS  
 Kate Day, USFS  
 Eli Asher, Cowlitz Indian Tribe  
 Amanda Froberg, Cowlitz PUD  
 Tim Romanski, USFWS  
 Joshua Ashline, NMFS  
 Steve West, LCFRB  
 Steve Manlow, LCFRB  
 Bill Sharp, Yakama Nation

**Guest (3)**

Matt Harding, Northwoods  
 Jeannie Heltzel, Meridian (formally DJ Warren)  
 Mark Larivier, Meridian (formally DJ Warren)

**Calendar:**

August 13, 2020	ACC Meeting	TBD
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<b>Assignments from July 9, 2020</b>	<b>Status</b>
McCune: Email the ACC approved Aquatic Fund Process Timeline to all ACC representatives for an additional 7-day review period	<b>Complete – 7/9/20</b>
McCune: Email the H&S Plan (clean & redline) to the ACC for a 60-day review period	<b>Complete – 7/11/20</b>
McCune: Email the Aquatic Fund Announcement letter out for review with comments due by August 3, 2020.	<b>Complete – 7/9/20</b>
Olson/Lesko: Request if FERC will delay its REA notice until after the ACC consensus meeting in September, 2020, and then report back findings to the ACC as quickly as possible before the August meeting.	<b>Complete – 7/22/20</b>

<b>Assignments from May 14, 2020</b>	<b>Status</b>
Lesko/Karchesky: Plan for monitoring water levels late June or early July relative to stranding. Matt Harding (Northwoods) would like to see stranding issue addressed at Swift and adjust water levels.	<b>Ongoing – currently Swift Reservoir is near full pool</b>

ATS: ACC awaiting recommendation from ATS regarding stocking into Swift reservoir.	<b>Ongoing</b>
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<b>Parking Lot Items</b>	<b>Status</b>
Waiting for input from the bull trout working group on whether they should be officially recognized as a subgroup of the ACC.	<b>Ongoing</b>

**Opening, Review of Agenda and Meeting Notes**

Erik Lesko (PacifiCorp) called the meeting to order at 9:33am and reviewed the agenda. No additions to the agenda were requested. A request was made by Matt Harding (Northwoods) to move the Flows/Reservoir Conditions Update topic to the first item on the agenda.

Lesko also reviewed the June 11, 2020 meeting notes to include edits and comments received from Jim Byrne (Trout Unlimited). The ACC approved the June 11, 2020 meeting notes at 10:03am to include clarifying edits received from Trout Unlimited regarding the Bull Trout Subgroup.

**Public Comment**

None

**Flows/Reservoir Conditions Update**

In response to a question and current reservoir levels from Matt Harding (Northwoods), Lesko communicated that the reservoir elevations were as follows: Merwin down about 3.8’, Yale down 12’ and Swift is down about 3’ so a total hole of about 19’ in the reservoirs. Natural flows without any hydro projects is 3,615 cfs and the outflow at Merwin has a FERC minimum of 2,300 cfs. We are currently discharging 2,400, so the reservoirs are being filled at this point. We are maintaining 10’ below full pool at Yale for the Saddle Dam seismic project. Minimum flow FERC requirement downstream of Merwin will change to 1,900 cfs as of July 11, 2020.

As far as doing surveys at Swift we still have a little bit of time, best guess is in approximately 3 weeks when the water levels may start dropping. Lesko will speak with PacifiCorp’s water management group and get back to Matt.

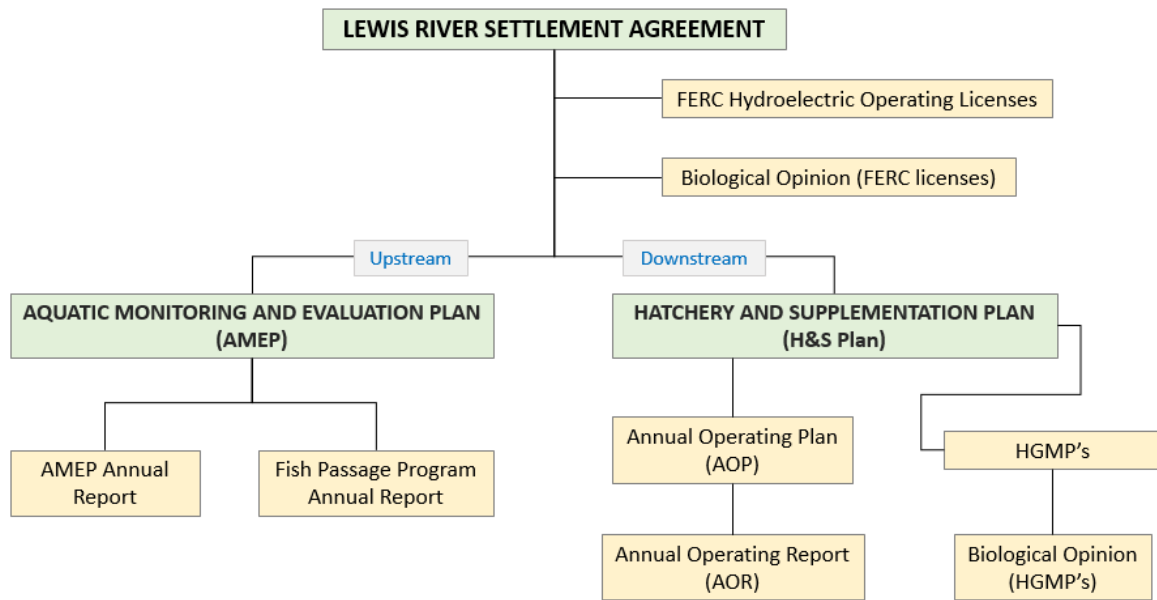
Lesko informed Harding that PacifiCorp only has minimum flow requirements at Merwin. PacifiCorp will drop to annual flow minimum of 1,200 cfs on July 31, 2020. The Flow Committee must provide their approval if it was necessary to drop below 1,200 cfs but we do not anticipate that happening this year. During recreation season every boat ramp has a minimum operating level and we attempt to maintain minimum reservoir elevations during the recreation season. However, as the summer progresses and if inflows drop substantially, drafting of reservoir would need to occur to maintain FERC minimum flows downstream of Merwin Dam.

PacifiCorp’s screw trap crews are no longer working on a daily basis up at Swift, so only periodic checks on the upper end of Swift will occur. Matt and Erik agreed to maintain communication as the summer progresses so that PacifiCorp can mobilize a survey crew to survey the area.

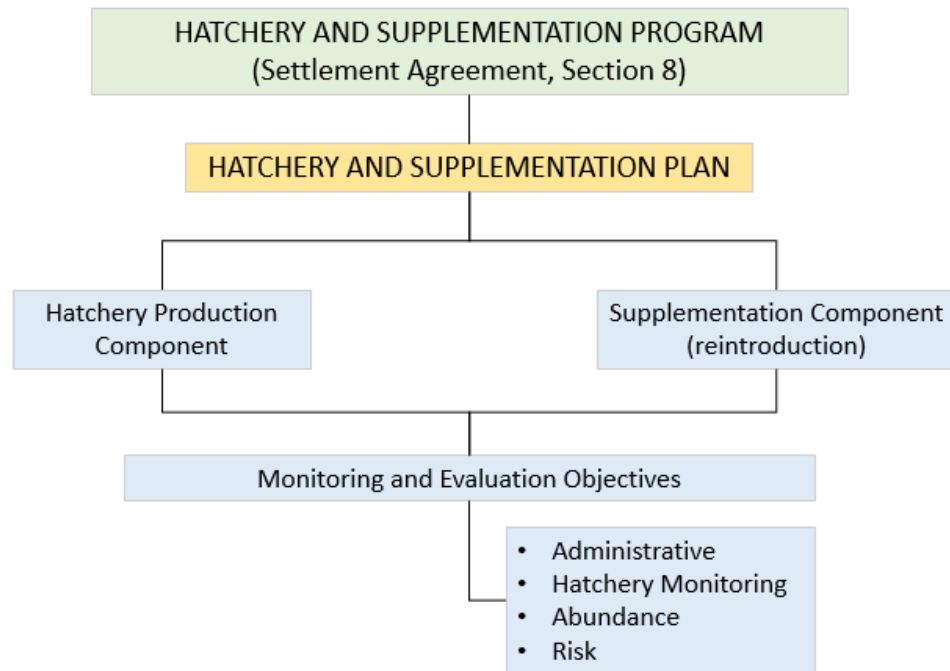
**Hatchery & Supplementation (H&S) Plan Presentation – Jeannie Heltzel and Mark Lariviere (Meridian Environmental)**

Lesko informed the ACC attendees that this presentation is the official kickoff for the 60-day review period and presented the following visuals representing collaborative efforts between the ACC and the ATS. The document that will be presented today is the 3<sup>rd</sup> version of the H&S Plan

and certainly the most comprehensive version. Lesko provided a background of what the H&S Plan is, where it fits in and what the schedule is moving forward for the remainder of the year.



