

# LEWIS RIVER AQUATIC COORDINATION COMMITTEE

Facilitator: ERIK LESKO  
503-412-8401

Location: TEAMS MEETING ONLY

Date: May 13, 2021

Time: 9:30 AM – 12:00 PM

## Agenda Items

- 9:30 a.m. Welcome
- Review Agenda, ACC 4/8/21 Meeting Notes
  - Comment & Accept Agenda, 4/8/21 Meeting Notes
- 10:00 a.m. Public Comment Opportunity
- 10:15 a.m. Review and discussion of Aquatic Fund Process and Timeline, and scoring template questions for 2021/2022 Funding Cycle
- 11:15 a.m. Study/Work Product Updates
- Flows/Reservoir Conditions Update
  - Swift Survey's at Northwoods Update
  - ATS Update
  - Fish Passage Update
- 11:45 a.m.
- Next Meeting's Agenda
  - Public Comment Opportunity
- Note: all meeting notes and the meeting schedule can be located at:  
<https://www.pacificorp.com/energy/hydro/lewis-river/acc-tcc.html>
- 12:00 p.m. **Meeting adjourn**

Microsoft Teams meeting

**Join on your computer or mobile app**

[Click here to join the meeting](#)

**Or call in (audio only)**

[+1 563-275-5003](tel:+15632755003).,86743835# United States, Davenport

**Phone Conference ID: 867 438 35#**

**FINAL Meeting Notes  
Lewis River License Implementation  
Aquatic Coordination Committee (ACC) Meeting  
May 13, 2021  
TEAMS Meeting Only**

**ACC Representatives Present (12)**

Eli Asher, Cowlitz Indian Tribe  
Amanda Froberg, Cowlitz PUD  
Alex Maslov, Fish First  
Steve West, LCFRB  
Scott Anderson, NMFS  
Kim McCune, PacifiCorp  
Chris Karchesky, PacifiCorp  
Erik Lesko, PacifiCorp  
Peggy Miller, WDFW  
Josua Holowatz, WDFW  
Bryce Glaser, WDFW  
Bill Sharp, Yakama Nation

**Calendar:**

June 10, 2021	ACC Meeting	TEAMS Meeting
---------------	-------------	---------------

Assignments from May 13, 2021	Status
McCune: Email revised Aquatic Fund Timeline and Evaluation Questions to the ACC for an additional 7-day review period.	<b>Complete – 5/13/21</b>

Assignments from December 10, 2020	Status
Lesko: Follow up first of the year with Matt Harding from Northwoods neighborhood to discuss fish stranding survey schedule.	<b>Ongoing</b>

Assignments from August 13, 2020	Status
Romanski: Jim Byrne (Trout Unlimited) requested Tim Romanski (USFWS) investigate why it was decided in 2005 and find out how and why the Merwin trap design was settled on and specified.	<b>Ongoing</b>

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

Erik Lesko (PacifiCorp) called the meeting to order at 9:35am and reviewed the agenda. Lesko also reviewed the April 8, 2021 meeting notes. The meeting notes were approved at 9:40am with housekeeping changes only.

**Public Comment Opportunity**

None

## Review and discussion of Aquatic Fund Process and Timeline, and scoring template questions for 2021/2022 Funding Cycle

Lesko reviewed ACC timeline comments received (**Attachment A**) and provided the image below representing the 2020/2021 schedule and the 2021/2022 schedule based on the ACC comments.

The ACC discussed if a formal decision template was needed for decided to modify the Aquatic Fund Process Timeline. Bryce Glaser (WFW) provided the following protocol on the need for a Decision Template: *"Not all decisions require a completed template, however, any decisions that may deviate from the Settlement Agreement intent or goals, affect existing recovery, or management goals and actions should require presentation of a completed template to the Committee."*

**With this in mind, the ACC agreed that a formal decision document is not needed in this case to revise the milestone dates below, however, to accommodate those ACC participants not in attendance, McCune will email the ACC and provide an additional 7-day review and comment period before the revised schedule is approved.** Upon final approval, McCune will update the Lewis River website with the updated schedule and documents and email the announcement that funds are available for the 2021/2022 funding cycle on July 5, 2021.