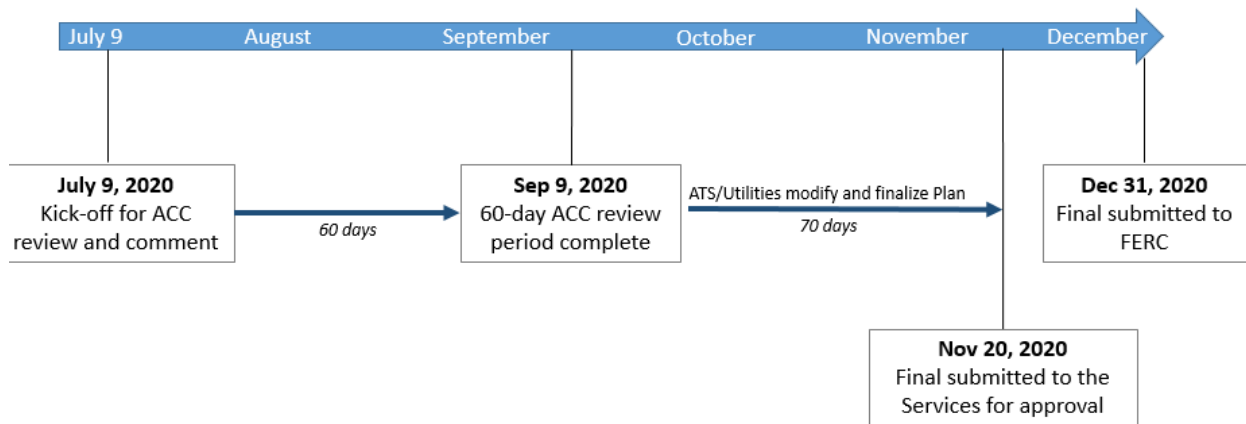
**Flow chart representing key points.**



**Hatchery and Supplementation Program goals**

- (i) support self-sustaining, naturally producing, harvestable native anadromous salmonid species throughout their historical range in the North Fork Lewis River Basin, and
- (ii) the continued harvest of resident and native anadromous fish species

H&S Plan Review and Finalization Schedule:  
July – December 2020



The H&S Program and Plan are requirements of the Settlement Agreement (SA 8.0) with the FERC operating licenses connected to it as well as the Biological Opinion. There are two plans which may have caused confusion in the past. One plan is the Hatchery & Supplementation Plan and the Aquatic Monitoring and Evaluation plan. There is some overlap between the two with respect to monitoring. The H&S Plan which you will be reviewing, deals mostly to downstream Merwin activities. The Aquatic Monitoring and Evaluation Plan relates to upstream activities, a lot of fish passage, up river surveys, etc. These are separate processes and separate FERC submittals.

The H&S Plan that was emailed to the ACC for review essentially has two components, 1) hatchery production component (Merwin, Lewis River and Speelyai Hatchery) fish production at those facilities, and 2) supplementation component. The supplementation component is really about reintroduction but the SA refers to supplementation so we have maintained that term. These two components lead to a third major piece of the plan which is the monitoring and evaluation objectives. These objectives outline for the next five years what monitoring and evaluation activities will take place at the hatchery level, surveys, and genetic monitoring. There are 13 different objectives. The Aquatic Technical Subgroup (ATS) focused a majority of their attention on developing these objectives and the ACC is requested to do the same in its review of the H&S Plan.

Lesko informed the ACC that within the final plan a comment matrix will be attached that will include all comments and responses received from the ACC review. The ATS and Utilities will review the matrix and respond to all additional comments that were collected during the 60-day review period. By November 20, 2020, the goal is to have a plan that is basically final and ready to file with the Services for their approval as part of the SA. We have until December 31, 2020 to submit the final document to the FERC.

PacifiCorp's consultants at Meridian offered to be available for questions during the 60-day review period and they will also come back to the August ACC meeting for another Q&A if the ACC feels that would be helpful.

McCune will email a clean copy and a red line to the ACC for a 60-day review and comment period.

Steve Manlow (LCFRB) communicated that within the H&S Plan (potential amendments to the Plan) there is an item that talks about the In Lieu decision and how the H&S plan may be required to be updated to be consistent with the In Lieu decision. Is the potential amendment relating to the number of fish that will be released upstream or what elements might be subject to revision? Lesko responded that the amendment reference is in there as primarily as a disclaimer because it's unknown how an In Lieu decision may affect the plan. The Plan has various numerical targets (e.g., adult supplementation targets upstream of Swift Dam), but the In Lieu decision may cause, for example, upstream supplementation targets to change as part of monitoring and evaluation studies related to In Lieu. The Utilities don't know what potentially might happen with the In Lieu decision so the amendment reference is in there to indicate that there is a chance an amendment is required. Manlow indicated that he didn't want to see the H&S Plan hamstrung because of deficiencies in the In Lieu study design which is the context of his question.

Lesko provided a copy of the H&S Plan Comment Matrix – June 2020 via screen share for ACC review ([Attachment B](#)) which is part of the H&S Plan. The Matrix details 58 recommendations and edits. The reviewers also provided feedback on several programmatic key questions included in the draft plan as part of this matrix. This matrix is a product of the Comprehensive Periodic review contract. For additional detail beyond what is provided below see [Attachment B](#).

Jeannie Heltzel and Mark Lariviere (Meridian Environmental, formerly DJ Warren) provided a cursory review so the ACC had an opportunity to ask questions. Comment 6 below, for example, the consultants completed

Comment Number	Location in June 2020 Review Draft	Comment	Action Taken
5	General Comment	We edited references to related documents (AOR, AOP, and AMEP) for consistency throughout the document.	Edits completed
6	General Comment	We suggested several edits to the Definitions of Terms and Acronyms. We added definitions of Annual Operating Report, Artificial Production Review and Evaluation, Coded-wire Tag, Distinct Population Segment, Double Index Tag, Endangered Species Act, Evolutionarily Significant Unit, Floating Surface Collector, GRTS, juvenile, Licensees, Major Population Group, Monitoring and Evaluation, Overall Downstream Survival, Single Nucleotide Polymorphism, Utilities, viable salmonid population, and Washington Department of Fish and Wildlife. We revised the definition of natural-origin to clarify that these are progeny of fish that spawn naturally, including progeny of HORs.	Edits completed

Consultants recommended that a similar protocol should be developed and agreed to for all adult salmonids handled at the collection facilities similar to the current winter steelhead protocols then that allows everyone to know what to do with each individual fish that they put their hands on at each facility.

3	General Comment	The ACC should develop a comprehensive fish handling protocol for all salmonids returning to the Merwin Collection Facility (MCF) and the Lewis River Hatchery. Appendix A of the 2019 AOP has a protocol established for steelhead. A similar protocol should be developed and agreed to for all adult salmonids handled at the collection facilities.	Recommendation
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PacifiCorp pointed out that one of the ongoing discussions the ACC has had as a group is the definition of a viable population or defining a self-sustaining population. Consultants recommend in comment 7 to use of the NMFS definition below:

<sup>1</sup> A viable ESU or population has been defined by NMFS as having a negligible risk of extinction due to threats from demographic variation, local environmental variation, and genetic diversity changes over a 100-year time frame.

7	General Comment	To assist the ACC parties with the population monitoring level parameters needed to define a self-sustaining population for the H&S Plan we recommend using the NMFS definition of a viable population. <sup>1</sup> Monitoring and evaluation activities should provide data on trends in abundance, productivity, diversity and structure.	Recommendation
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The consultants also made some clarifying recommendations such as comment 8 but recognized we may be stuck with the title, Hatchery & Supplementation Plan due to the SA references.

8	General Comment	This program has a different definition of supplementation than other reports. Usually supplementation doesn't refer to adult <u>outplants</u> . Perhaps a better title for the H&S Plan is 'Hatchery and Reintroduction Plan'.	Recommendation
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With comment 15 the consultant's added descriptions to better understand references throughout the H&S Plan and how they inter-connect. Descriptions were also added for the ACC and ATS to better describe the role of each group. The consultants recommended that the more detail added within the adaptive management plan the clearer it will be going forward.

Comment Number	Location in June 2020 Review Draft	Comment	Action Taken
15	Section 1.0, various subsections	We added a description of the relationship between the H&S Plan and related regulatory and planning documents (AMEP, AOP, HGMPs and BiOp). While this duplicates some material in Section 7 of the H&S Plan, we found this information necessary to understand the references to these other documents throughout the H&S Plan.	Edits completed
16	Section 1.1	We made edits and clarifications to Section 1.1., Adaptive Management. We added a description of the role of the ACC and ATS in this process. We recommend that this section be developed further – for example, decision rules stated in different sections of the plan could be listed/summarized here. We added a table (Table 1-1) to this section summarizing decision rules described in other sections of the Plan.	Edits completed and Recommendation

One of the tasks was to add language to Section 2.3 to help guide the process, and added species clarification in Section 2 – Hatchery Programs.

21	Section 2.3	We made edits and clarifications to Section 2.3, Integrated and Segregated Hatchery Management. We added HSRG recommendations for <u>pHOS</u> and PNI levels for integrated hatchery programs. PNI levels are dependent on <u>pHOS</u> and <u>pNOB</u> levels, and we discussed potential <u>pNOB</u> levels to meet the PNI targets.	Edits completed
23	Section 2.4-2.6	We reorganized much of Section 2 by species (Spring Chinook, Coho, and steelhead) for consistency with Section 3 and related documents (AOP, etc.). We added tables summarizing key elements of each hatchery program, including population designation, ESA status, and <u>pNOB</u> target.	Edits completed

Recommendation was made to clearly state in the Plan that the Ocean Recruits analysis has been deferred.

24	Section 2.4.2	The H&S Plan should note that the Ocean Recruits analysis has been deferred until 2024 per the 2019 Annual Upstream Fish Passage Report. The adjustments to hatchery production are not possible until the analysis is completed. Thus, the current hatchery production plan will continue unchanged unless superseded by the HGMP.	Recommendation
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Resolution of this coho management discrepancy is recommended.

26	Section 2.5.1	The H&S Plan has separate broodstock targets for the Type-N and Type-S programs, but a single <u>smolt</u> release target. The AOP has separate juvenile release and broodstock targets for each group. We recommend resolving this discrepancy – is Coho managed as a single population or as two groups (early and late run)?	Recommendation
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Comment 39 outlines a recommendation to secure more timely and accurate delivery of genetic information from an independent provider.

39	Section 3.3.2	The current H&S Plan has limitations in place for the use of lower river NOR steelhead for the integrated broodstock program based on the presumptive genetic analysis of stock composition of individual fish. We recommend that the licensees make arrangements with an independent provider of genetic analysis to ensure timely and accurate delivery of this crucial genetic information.	Recommendation
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In a previous version of the H&S Plan it was acknowledged that there needed to be a master table to clarify the master table and more accessible.

58	Section 7.1	The reference providing the location of the master tables is confusing. Currently, the master tables are found in the 2019 AMEP Annual Report (Tables 2.0-1 and 2.0-2). We suggest clarifying this (report names are confusing).	Recommendation
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These are but a few examples for ACC and ATS to reference during the 60-day review period and discuss going forward. The consultants also provided feedback to the 8 program key questions (**Attachment B**) so the ACC can ask themselves, will answering these key questions ultimately to determine whether the H&S program is meeting its stated goals.

The ATS will be reviewing all consultant recommendations and how to address them in the final document. **Comments from the ACC are due on or before Tuesday, September 8, 2020.**

< Break 11:10am >

<Reconvene: 11:20am >

### Review of Services In Lieu Timeline

Lesko reviewed the Working Timeline for Lewis River In Lieu Implementation (**Attachment A**) as provided by NMFS. As part of the last ACC meeting the attendees requested that Services provide a timeline schedule to McCune who in turn distributed the time line on Monday, July 6, 2020.

In response to a question from Eli Asher (Cowlitz Tribe) regarding the ACC consensus process for the In Lieu Strategic, Monitoring and Bull Trout Fish Passage Plans, Josh Ashline (NMFS) indicated that the ACC discussed this two meetings ago when Jennifer Quan was in attendance and NMFS asked for approval of these plans in the preliminary decision letter but did not want to go outside the bounds of the SA, in Section 14 – Consensus Process. That was going to serve as the approval as outlined in the preliminary decision letter. Lesko noted that the Utilities already submitted the Amendments to the FERC on July 2, 2020 which is in conflict with the first item on the Services timeline.

Ashline recognized that the schedule below was a bit off with respect to the FERC submittal and there was no issue there. The timeline is the procedural steps the Services have to go through. The

first two items will not be removed but where it says submittal of non-capacity license amendments to the FERC just change that to July, 2020 and change the months accordingly thereafter. See [Attachment A](#) for a detailed timeline.

SERVICES WORKING TIMELINE FOR LEWIS RIVER IN-LIEU IMPLEMENTATION

Month	Action	Lead Entity	Notes
July 2020	Response to draft license amendment document comments released to ACC for 30-day review	Utilities	
August 2020	Discussion of license amendment documents at ACC meeting	All	
August 2020	Submittal of non-capacity license amendments to FERC	Utilities	The submittal of license amendments by the Utilities; assumes discussions are finalized during the August ACC meeting.

Several ACC representatives had the question – If through the ACC consensus decision process, an amendment to the application for license amendment is needed, but the FERC has already noticed for public comment wouldn't that cause an issue because the public would not be commenting on the amended application. So this is a FERC timing issue that they were concerned about and asked whether the Utilities can request FERC delay the notice until the ACC has completed their decision process. Some ACC representatives were concerned that if amendments were filed after the public notice, that the clock would need to be reset as well, but the legality around this was unknown.

Lesko did indicate that the ACC process is a separate process with the purpose to address the request by the Services, not the FERC timeline. However, representatives from NMFS, WDFW, Cowlitz Indian Tribe and others thought this was imperative and related if the ACC was to initiate the consensus process.

The ACC requested that Todd Olson (PacifiCorp) ask FERC if the REA notice can be delayed until after the ACC consensus meeting in September, 2020, and then report back findings from the FERC as early as possible. If it is possible to delay the FERC REA notice, the ACC wanted the authors of the plans to participate in the August ACC meeting to review specific responses to comments included in the FERC amendment submittals prior to conducting a consensus decision meeting in September. Also the question was asked, if the utility submits an amendment, how does this affect the REA? Does it reset the clock?

Lesko asked that Ashline update the timeline after the FERC process question is resolved.



### Aquatic Fund Procedures Review: 2020/2021 Funding Cycle

Lesko discussed with the ACC what recommended changes the Utilities made to the Aquatic Fund timeline and evaluation (scoring) process. The most significant change to the timeline is removal of the pre-proposal step. When an applicant submits their draft full proposal it must meet the criteria that is outlined in the announcement cover letter (**Attachment C**) that will be sent to any interested parties on or about September 4, 2020. If a proposal does not meet the criteria the project will not proceed to a final proposal. Removal of this step on the new schedule means the draft full proposal will be due by November 20, 2020. The goal of this change is to streamline the process and remove any redundancy. The responsibility is on the applicant to meet the criteria before they apply for funding. The balance of the timeline is basically the same. We hope to modify the schedule in subsequent years to make the announcement much earlier perhaps in May 2021 for the 2021/2022 Funding Cycle.

**The Aquatic Fund Timeline below was reviewed and approved by the ACC attendees for the 2020/2021 funding cycle.** Due to several absent ACC representatives McCune will send the timeline out for a 7-day review and comment period prior to posting on the Lewis River website. **The Announcement letter will also be emailed to the ACC for review with comments due by August 3, 2020.**

**Lewis River Aquatic Fund Process Timeline**

Activity	Target Milestone Date
Request for proposals distributed along with landowner acknowledgement form	September 4
Draft Full Proposals due to ACC	November 20
Conduct Proposed Project Information Meeting ( <i>applicant presentations</i> )	December ACC meeting
ACC members submit written request for clarification of project information if questions not answered in previous meeting/presentation.	January 4
Final Full Proposals due (ACC requests for clarification need to be included as an Appendix)	January 29
Final Full Proposals submitted to ACC for 30-day review and evaluation	February 1
ACC scoring template due to Utilities	March 1
Distribute combined master scoring template to ACC	March 5
*Conduct Project Selection Meeting	March 11 ACC meeting
Provide add'l 7-day review period for absentee ACC participants, if needed	Third Thursday in March
Submit Project Selection Report to FERC	By April 15th

\*Project applicants not permitted to attend this meeting.

Lesko presented a draft Aquatic Fund project evaluation template for ACC consideration. The matrix was developed after the Utilities review and discussion of what worked and didn't work in past years and with recent input provided from Steve West (LCFRB). Questions have been revised and streamlined (**Attachment C**). All 29 evaluation questions were reviewed for redundancy and we were able to reduce the number of questions to 14.



**Instructions** There are 5 categories that are used to evaluate each proposal by the ACC.

	Category	Rating
	Priority Objectives	Go - NO GO
1	Benefit to Fish	Numerical
2	Scientific Validity	Numerical
3	Feasibility	Numerical
4	Cost Effectiveness	Numerical

If any project fails to meet the (5) Priority Objectives, the proposal will not be accepted

If the project meets all (5) Priority Objectives, the proposal will be accepted, evaluated and scored using the 'scoring template'.

The scoring template uses 4 categories and 14 questions to prioritize and select projects for funding.

Each category has a specific weighting

Benefits to Fish	35%
Scientific Validity	30%
Feasibility	20%
Cost Effectiveness	15%
	100%

Scoring:

1	Specific questions are provided for each category. Reviewers rate each question with a score of 1 to 10 (10 being the best)
2	All reviewer scores for each category are summed and averaged to calculate a combined category score for each project. A weighting multiplier is applied to each combined category score to calculate a combined weighted scores for each of the four categories. Weighted scores are then summed to assign the final project score.
3	Each proposal is then ranked based on the highest to lowest final project score
4	Total points available = 140 (14 questions at 10 points possible each)
5	Once all proposals are scored, the ACC will approve projects by consensus. However, any project that fails to achieve a total score less than 70 will not be considered by the ACC (average score of 5 or below for all questions)

Lesko requested each ACC representative review the 14 questions to ensure ACC finds the questions acceptable. Also, the ACC should review changes to the weighting for each of the four categories to ensure that these proposed weightings are representative and appropriate. In addition, Lesko suggested that once the questions are approved, they be provided to the applicants as an attachment to the announcement letter so they know what their project is being evaluated on.

**The ACC agreed to submit comments on the evaluation template no later than Monday, August 3, 2020.**

## Study/Work Product Updates

### Merwin Fish Collection Facility and General Operations ([Attachment D](#))

A total of (655) fish were captured at the Merwin Dam Adult Fish Collection Facility (MFCF) during the month of June. The majority of these fish collected were spring Chinook (69.0 %) and summer steelhead (29.8%). Species composition gradually shifted as the month progressed, transitioning from being predominantly Spring Chinook to predominantly summer steelhead.

The fish lift and conveyance system at the MFCF ran continuously throughout the month of June. However, upstream fish transport did not take place on Tuesday, June 30<sup>th</sup>, as damaged brushes on the vertical basket crowder in the presort pond prevented fish from being sorted that day. Fish transport was resumed following the replacement of the damaged brushes. PacifiCorp continued to utilize a modified fish transport schedule throughout the month of June. Under this modified schedule, the fish lift and conveyance system operate 7 days per week, with fish sorting and transport taking place weekdays only. This schedule prevents the need to have contracted fisheries

staff enter the Merwin adult trap over the weekend, reducing the risk of COVID-19 transmission. Flow below Merwin Dam fluctuated between 2,700 and 5,950 cfs for the month of June (Figure 1).