Activity	Original Milestone Date	Revised Milestone Date	Notes
Request for proposals distributed along with landowner acknowledgement form	4-Sep	07/05/21	First business day of August
Draft Full Proposals due to ACC	20-Nov	10/25/21	Almost 4 months to develop draft proposal
Conduct Proposed Project Information Meeting (applicant presentations)	10-Dec	11/16/21	
ACC members submit written request for clarification of project information if questions not answered in previous meeting/presentation.	4-Jan	12/03/21	Gives ACC 2 weeks to provide written comments or questions from presentations (enough time?)
Final Full Proposals due (ACC requests for clarification need to be included as an Appendix)	29-Jan	12/31/21	1 month for author(s) to revise proposal based on written ACC comments
Final Full Proposals submitted to ACC for 30-day review and scoring	1-Feb	01/04/22	Second business day of January
ACC scoring template due to Utilities	1-Mar	02/01/22	about a month to score proposals
Distribute combined scoring template to ACC	5-Mar	02/03/22	submitted one week prior to meeting along with other meeting materials
Conduct Project Selection Meeting	March 11*	February 10, 2022*	ACC Meeting
Provide add'l 7-day review period for absentee ACC participants, if needed	18-Mar	02/17/22	
Submit Project Selection Report to FERC	15-Apr	04/15/22	Hard deadline

Lesko reviewed the existing 2020/2021 aquatic fund evaluation questions (see below) and **the ACC agreed to modify the only those questions in red, with the revised question in green. The evaluation questions too will be emailed to those ACC representatives not in attendance for an additional 7-day review period.**

	ORIGINAL QUESTIONS	REVISED QUESTIONS
Q1	Does the project provide direct benefit(s) to priority species and habitat reaches?	
Q2	Does the project provide tangible, on the ground benefits?	
Q3	Does the project address a limiting factor(s) to the target species without adversely impacting other species, life history stages, or habitat processes	
Q4	Does the proposal apply appropriate and proven methods, designs and technologies?	
Q5	Are the project objectives identified appropriate and justified given the proposed scope and schedule?	
Q6	Does the project describe and consider long term benefits and influences (e.g., watershed processes, hydro operations, climate change, etc.)?	
Q7	What constraints or contingencies affect project implementation (permitting, legal, location, funding, etc.)	To what extent do constraints or contingencies affect project implementation (e.g., permitting, legal, location, funding, etc)?
Q8	Is the probability of success high, medium or low?	
Q9	How qualified and experienced is the project team in successfully completing projects of similar scope, nature, and magnitude?	
Q10	How might other habitat protection, assessments, or restoration actions in the watershed impact the project?	To what extent would other habitat protection, assessments, or restoration actions in the watershed positively impact or compliment the project?
Q11	Will the project be cost shared with other funding sources (e.g., matching contributions, in-kind participation, grants, etc.)?	To what extent do other funding sources support the project (e.g., matching contributions, in-kind participation, grants, etc.)?
Q12	Are project costs reasonable by work effort and type (administration, permitting, goods and services, rentals, labor, contracts, etc.)?	
Q13	Are the total costs justified based on expected short and long term benefits to fish?	
Q14	Is the project self-maintaining once completed? If not, how will maintenance be achieved?	What is the extent of maintenance required after project completion?
GENERAL COMMENTS		
	I also think it would be helpful to add a comment column on the scoring template tab for each project (or somewhere else it would make sense). As a first-time scorer, it was difficult to determine if I should submit comments on the rationale behind my ratings with the completed scoring template, or if these comments were instead discussed at the project selection meeting.	
	Offer guidelines for scoring questions	
	More clarification needed for design only projects	

Break 10:50am

Reconvene 11:00am

## Study/Work Product Updates

### Flows/Reservoir Conditions Update

Merwin – down 3.1’

Yale – down 12.1’

Swift – down 6.2’

Total hole– 21’

Natural flow at Merwin is 4,326 cfs and our outflow 2,780 cfs.