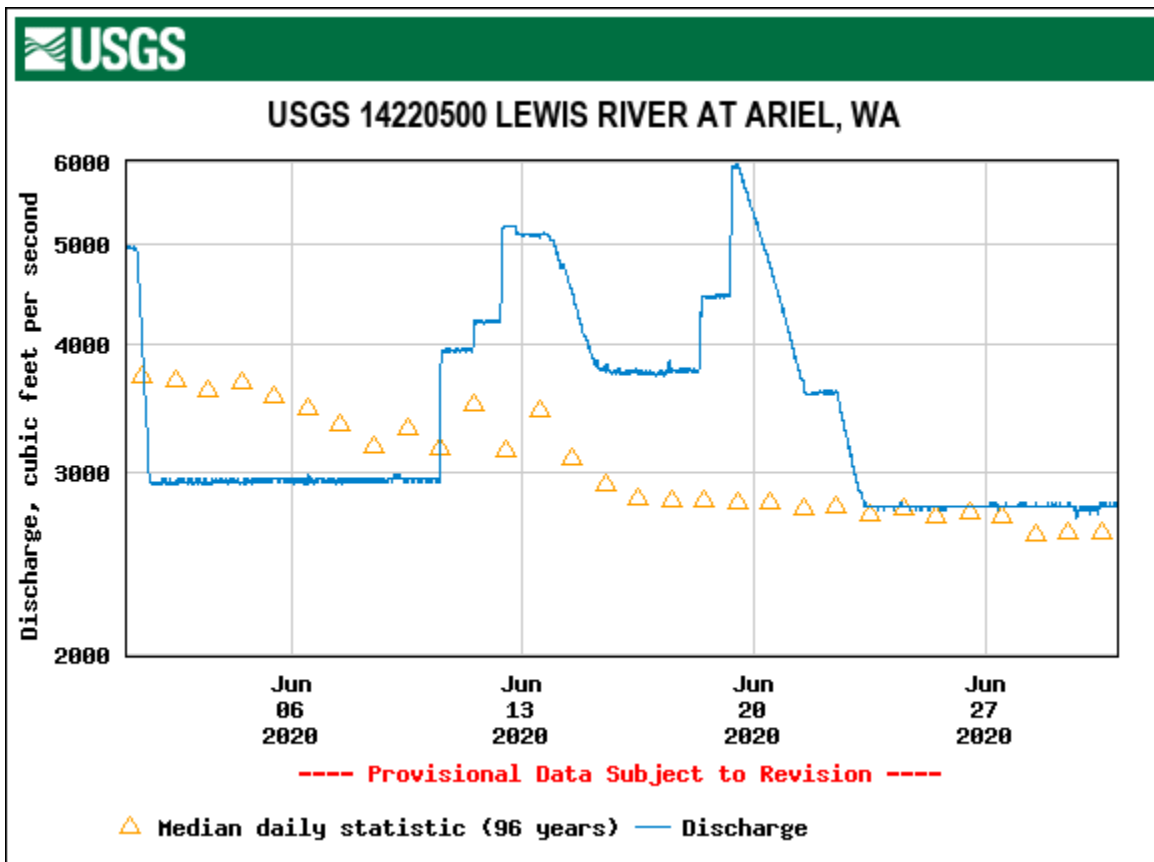


Figure 1. Discharge in cubic feet per second recorded at the USGS Ariel, WA gauge (14220500) located immediately downstream of Merwin Dam.

### Upstream Transport ([Attachment D](#))

There was an overall decrease in the number of fish transported upstream throughout the month of June, which is consistent with the run timing curves of winter steelhead and spring Chinook in the North Fork Lewis River. Three (3) Blank Wire Tag (BWT) winter steelhead were captured by the end of December 2019 and were transported upstream as part of the 2020 run year. An additional 725 BWTs have been collected and transported upstream since January 1, 2020, bringing the 2020 run total for BWTs to 728. In addition to the BWTs, an additional 313 natural origin (NOR) winter steelhead have been transported upstream from the MFCF. By the end of June, the total number of winter steelhead (Blank Wire tag and NOR) transported upstream was 1,040 (Table 1). In addition to the steelhead, 570 spring Chinook, twelve cutthroat, and eleven coho have been collected and transported upstream of Swift Dam in 2020.

**Table 1. Total number of adult winter steelhead transported upstream of Swift Dam by run-year.**

<b>Run Year</b>	<b>Male</b>	<b>Female</b>	<b>Total adult winter steelhead taken upstream of Swift Dam</b>
<b>2012</b>	141	48	<b>189</b>
<b>2013</b>	440	301	<b>741</b>
<b>2014</b>	452	581	<b>1,033</b>
<b>2015</b>	746	477	<b>1,223</b>
<b>2016</b>	378	376	<b>754</b>
<b>2017</b>	331	261	<b>592</b>
<b>2018</b>	682	535	<b>1,227</b>
<b>2019</b>	527	486	<b>1,013</b>
<b>2020</b>	505	535	<b>1,040</b>

**Swift Floating Surface Collector (Attachment D)**

The total number of out-migrants collected at the Swift FSC in June were slightly lower than were collected in May. Coho smolts made up the bulk of the catch during the month of June (91.1%), followed by Chinook (5.5%) and steelhead (2.9%) (Table 2).

The ongoing Collection Efficiency study taking place at the Swift FSC will hopefully give insight into fish behavior once fish are inside the fish channel. The information ascertained from this study will provide guidance as to any operational or structural changes that may be needed in order to increase collection efficiency at the FSC. The study is scheduled to be continue into the month of July.

**Table 2. Total number of outmigrants collected at the Swift Floating Surface Collector during the month of June by year.**

<b>Run Year</b>	<b>June Collection Numbers by Run Year at Swift FSC</b>				
	<b>Coho</b>	<b>Chinook</b>	<b>Steelhead</b>	<b>Cutthroat</b>	<b>TOTAL</b>
<b>2013</b>	5,415	297	52	3	<b>5,767</b>
<b>2014</b>	2,353	419	117	108	<b>2,997</b>
<b>2015</b>	7,192	300	152	68	<b>7,712</b>
<b>2016</b>	10,118	75	131	89	<b>10,413</b>

<b>2017</b>	6,947	44	467	149	<b>7,607</b>
<b>2018</b>	13,844	365	306	184	<b>14,699</b>
<b>2019</b>	30,603	2,064	341	214	<b>33,222</b>
<b>2020</b>	11,125	678	355	53	<b>12,211</b>

Lesko informed the ACC attendees that the collector will be off line by the end of next week or possibly the following week. Catch rate are about 20-40 fish per day, mostly coho, for whatever reason collection has dropped off which is likely temperature related. Merwin adult facility is out of springer season now and full on with summer steelhead. PacifiCorp will coordinate with WDFW on broodstock needs. Josua Holowatz (WDFW) confirmed we did achieve our broodstock needs for this year. Lewis brood goal was 1,215 hatchery origin and 1,302 hatchery origin were received. 94 NOR went directly up river. Weekly intake now is at 23 fish which is very low so we are basically done.

**Agenda items for August 13, 2020**

- Review July 9, 2020 Meeting Notes (**ACC COMMENTS DUE August 3, 2020**)
- Finalize Aquatic Fund Procedure Documents: 2020/2021 Funding Cycle
- Hatchery & Supplementation (H&S) Q&A – Jeannie Heltzel and Mark Lariviere (Meridian Environmental)
- In Lieu Presentation by authors
- Study/Work Product Update

*Adjourn 1:03pm*

**Next Scheduled Meeting:**

August 13, 2020
Skype Call Only
9:30 a.m. – 1:00 p.m.

**Meeting Handouts & Attachments:**

- Meeting Notes from 6/11/20
- Agenda from 7/9/20
- **Attachment A**– Services Working Timeline for Lewis River In Lieu Implementation
- **Attachment B** - H&S Plan Comment Matrix – June 2020
- **Attachment C** – Draft Announcement Letter and Draft Aquatic Fund Evaluation Template
- **Attachment D** – Lewis River Fish Passage Report (June 2020)

SERVICES WORKING TIMELINE FOR LEWIS RIVER IN-LIEU IMPLEMENTATION

<b>Month</b>	<b>Action</b>	<b>Lead Entity</b>	<b>Notes</b>
July 2020	Response to draft license amendment document comments released to ACC for 30-day review	Utilities	
August 2020	Discussion of license amendment documents at ACC meeting	All	
August 2020	Submittal of non-capacity license amendments to FERC	Utilities	The submittal of license amendments by the Utilities; assumes discussions are finalized during the August ACC meeting.
September 2020	License amendments deemed ready for Environmental Analysis (REA Notice)	FERC	The REA Notice triggers the Services' Federal Power Act obligations (fishway prescriptions), and NEPA (FERC is the lead agency).
September 2020	Draft BA submitted to FERC for review	Utilities	
October 2020	FERC requests Formal ESA Section 7 Consultation	FERC/Services	Formal consultation is not initiated until the Services determine the package is complete. This timeline assumes a complete package is initially submitted. Additionally, Formal Consultation may be delayed in the event of a trial type hearing.
November 2020	Preliminary Federal Power Act Obligations due to FERC	Services	This includes Section 18 Fishway Prescriptions.
November 2020	Proposed Settlement Agreement Amendments	Services	These will be based on proposed changes to our Section 18 Fishway Prescriptions. SA amendments may be delayed in the event of a trial type hearing.

SERVICES WORKING TIMELINE FOR LEWIS RIVER IN-LIEU IMPLEMENTATION

January 2021	Motions to intervene/Trial type hearing request	Settlement Parties and other potential interveners	
February 2021	Final Federal Power Act Obligations due to FERC	Services	This includes the following final documents: Section 18 Fishway Prescriptions; 10(j) and 10(a) Recommendations; 4(e) Terms and Conditions; add 4 months (estimated) if trial type hearing occurs.
March 2021	Final Biological Opinion due to FERC	Services	This action assumes a complete consultation package was provided and consultation was initiated in October. If this is not the case, a final Biological Opinion is due 135 days after being initiated.
April 2021	Final license amendment decision	FERC	This decision would mark the end of the decision making process that the Services began with our preliminary decision letters in April 2019.