### **ATS Update**

The ATS is currently finalizing the 2021 annual operating plan AOP, specifically updating protocols for steelhead supplementation program, screw trapping, genetic monitoring and fall salmon survey efforts. The ATS will then focus on working to finalize the 2022 AOP, which will include the new (2020) Hatchery & Supplementation Plan monitoring objectives, strategies and protocols. In addition, the ATS will begin reviewing the draft Aquatic Monitoring & Evaluation Plan (AMEP). The ATS will likely need to schedule additional meetings for this review. We hope to have a draft AMEP available for ACC review by late this fall (November).

### **Fish Passage Update**

Chris Karchesky (PacifiCorp) noted that fish passage on both sides of the Project (Merwin Dam and the Swift Floating Surface Collector) were in full swing. Collection at the Merwin Dam Adult Fish Trap was mostly dominated by spring Chinook with a few remaining winter steelhead coming in. Karchesky noted that while the NOR winter steelhead run this year was lower than normal, they did manage to get enough adult to meet brood stock needs for the supplementation program. He also noted that about 900 adult spring Chinook had also been collected to date and that most of the fish had been taken for brood stock. About 40 NORs that have gone upstream to date. Any surplus HOR spring Chinook not needed for brood are currently being held at Lewis River Hatchery as insurance. These fish may be taken upstream later.

Collection of juvenile fish at the Swift FSC has increased as anticipated by mid-May. Collection is currently dominated by juvenile coho and steelhead. Out-migrating spring Chinook numbers peaked in late-March and their numbers have since declined. Swift Reservoir is currently about 5 feet from full pool and debris removal efforts are ongoing. Karchesky noted that as the reservoir reaches full pool, the amount of floating debris decreases. He also noted that steelhead smolts were slightly higher than average and are currently on pace with the 2018 out-migration year when over 8,000 steelhead smolts were transported downstream.

Karchesky reminded the ACC that PacifiCorp will be taking the FSC offline this summer to performance maintenance. This year the vessel will be deballasted so that areas typically inundated with water can be worked on. In particular, Karchesky noted that PacifiCorp will be installing new traveling screen and recoating (painting) the fish holding tanks. Bryce Glaser (WDFW) asked if there was a hard date for the outage, or whether it depended on fish numbers before the FSC was turned off for the summer. Karchesky indicated that it was dependent on fish numbers and other criteria developed earlier by the ACC. Karchesky also added that the outage typically begins around mid- to late-July each year. A narrative describing summer outage period and criteria developed by the ACC is provided in the Lewis River Fish Passage Program Annual Report available online.

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

During the month of April, a total of 650 fish were captured at the Merwin Dam Adult Fish Collection Facility (MFCCF). The monthly catch was mostly composed of spring Chinook (74.0%) and winter steelhead (22.9%). All hatchery spring Chinook were transported to Lewis River hatcheries to be brood stock or to be held for possible transport upstream in the future. All natural origin adults were transported upstream.

The MFCF remained operational throughout the month of April. Flow below Merwin Dam decreased from approximately 4,800 cfs at the beginning of the month to 2,870 cf. on April 7<sup>th</sup>, where it remained for the remainder of the month (Figure 1).

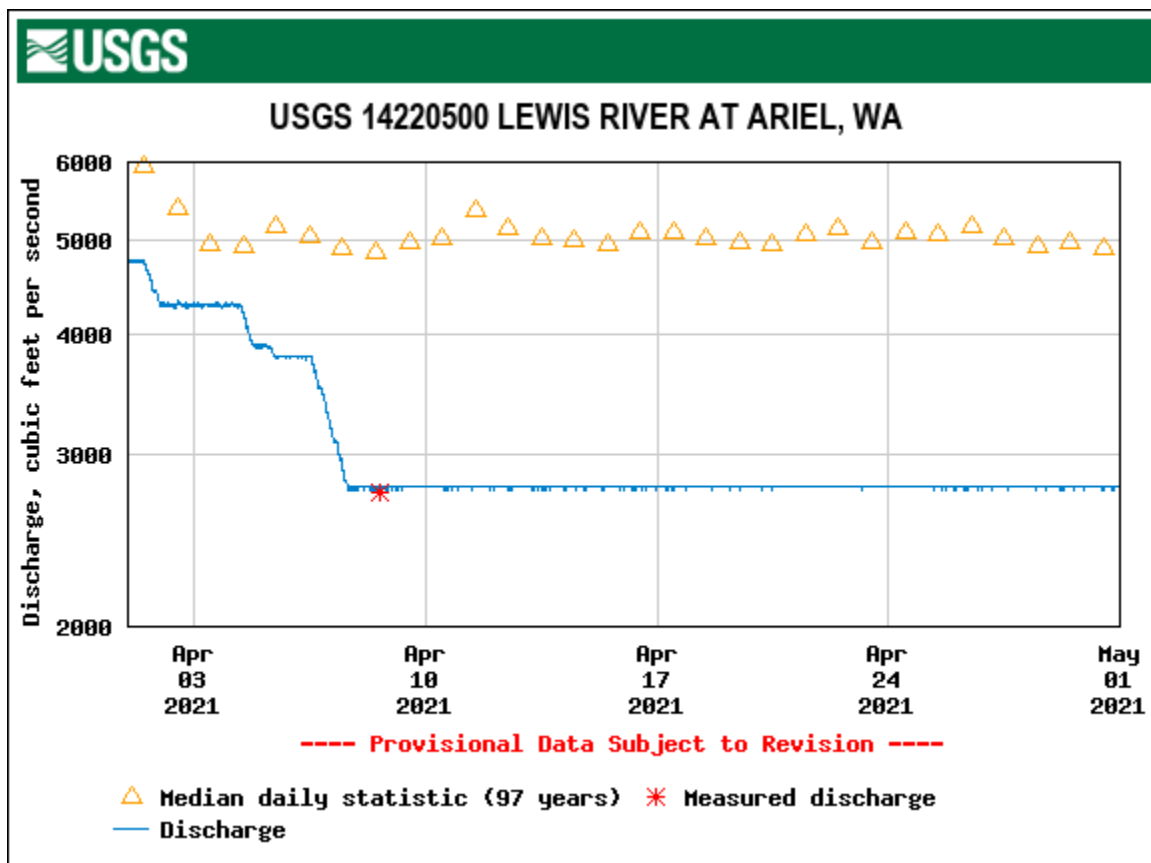
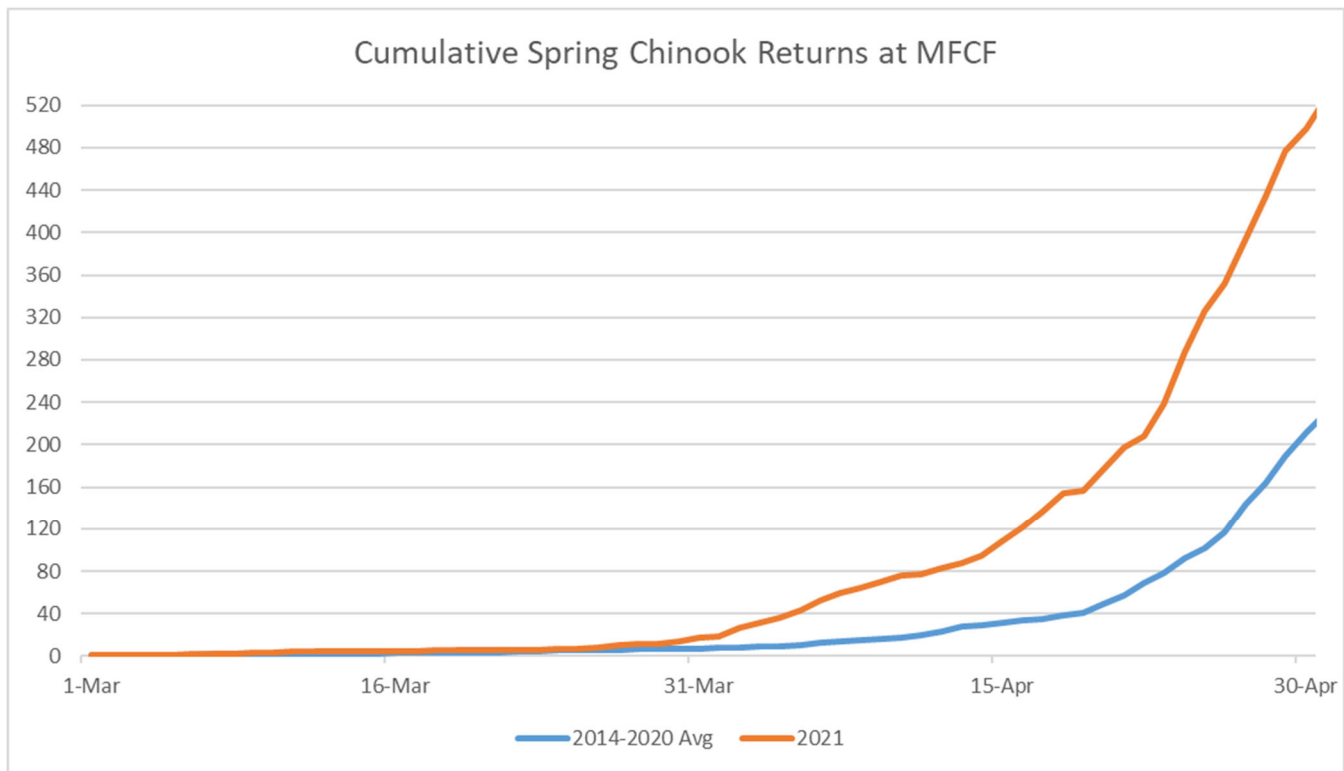