Lewis River Hatchery and Supplementation Plan  
(FERC Project Nos. 935, 2071, 2111, 2213)  
Comment Matrix – June 2020

Comment Number	Location in June 2020 Review Draft	Comment	Action Taken
1	General Comment	The Lewis River Hatchery and Supplementation Plan (H&S Plan) can be changed upon the completion of <b>amendments</b> to the plan. Possible sources for amendments include: 1) An approved HGMP, 2) Plan updates occurring as a result of Alternative Dispute Resolution decisions, 3) ACC agreement of the population level monitoring parameters if substantive and impactful, and 4) Settlement Agreement amendments. If the H&S Plan is changed due to plan amendments, we recommend the amended plan be resubmitted to an outside reviewer for a Comprehensive Periodic Review prior to implementation.	Recommendation
2	General Comment	We recommend that the distinct goal of recovery and restoration for NOR fish, and the dual goals of harvest for HOR fish and restoration for integrated HOR fish be clarified.	Recommendation
3	General Comment	The ACC should develop a comprehensive fish handling protocol for <b>all</b> salmonids returning to the Merwin Collection Facility (MCF) and the Lewis River Hatchery. Appendix A of the 2019 AOP has a protocol established for steelhead. A similar protocol should be developed and agreed to for all adult salmonids handled at the collection facilities.	Recommendation
4	General Comment	The Lewis River Settlement Agreement is referred to as the Agreement in most of the document. In places, the document refers to the 'SA' or the Settlement Agreement. We edited these references so that 'Agreement' is used consistently throughout the document.	Edits completed

Comment Number	Location in June 2020 Review Draft	Comment	Action Taken
5	General Comment	We edited references to related documents (AOR, AOP, and AMEP) for consistency throughout the document.	Edits completed
6	General Comment	We suggested several edits to the Definitions of Terms and Acronyms. We added definitions of Annual Operating Report, Artificial Production Review and Evaluation, Coded-wire Tag, Distinct Population Segment, Double Index Tag, Endangered Species Act, Evolutionarily Significant Unit, Floating Surface Collector, GRTS, juvenile, Licensees, Major Population Group, Monitoring and Evaluation, Overall Downstream Survival, Single Nucleotide Polymorphism, Utilities, viable salmonid population, and Washington Department of Fish and Wildlife. We revised the definition of natural-origin to clarify that these are progeny of fish that spawn naturally, including progeny of HORs.	Edits completed
7	General Comment	To assist the ACC parties with the population monitoring level parameters needed to define a self-sustaining population for the H&S Plan we recommend using the NMFS definition of a viable population. <sup>1</sup> Monitoring and evaluation activities should provide data on trends in abundance, productivity, diversity and structure.	Recommendation
8	General Comment	This program has a different definition of supplementation than other reports. Usually supplementation doesn't refer to adult outplants. Perhaps a better title for the H&S Plan is 'Hatchery and Reintroduction Plan'.	Recommendation
9	Executive Summary, p. ES-1	We added background material from the 2014 H&S Plan to the Executive Summary.	Edits completed

<sup>1</sup> A viable ESU or population has been defined by NMFS as having a negligible risk of extinction due to threats from demographic variation, local environmental variation, and genetic diversity changes over a 100-year time frame.

Comment Number	Location in June 2020 Review Draft	Comment	Action Taken
10	Executive Summary, H&S Plan Contents	The text states, 'When selecting between actions, deference will be given to those that provide the greatest benefit to the protection and recovery of natural origin fish populations.' This point is not strongly emphasized elsewhere and we recommend using the language from the Agreement (ES 3.5.2) '...the priority objective of recovery of wild stocks in the basin to healthy and harvestable levels.'	Edits completed
11	Executive Summary, Table E-1	We updated items listed in the 'location' column of Table E-1, Summary of H&S Topics Required by Section 8.2.2 of the Agreement. We also added WDFW 2006, Salmonid Disease Policy of Co-managers, to the Item 9 location column.	Edits completed
12	Executive Summary, Deviations from Settlement Agreement	We made edits and clarifications to the list of Deviations for the Settlement Agreement.	Edits completed
13	Section 1.0	We added background material from the 2014 H&S Plan to the beginning of Section 1.	Edits completed
14	Section 1.0, Figure 1-1	The H&S Plan, the annual plan (AOP), the annual report (AOR), and the monitoring and evaluation plan (AMEP) are inter-connected and have relevance and interdependence upon each other for the Lewis River Program. An orderly flow diagram is needed to clearly define the relationships of the plans, reports and other documents with completion dates and scheduled updates in order to fully understand the relevance and connectedness of each plan or report. We revised Figure 1-1 showing the relationship between the Agreement and required plans and regulatory documents.	Edits completed

Comment Number	Location in June 2020 Review Draft	Comment	Action Taken
15	Section 1.0, various subsections	We added a description of the relationship between the H&S Plan and related regulatory and planning documents (AMEP, AOP, HGMPs and BiOp). While this duplicates some material in Section 7 of the H&S Plan, we found this information necessary to understand the references to these other documents throughout the H&S Plan.	Edits completed
16	Section 1.1	We made edits and clarifications to Section 1.1., Adaptive Management. We added a description of the role of the ACC and ATS in this process. We recommend that this section be developed further – for example, decision rules stated in different sections of the plan could be listed/summarized here. We added a table (Table 1-1) to this section summarizing decision rules described in other sections of the Plan.	Edits completed and Recommendation
17	Section 1.27	We made edits and clarifications to Section 1.2., Plan Format.	Edits completed
18	Section 2.0	We recommend adding a Project Area map to Section 2.0 with the location of the project area dams, hatchery facilities, and fish collection facilities.	Edits completed (map added to Exec. Summary)
19	Section 2.1	The 2014 H&S plan described hatchery facility upgrades in detail. Do any recent upgrades need to be listed here, or should there be a reference to the 2014 H&S plan for a list of the most recent upgrades?	Edits completed

Comment Number	Location in June 2020 Review Draft	Comment	Action Taken
20	Section 2.2	To fully understand the impact of the hatchery rainbow trout releases into Swift Reservoir, and the relationship of those fish to the downstream fish passage survival of NOR smolts from the upper Lewis River basin, we recommend a study of the predation of the Swift Reservoir rainbow trout plants be conducted. Consistent with the priority objective of the Settlement Agreement, the final evaluation report of this study should include a list of potential management actions – ranging from no change to the current program to elimination of the current program.	Recommendation
21	Section 2.3	We made edits and clarifications to Section 2.3, Integrated and Segregated Hatchery Management. We added HSRG recommendations for pHOS and PNI levels for integrated hatchery programs. PNI levels are dependent on pHOS and pNOB levels, and we discussed potential pNOB levels to meet the PNI targets.	Edits completed
22	Section 2.3.3	We suggest defining ‘sustainable survival’ for hatchery releases or either removing or editing this text. The SAR is strongly influenced by factors beyond the control of managers (early marine survival, out-of-basin harvest, etc.).	Edits completed
23	Section 2.4-2.6	We reorganized much of Section 2 by species (Spring Chinook, Coho, and steelhead) for consistency with Section 3 and related documents (AOP, etc.). We added tables summarizing key elements of each hatchery program, including population designation, ESA status, and pNOB target.	Edits completed
24	Section 2.4.2	The H&S Plan should note that the Ocean Recruits analysis has been deferred until 2024 per the 2019 Annual Upstream Fish Passage Report. The adjustments to hatchery production are not possible until the analysis is completed. Thus, the current hatchery production plan will continue unchanged unless superseded by the HGMP.	Recommendation

Comment Number	Location in June 2020 Review Draft	Comment	Action Taken
25	Section 2.5.1	We suggest providing more information on why the Type-N program is operated as an integrated program (with pNOB target of 30 percent) versus operating the Type-S program as segregated (no NORs in broodstock). The document doesn't provide information on NOR vs. HOR returns in the early vs. late run, so there is no context provided. If sufficient Type S NORs are available, we recommend that the Type-S program be integrated.	Some edits completed (NOR vs. HOR returns added to Coho tables); Recommendation
26	Section 2.5.1	The H&S Plan has separate broodstock targets for the Type-N and Type-S programs, but a single smolt release target. The AOP has separate juvenile release and broodstock targets for each group. We recommend resolving this discrepancy – is Coho managed as a single population or as two groups (early and late run)?	Recommendation
27	Section 3.0	The H&S Plan has numerical adult transport (supplementation) goals, but does not specify how returning NORs should be allocated between broodstock and the supplementation program. The Plan should include numerical targets for integrating NORs into spring Chinook broodstock. We recommend using the HSRG guidelines in Section 2.3 for transitioning to an integrated program given the population's status as a Primary population.	Recommendation
28	Section 3.0	We noted that the supplementation programs also transport natural-origin adults.	Edits completed
29	Section 3.0	It would be helpful to include a timeline for the supplementation programs in the introduction to this section. Throughout Section 3, different dates/years are cited that refer to either the beginning of the hatchery portion of the supplementation program (2009) or transport portion of the program (2012 or 2013), which makes it confusing to understand when 'year 15' of the program will be reached. The timeline could be included in the Adaptive Management Plan (discussed above).	Timeline added (Figure E-1)

Comment Number	Location in June 2020 Review Draft	Comment	Action Taken
30	Section 3.0	We suggest replacing the text 'reestablishment of self-sustaining natural-origin populations in future years through natural selection pressure and local adaptation' with 'reestablishment of self-sustaining, locally adapted natural-origin populations'.	Edits completed
31	Section 3.0	We recommend that program managers consider adjusting adult transport targets to reflect declining fecundity rates, e.g. in spring Chinook.	Edits completed
32	Section 3.1.1	The text states there are 'no anticipated trigger points that would discontinue the program...' but does not provide any examples of potential trigger points. We recommend clarifying the text by stating that the reintroduction program will continue regardless of the number of adult returns.	Recommendation
33	Section 3.1.1	The text notes that 'because NORs are currently rare, the program will continue transporting mostly HORs.' We recommend including the spring Chinook adult returns (NORs and HORs) data somewhere in the report. Section 6 (Outcomes) shows the total number of adults trapped, but data is not split into NORs and HORs.	Tables in Section 6 were revised
34	Section 3.1.2	We corrected the total number of adults needed for broodstock and supplementation – 4,400 instead of 3,000 as stated in the text.	Edit completed
35	Section 3.1.2	The text notes that 'the adult supplementation program may need to be extended beyond year 15... assuming that future total spring Chinook adult returns to traps downstream of Merwin Dam exceed the minimum target of 4,400 adults for both broodstock and supplementation.' Why would a decision to extend the program be linked to meeting (or exceeding) the brood and transport adult targets? We suggest deleting the latter portion of this sentence.	Recommendation