Figure 1. Discharge in cubic feet per second recorded at the USGS Ariel, WA gauge (14220500) located immediately downstream of Merwin Dam.

### Upstream Transport

Upstream transport for adult salmonids increased throughout the month of April, with a total of 160 adult fish being transported upstream by the end of the month. The majority (66.9%) of the adults transported upstream in April were winter steelhead (n=107), followed by natural origin (NOR) spring Chinook (n=38), and cutthroat trout (n=15). Spring Chinook collection totals at the MFCF continued to increase throughout the month and are greater than the 2014-2020 average (Figure 2). Upstream transport for winter steelhead remains below the 2012-2020 average (Table 1).



**Figure 2. Cumulative number of Spring Chinook collected at Merwin Adult Fish Collection Facility in 2021, relative to the 2014-2020 average.**

**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>	517	535	<b>1,052</b>

<b>2021</b>	98	146	<b>234</b>
-------------	----	-----	------------

By the end of April 2021, 161 BWT winter steelhead, 83 coho, 73 NOR winter steelhead, 42 NOR spring Chinook, and 26 cutthroat trout have been transported upstream of Swift Dam since the beginning of the year.

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

The Swift Reservoir Floating Surface Collector (FSC) was taken out of operation from April 28<sup>th</sup> -April 29<sup>th</sup> so that submerged debris could be removed from holding tanks and modifications could be made to screens in the adult fish holding tank; the FSC operated continuously otherwise. A total of 3,410 out-migrants were collected throughout the month, which is an increase from March's total of 1,949. There was a considerable increase in the number of juvenile steelhead collected at the FSC in April (n=661) relative to the number collected in March (n=31). The majority (37.3%) of the fish collected in April were juvenile coho (n=1,271), followed by spring Chinook (n=878), steelhead (n=661), planted rainbow trout (n=529), cutthroat trout (n=59), and bull trout (n=4). April 2021 collection totals are considerably less than what was collected during the same timeframe for the past few years (Table 2).