Comment Number	Location in June 2020 Review Draft	Comment	Action Taken
36	Section 3.1.3	The text notes 'NOR returns in excess of broodstock or upstream transport needs shall either be transported upstream or released downstream of Merwin Dam'. We recommend that all NORs in excess of broodstock needs should always go upstream. The same comment applies to Coho (Section 3.2.1) and late winter steelhead (Section 3.3.4).	Recommendation
37	Section 3.3.1	The data presented in the H&S Report and the 2019 Annual Operations Report show that the tangle netting broodstock capture effort for late winter steelhead in the lower Lewis River results in a very minimal catch and therefore contribution to the NOR broodstock program. The collection results (less than 6 percent of broodstock utilized resulted from tangle net captures) and the resultant egg takes do not support continuing the transport of these NOR fish to the hatchery. The data presented indicates there are sufficient adult returns for the integrated hatchery program collected at the MCF. We recommend ending the tangle netting broodstock collection.	Recommendation
38	Section 3.3.1	The document states, 'a plan for evaluating the success of this strategy in achieving recovery goal objectives <b>should be</b> developed by the ATS during the duration of this H&S Plan.'" This phrasing ( <b>should be</b> ) is used in several places in the document. This is confusing. Is this PacifiCorp's recommendation, and is it consistent with the Agreement? We recommend using ' <b>will be</b> ' here and in several other places noted in the document comments.	Edits completed
39	Section 3.3.2	The current H&S Plan has limitations in place for the use of lower river NOR steelhead for the integrated broodstock program based on the presumptive genetic analysis of stock composition of individual fish. We recommend that the licensees make arrangements with an independent provider of genetic analysis to ensure timely and accurate delivery of this crucial genetic information.	Recommendation



Comment Number	Location in June 2020 Review Draft	Comment	Action Taken
40	Section 3.3.4	We recommend the AOP Appendix A steelhead protocol should be reviewed and edited to allow for NOR steelhead collected at the MCF that are excess to bloodstock needs to be transported directly to the upper Lewis River basin and <b>not</b> be transported to the hatchery. The only exception would be fish collected for broodstock, fish visibly infected with a transmittable disease and fish needed for scientific assessments or studies. All surplus NOR steelhead meeting the above listed criteria should be released into the upper Lewis River basin in order to maximize adult supplementation efforts.	Recommendation
41	Section 3.3.4	We recommend the Program consider using reconditioned steelhead kelts for the NOR broodstock program. This would be one way to maximize reproductive success and utilize fish that are otherwise handled at the MCF.	Recommendation
42	Section 4.0	The H&S Monitoring and Evaluation Objectives do not seem to align with the same objectives in either the 2014 H&S Plan or the objectives in the 2019 AOP. We recommend that the 2020 H&S Plan Objectives align with the AOP and that differences between the 2020 and 2014 H&S Plan Objectives be reconciled or explained.	Recommendation
43	Section 4.1.1	We recommend including the status of the HGMPs here.	Recommendation
44	Section 4.1.2	Format outlined for the M&E section shows Key Questions after Purpose (reorder for consistency).	Edits completed
45	Section 4.2.1	We added HSRG hatchery operations monitoring recommendations here.	Edits completed

Comment Number	Location in June 2020 Review Draft	Comment	Action Taken
46	Section 4.3.2	We recommend adding another Key Question – do the populations studied downstream of Merwin Dam utilize the available habitat? High/medium/low usage?	Edits completed
47	Section 4.4.1	The text refers to a ‘draft multi state mark-recapture model’ to estimate pHOS for late winter steelhead downstream of Merwin Dam. Please provide a reference or more explanation.	Edits completed
48	Section 4.4.1	The document states, ‘To estimate the proportion of HOR spawners, study designs <b>should</b> incorporate established methods already in place to estimate abundance using sampled carcasses.’ The use of ‘ <b>should</b> ’ is problematic. What if they don’t? We recommend replacing should with ‘must’. How much weight does the H&S Plan have?	Resolved
49	Section 4.4.2	Objective 8.0: Genotypic Diversity, states, ‘Determine if genetic diversity, population structure, and effective population size have changed between segregated and integrated programs.’ We suggest editing the end of this sentence as follows, ‘.... Have changed between natural-origin and hatchery-origin fish.’ Under the ‘Purpose’ of this Objective, we suggest changing ‘segregated and integrated populations’ to ‘hatchery-origin and natural-origin populations.’	Recommendation
50	Section 4.4.4	The Key Questions for Objective 9.0 would be the same as for Objective 4.0. See Section 4.2.2. Objective 9.0 appears to be redundant with Objective 4.0. We recommend eliminating Objective 9.0 as the key questions are identical to those under Objective 4.0.	Recommendation

Comment Number	Location in June 2020 Review Draft	Comment	Action Taken
51	Section 6.1	<p>The text states, 'If adult returns continue to fall short of targets, managers could suspend the program, prioritize supplementation over hatchery production, or implement temporary use of Kalama River stock...'</p> <p>The Agreement identifies Cowlitz River spring Chinook as an alternative broodstock. We recommend that this be identified in the Plan. Also, the Plan needs to describe how or when a decision would be made to use an alternative broodstock source.</p>	Edits completed identifying Cowlitz as an alternative broodstock.
52	Section 6.1	The text states, 'Despite these challenges, it is recommended that efforts continue to improve hatchery operations...' We suggest clarifying who made this recommendation.	Edits completed
53	Section 6.2	<p>The text states, 'Based on revised 2018 EDT estimates of juvenile productivity and capacity upstream of Swift Dam (Table 6-3), the Coho supplementation program has the potential to achieve the stated outcome goal of the program.'</p> <p>Comment - Table 6-3 shows juvenile EDT estimates -- since program goals are stated in terms of adult returns it is difficult to see the connection between juvenile capacity and adult returns. We recommend that this be clarified in the Plan. Clearly state the number of juvenile recruits needed to meet the Plan's targeted number of adult returns based on smolt-to-adult survival assumptions.</p>	Recommendation
54	Section 6.5 (Question 3)	<p>The text states, 'The ATS should determine whether annual productivity estimates (provided by the AMEP) are sufficient to support the outcome goals of the program.'</p> <p>Comment - NMFS wants 12 years of data to determine productivity estimate.</p>	Comment

Comment Number	Location in June 2020 Review Draft	Comment	Action Taken
		<i>Note: A review of “Key Questions Related to the Outcome Goal” is provided after this table.</i>	
55	Section 6.5 (Question 6)	<p>The text states, ‘If the number of available spawners is fully capable of seeding all available habitats, recovery rates will depend upon improvements in habitat or some other limiting factor.’ Should this topic be added to the M&amp;E program? Are the spawners utilizing all the available habitat? Lower river basin? Upper river basin? High/medium/low usage.</p> <p><i>Note: A review of “Key Questions Related to the Outcome Goal” is provided after this table.</i></p>	Edits completed
56	Section 6.5 (Question 6)	<p>The text states, ‘Monitoring of natural origin adults should demonstrate that harvest rates on natural origin listed populations do not jeopardize achieving <b>minimum viability goals</b> of the reintroduction program.’ Are minimum viability goals of the reintroduction program the same as the VSP goals from the LCRFRB Plan? If so, we recommend stating this here.</p> <p><i>Note: A review of “Key Questions Related to the Outcome Goal” is provided after this table.</i></p>	Recommendation
57	Section 6.5 (Question 8)	<p>The text states, ‘The H&amp;S Plan began supplementation for all species upstream of Swift Dam in 2012.’</p> <p>Comment - According to Table 6-1, spring Chinook transport began in 2013.</p> <p><i>Note: A review of “Key Questions Related to the Outcome Goal” is provided after this table.</i></p>	Edits completed
58	Section 7.1	<p>The reference providing the location of the master tables is confusing. Currently, the master tables are found in the 2019 AMEP Annual Report (Tables 2.0-1 and 2.0-2). We suggest clarifying this (report names are confusing).</p>	Recommendation

## REVIEW OF KEY QUESTIONS RELATED TO THE OUTCOME GOAL

**Review Task:** “.....review these questions and determine whether they are appropriate. By appropriate, I mean are we asking the right questions, are they clear or specific enough to be of value, are there other questions we are not asking and things of that nature rather than trying to answer these difficult questions.”

Responses to the review of each key question are included below in *blue italics*.

### Draft 2020 H&S Plan, Section 6.5

#### 1. Are the hatchery programs operated consistent with HSRG guidelines to meet recovery goals?

The H&S Plan relies on HSRG guidelines as the scientific basis for hatchery operations. These guidelines represent HSRG understanding of best management practices for hatcheries attempting to achieve conservation or harvest goals.

*Yes, this is an appropriate question. Agreement recovery goals involving NOR fish are dependent upon HOR F<sub>1</sub> production from the hatcheries. HSRG guidelines are intended to ensure NOR populations drive fitness in order to maximize recovery success.*

#### 2. Are the number of adult returns adequate to achieve transport targets for each transport species?

Ultimately, success of the program relative to the outcome goals will be based on the number of NOR adult returns to the North Fork Lewis River. The number of returning adults (abundance) is affected by and dependent on how well the program is implemented and whether it is meeting viability targets for abundance, productivity, diversity and spatial distribution.

*Yes, this is an appropriate question. Adult returns and successful spawning are key metrics for upper Lewis River basin population persistence.*

*Currently, spring Chinook and steelhead adult returns earmarked for the upper Lewis River basin are not meeting the updated and revised adult return goals specified in the plan.*

#### 3. Is productivity from transported adult spawners adequate to support self-sustaining populations?

The H&S Plan relies on adult supplementation to reintroduce steelhead, Coho and spring Chinook upstream of Swift Dam. Recent EDT estimates of productivity suggest that the habitat available upstream of Swift Dam is adequate to support the outcome goal. Results from the Eagle Cliff screw trapping efforts (since 2013) indicate large numbers of Coho, spring Chinook (when available) and steelhead juveniles passing the trap which suggests transported adults are spawning successfully upstream of Swift Reservoir.

Monitoring the productivity of the naturally spawning population above Swift Dam provides managers with the ability to track recovery progress as reintroduction efforts mature. This is also an important metric for determining when populations move from the re-colonization to the local adaptation phase.

The ATS should determine whether annual productivity estimates (provided by the AMEP) are sufficient to support the outcome goals of the program. If not, the ATS should provide recommended strategies to the ACC to improve overall productivity for all three transport species.

*Yes, this is an appropriate question.*

*Adult returns and their survival to the spawning grounds in the upper Lewis River basin are one of the key metrics for population persistence, i.e., an adult productivity value > 1.0.*

**4. Do transported adults effectively distribute and use available spawning habitat?**

Relates to whether adults are able to achieve production and capacity estimates by EDT.

*No, this question is less important in determining the self-sustainability of the upper Lewis River basin populations.*

*If the populations are able to take advantage of discontinuous or patchy, but highly productive habitat and life history strategies, they may be able to achieve self-sustainability without utilizing all the available spawning habitat in the upper Lewis River basin.*

**5. Is survival and collection efficiency of juveniles produced above Swift Dam sufficient to meet program goals?**

For this program to be successful, juveniles from natural spawners must not only survive and be available for capture, but also be effectively collected, transported and released downstream of Merwin Dam at a rate that is sustainable. This metric is generally referred to as Overall Downstream Survival (ODS), and is critical for achieving the outcome goals as it affects the number of adult returns. Without an acceptable capture efficiency or ODS, the outcome goal cannot be achieved.

*Yes, this is one of the most important questions for determining success in achieving Program goals in the upper Lewis River basin.*

*The production of juveniles from the upper Lewis River basin (the numbers produced and the numbers collected at the FSC combined) is the single most important factor within the control of the Program that can lead to achieving Program and Agreement adult population goals.*

**6. Is harvest management a threat to supplementation and recovery programs upstream of Merwin Dam?**

Because harvest removes potential spawners (including transported adults) from the population, which in turn reduces the number of eggs deposited and the potential number of emergent fry available to occupy the habitat, it is important to understand the effect harvest regimes are having on the rate of population recovery in terms of abundance, spatial and temporal distribution. If the number of available spawners is fully capable of seeding all available habitats, recovery rates will depend upon improvements in habitat or some other limiting factor. Unless sufficient spawners are available to fully seed the habitat, any harvest will potentially prolong the recovery process. Monitoring of natural origin adults should demonstrate that harvest rates on natural origin listed populations do not jeopardize achieving minimum viability goals of the reintroduction program.

At a minimum, harvest managers should provide the following to monitor whether management actions are adequate to control threats of overharvest and incidental impacts to NOR listed stocks (Crawford and Rumsey 2011):

- Implement marking strategies that reflect impacts to NOR listed stocks rather than hatchery surrogates (i.e., DIT programs)
- Provide data indicating that harvest restrictions regulating incidental take (exploitation rates) support meeting recovery of natural populations (e.g., meet viability escapement goals for reintroduction)
- Demonstrate that pre-harvest forecasts of run size and incidental take of listed species are accurate and track with “in-season” and post-season” analysis
- Demonstrate compliance with adopted fishery regulations designed to minimize incidental take of listed species (e.g., monitoring of illegally retained fish)
- Report the percentage of fishers reporting total catch by turning in annual commercial, tribal, and sport results (by fishery)
- Identify numeric harvest goals for the North Fork Lewis River terminal fishery (HSRG 2009).
- Provide annual estimates of actual exploitation or escapement rates

*No, this question is not as important in assessing Program success.*

*As long as current fish management regulations remain in place, steelhead populations are generally protected from harvest. Coho returns (and ocean recruits) are consistently robust, and sufficient numbers of adults return annually to fully seed the upper basin. The spring Chinook population is the most susceptible to harvest management impacts - primarily in ocean fisheries targeting immature adults. Current ocean management regulations lump this population with other Chinook populations and the current conservative harvest levels afford a high degree of protection.*

#### **7. Is the H&S Program producing population level VSP data sufficient to meet NOAA guidelines?**

The ability to determine whether the strategies included in the H&S Plan are effective relative to the outcome goal depends in part on the quality of data collected and analyzed through monitoring. Data collected as part of this plan and the AOP should, when practical, strive to meet guidance provided by NOAA (Crawford and Rumsey 2011). Data collected and analyzed using this guidance allows NOAA to assess 1) the viability metrics of listed North Fork Lewis River populations over time, 2) compliance with related HGMPs, and 3) determine the status of the H&S Program relative to achieving the outcome goals of the Agreement.

*No, this question is less important in determining the self-sustainability of the upper Lewis River basin populations.*

*Like many Pacific Northwest programs, the Lewis River H&S Program is only beginning to provide sufficient VSP data to determine whether the populations are self-sustaining. It is unknown if future data sets will be sufficient to give answers, but collecting VSP metrics can only ever partially answer the question of Program success. Only a high adult productivity value (>1.0) allows for sufficient adult returns from the upper basin supplementation efforts, and for harvest of these populations, both of which are Program goals.*

**8. When is it appropriate and how do reintroduction programs transition from recolonization to local adaptation phases to full recovery?**

The H&S Plan began supplementation for all species upstream of Swift Dam in 2012. Juvenile collection at Swift Dam began in 2013. Juvenile collection efficiency continues to improve at the Swift FSC, and increasing numbers of adult NOR salmonids are being trapped and transported upstream of Swift Dam. The ATS has identified the need to develop an objective set of criteria for determining when transitions between recovery phases are warranted. Early within the duration of this revised H&S Plan, the ATS should develop these criteria, incorporating biological, logistical, and management considerations. Additionally, in preparation for changes in hatchery management objectives, the ATS should develop detailed plans outlining the transition from segregated to integrated hatchery programs, where appropriate. These criteria and hatchery transition plans will allow for adaptive management of reintroduction programs as recovery in the Upper Lewis Basin progresses.

*Yes, this is an important question for determining the success of achieving Program goals in the upper Lewis River basin.*

*A timeline and a series of decision points (Decision Rules) should be developed to assess whether the Program is meeting targets. Based on those results, a decision tree can be followed to change population management actions.*



September 4, 2020

**Subject: Availability of Funds for Aquatic Related Projects in the Lewis River Basin**

Dear Interested Party:

PacifiCorp owns the Merwin, Yale, and Swift No. 1 hydroelectric projects on the Lewis River in southwest Washington. Public Utility District No. 1 of Cowlitz County, Washington (Cowlitz PUD) owns the Swift No. 2 hydroelectric project, also located on the Lewis River. These projects are operated as a coordinated system. On November 30, 2004, the Lewis River Settlement Agreement (SA) established the Lewis River Aquatic Fund (Fund). On June 26, 2008, the Federal Energy Regulatory Commission acknowledged this fund as a stipulation of project operating licenses. The purpose of the Fund is to support resource protection measures via aquatic related projects (Projects) in the Lewis River basin. To be considered for funding, the Projects must meet each of the following priority objectives as specified in the project operating licenses and the SA:

- (1) *Benefit to fish recovery throughout the North Fork Lewis River, with priority to federal ESA-listed species;*
- (2) *Support of the reintroduction of anadromous fish throughout the Basin; and*
- (3) *Enhancement to fish habitat in the Lewis River Basin, with priority given to the North Fork Lewis River.*

This letter is to provide you the opportunity to submit proposals for Resource Project funding. The total Fund amount available this year is limited to \$3,158,481.23 for Resource Projects and \$816,962.35 for Bull Trout Projects. Design-only projects will be considered during this 2020/2021 funding cycle and will be evaluated for its biological merit. If you know of other entities that may have an interest in seeking funding, please forward this opportunity to them. **All Lewis River Aquatic Fund documents and process timeline can be located** at the following link:

The Aquatic Fund Subgroup to the Aquatic Coordination Committee (ACC) completed a **Lewis River Aquatic Fund Priority Reaches** document which provides priority rankings for stream reaches within the Lewis River watershed. The Priority Reaches document is aligned with the Lower Columbia Fish Recovery Board (LCFRB) Interactive map which is found on their website at [www.lowercolumbiasalmonrecovery.org/mappage](http://www.lowercolumbiasalmonrecovery.org/mappage). The interactive maps provide a wealth of information that should help project proponents in selecting areas to focus their habitat improvement efforts. For consideration of funding the proponent must demonstrate that they have reviewed both the Priority Reaches and the LCFRB Interactive map and selected appropriate projects/reaches from those two tools. Additionally, proponent must show how proposed project is consistent with fund objectives and priorities. Projects proposed in reaches other than those identified in the Priority Reaches document or high priority reaches in the LCFRB habitat strategy (Tier 1 and Tier 2) need a clear explanation of why they still support Lewis River Aquatic Fund goals.

To be consistent with certain comprehensive plans such as the *Lower Columbia Salmon Recovery Plan and the Washington Department of Fish & Wildlife Subbasin Plan (LCFRB 2010)* relating to Lewis River reintroduction efforts and the recovery of ESA listed threatened salmon and steelhead species, higher priority will be given to Resource Projects that provide benefits to Recovery Plan priority fish species and stocks reintroduced to or originating from upstream of Merwin Dam, with emphasis on Spring Chinook. Resource Projects must have specific objectives and expected outcome(s) that help attain the objectives of the Aquatic Fund.

Bull Trout Project funding is available this year and we invite you to review the December 2017 Bull Trout project identification assessment. Proposals will be evaluated according to alignment with the assessment.

[https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/energy/hydro/lewis-river/license-implementation/acc/LR\\_BT\\_Hab\\_Restor\\_FinalReport.pdf](https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/energy/hydro/lewis-river/license-implementation/acc/LR_BT_Hab_Restor_FinalReport.pdf)

To be considered, applicants must submit a completed draft **Full Proposal Form** by close of business **November 20, 2020** and obtain acknowledgement from all owners of land needed to access the proposed Resource Project. Landowner(s) must sign a **Landowner Acknowledgement Form** indicating they are aware that the project is being proposed on their property.

Each applicant will have an opportunity for a project presentation to the ACC on December 10, 2020 with final full proposals due by January 29, 2021. Full proposals will be evaluated and scored based on four primary categories: (1) benefits to fish, (2) scientific validity, (3) feasibility and (4) cost effectiveness. The Utilities and representatives of the Lewis River ACC will finalize a list of selected Resource Projects on March 11, 2021. Shortly thereafter, the Utilities will submit the final list to the Federal Energy Regulatory Commission to meet the submittal deadline of April 15, 2021) and notify proponents.

Please give attention to this excellent opportunity. If you have any questions please contact Mr. Erik Lesko, PacifiCorp (503) 813-6624.

We look forward to your response in November.

Sincerely,

Todd Olson  
Director, Compliance Hydro Resources

# Lewis River Fish Passage Report

## June

### Merwin Fish Collection Facility and General Operations

A total of (655) fish were captured at the Merwin Dam Adult Fish Collection Facility (MFCF) during the month of June. The majority of these fish collected were spring Chinook (69.0 %) and summer steelhead (29.8%). Species composition gradually shifted as the month progressed, transitioning from being predominantly Spring Chinook to predominantly summer steelhead.

The fish lift and conveyance system at the MFCF ran continuously throughout the month of June. However, upstream fish transport did not take place on Tuesday, June 30<sup>th</sup>, as damaged brushes on the vertical basket crowder in the presort pond prevented fish from being sorted that day. Fish transport was resumed following the replacement of the damaged brushes. PacifiCorp continued to utilize a modified fish transport schedule throughout the month of June. Under this modified schedule, the fish lift and conveyance system operate 7 days per week, with fish sorting and transport taking place weekdays only. This schedule prevents the need to have contracted fisheries staff enter the Merwin adult trap over the weekend, reducing the risk of COVID-19 transmission. Flow below Merwin Dam fluctuated between 2,700 and 5,950 cfs for the month of June (Figure 1).

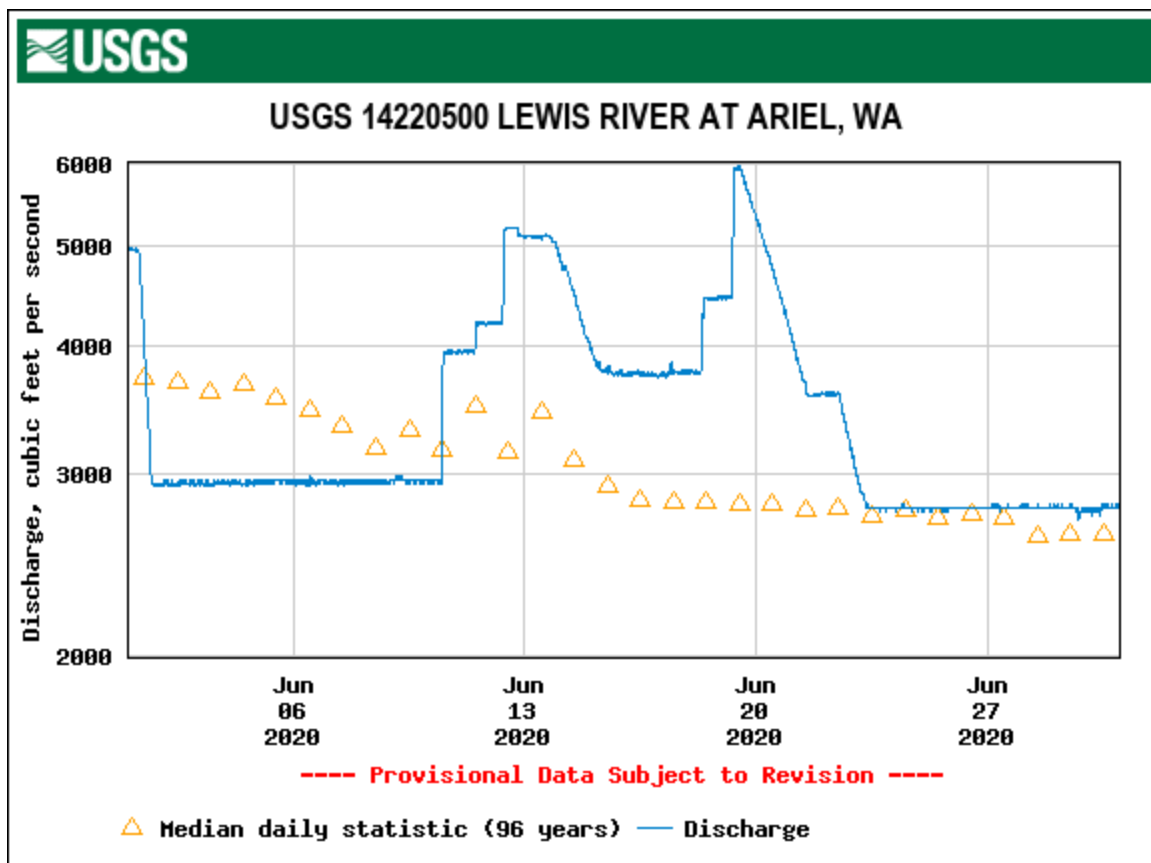


Figure 1. Discharge in cubic feet per second recorded at the USGS Ariel, WA gauge (14220500) located immediately downstream of Merwin Dam.

## **Upstream Transport**

There was an overall decrease in the number of fish transported upstream throughout the month of June, which is consistent with the run timing curves of winter steelhead and spring Chinook in the North Fork Lewis River. Three (3) Blank Wire Tag (BWT) winter steelhead were captured by the end of December 2019 and were transported upstream as part of the 2020 run year. An additional 725 BWTs have been collected and transported upstream since January 1, 2020, bringing the 2020 run total for BWTs to 728. In addition to the BWTs, an additional 313 natural origin (NOR) winter steelhead have been transported upstream from the MFCF. By the end of June, the total number of winter steelhead (Blank Wire tag and NOR) transported upstream was 1,040 (Table 1). In addition to the steelhead, 570 spring Chinook, twelve cutthroat, and eleven coho have been collected and transported upstream of Swift Dam in 2020.

**Table 1. Total number of adult winter steelhead transported upstream of Swift Dam by run-year.**

<b>Run Year</b>	<b>Male</b>	<b>Female</b>	<b>Total adult winter steelhead taken upstream of Swift Dam</b>
<b>2012</b>	141	48	<b>189</b>
<b>2013</b>	440	301	<b>741</b>
<b>2014</b>	452	581	<b>1,033</b>
<b>2015</b>	746	477	<b>1,223</b>
<b>2016</b>	378	376	<b>754</b>
<b>2017</b>	331	261	<b>592</b>
<b>2018</b>	682	535	<b>1,227</b>
<b>2019</b>	527	486	<b>1,013</b>
<b>2020</b>	505	535	<b>1,040</b>

## **Floating Surface Collector (FSC)**

The total number of out-migrants collected at the Swift FSC in June were slightly lower than were collected in May. Coho smolts made up the bulk of the catch during the month of June (91.1%), followed by Chinook (5.5%) and steelhead (2.9%) (Table 2).

The ongoing Collection Efficiency study taking place at the Swift FSC will hopefully give insight into fish behavior once fish are inside the fish channel. The information ascertained from this study will provide guidance as to any operational or structural changes that may be needed in order to increase collection efficiency at the FSC. The study is scheduled to be continue into the month of July.

**Table 2. Total number of outmigrants collected at the Swift Floating Surface Collector during the month of June by year.**

<b>Run Year</b>	<b>June Collection Numbers by Run Year at Swift FSC</b>				
	<b>Coho</b>	<b>Chinook</b>	<b>Steelhead</b>	<b>Cutthroat</b>	<b>TOTAL</b>
<b>2013</b>	5,415	297	52	3	<b>5,767</b>
<b>2014</b>	2,353	419	117	108	<b>2,997</b>
<b>2015</b>	7,192	300	152	68	<b>7,712</b>
<b>2016</b>	10,118	75	131	89	<b>10,413</b>
<b>2017</b>	6,947	44	467	149	<b>7,607</b>
<b>2018</b>	13,844	365	306	184	<b>14,699</b>
<b>2019</b>	30,603	2,064	341	214	<b>33,222</b>
<b>2020</b>	11,125	678	355	53	<b>12,211</b>



**Fish Facility Report**  
**Swift Floating Surface Collector**  
**June 2020**

Day	Coho			Chinook			Steelhead				Cutthroat		Bull Trout	Planted Rainbow	Total	
	fry	parr	smolt	fry	parr	smolt	fry	parr	smolt	kelt	fry	<13 in				> 13 in
1		20	392			20			29	6		1	1	0	49	518
2		20	279			32		1	28	6				0	56	422
3		3	191			17			18	4		4		1	13	251
4		4	193			12			25	2		1		0	69	306
5			117			22			4	4		1	1	0	48	197
6			153		1	10			6	4				1	47	222
7			216			11			10	7				0	28	272
8	7		371		1	10			14	2		2		0	40	447
9			104		1	19			10	2				0	19	155
10			277			21		1	14	2		6		0	22	343
11		5	483	1	1	24			18					0	39	571
12		2	340			4			6			3		0	2	357
13		8	450		1	24			29			3		0	17	532
14	2	11	209		3	18			32	2		4		0	32	313
15	21	1	82	1	1	12			14	2				0	16	150
16	1	11	158			30			8					0	4	212
17	5	20	1186		8	118			22			1		0	2	1362
18		7	278		4	23			20	1		9		1	8	351
19		6	551		9	22			2					0	1	591
20			532		4	8			4			1		0	4	553
21	3		1311		7	8				1		4		1	6	1341
22		7	745		5	35			5			4		0	4	805
23		28	457		7	11						1		0	1	505
24		9	449		1			1	4			1		0	4	469
25	1	13	451		11	12			9					0	9	506
26	1	11	140	1	14	12						5		0	0	184
27		4	121		3	8			5	1				0	1	143
28		14	284		6	20		1	3	1				0	2	331
29		14	204		7	12				1				1	4	243
30		1	141		1	4			12					1	1	161
<b>Monthly</b>	41	219	10865	3	96	579	0	4	351	48	0	51	2	6	548	12813
<b>Total</b>	79	3773	24464	3	3002	12440	4	45	4018	110	1	423	27	19	2064	50472