**Table 2. Number of coho, Chinook, and steelhead juveniles transported downstream from the Swift Floating Surface Collector by run-year.**

<b>Run Year</b>	<b>April Collection Numbers by Run Year at Swift FSC</b>			
	<b>Coho</b>	<b>Chinook</b>	<b>Steelhead</b>	<b>TOTAL</b>
<b>2013</b>	953	173	5	<b>1,131</b>
<b>2014</b>	2,174	175	65	<b>2,414</b>
<b>2015</b>	739	535	143	<b>1,417</b>
<b>2016</b>	10,504	282	499	<b>11,285</b>
<b>2017</b>	902	340	219	<b>1,461</b>
<b>2018</b>	2,795	657	815	<b>4,267</b>
<b>2019</b>	6,117	610	223	<b>7,070</b>
<b>2020</b>	2,106	6,519	1,282	<b>9,907</b>
<b>2021</b>	1,271	878	661	<b>2,810</b>

### **2021 Q2 Aquatic Fund Contributions**

McCune informed the ACC that the Utilities contributed \$225,000 (\$309,384.74 escalated) to the Aquatic Fund (Resource) Fund. The Settlement Agreement does not require additional contributions to the Bull Trout fund, however, the additional interest income for 2021 as of April 30, 2021 is \$8,956.70



**Lewis River License Implementation**  
**Lewis River Aquatics Fund - Resource Projects**  
**Sections 7.5, 7.5.1, 7.5.3.1, & 7.7**

<b>Totals:</b>	\$ 4,975,142.21	\$ (2,929,977.00)	\$ 883,886.45	\$ 2,929,051.66	
Release Date	Funds Received	Expense	Interest	Balance	Notes
09/09/19	\$ 177,000.00	\$ -	\$ -	\$ 2,701,866.58	2018 Lewis River 12 Phase II, funds returned; project will not be completed
12/31/19	\$ -	\$ -	\$ 112,538.44	\$ 2,814,405.02	
04/30/20	\$ 306,706.48	\$ -	\$ 37,369.73	\$ 3,158,481.23	
12/01/20	\$ -	\$ (175,000.00)	\$ -	\$ 2,983,481.23	2020 WDFW Eagle Island Chum Spawn
12/31/20	\$ -	\$ -	\$ 68,874.48	\$ 3,052,355.71	
01/21/21	\$ 59,795.10	\$ -	\$ -	\$ 3,112,150.81	2015 LR Side Channel V - USFS; funds not used
04/30/21	\$ -	\$ -	\$ -	\$ 3,112,150.81	
04/30/21	\$ 309,284.74	\$ -	\$ 33,312.11	\$ 3,454,747.66	
06/30/21	\$ -	\$ (48,210.00)	\$ -	\$ 3,406,537.66	2021 Pepper Creek Culvert Removal and Road Hydro-Stabilization, USFS
06/30/21	\$ -	\$ (143,966.00)	\$ -	\$ 3,262,571.66	2021 SW Washington Nutrient Enhancement Coalition, LCFEG
06/30/21	\$ -	\$ (333,520.00)	\$ -	\$ 2,929,051.66	2021 Clear Creek and Clearwater Creek Restoration Design, USFS
	\$ -	\$ -	\$ -	\$ -	
	Total Spent to Date:		\$ (2,929,977.00)		
	Balance Remaining:		\$ 2,929,051.66		* Project close out complete

**Lewis River License Implementation**  
**Lewis River Aquatics Fund - Bull Trout**  
**Sections 7.5, 7.5.1, 7.5.3, 7.5.3.1, & 7.7**

<b>Totals:</b>	\$ 710,489.80	\$ (427,397.92)	\$ 367,920.65	\$ 651,012.53	
Release Date	Funds Received	Expense	Interest	Balance	Notes
4/30/20	\$ -	\$ -	\$ 10,697.80	\$ 816,962.35	
12/31/20	\$ -	\$ -	\$ 17,943.48	\$ 834,905.83	
4/30/21	\$ -	\$ -	\$ 8,956.70	\$ 843,862.53	
6/20/21	\$ -	\$ (192,850.00)	\$ -	\$ 651,012.53	2021 Rush Creek Side Channel, USFS
	\$ -	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	\$ -	
	Total Spent to Date:		\$ (427,397.92)		
	Balance Remaining:		\$ 651,012.53		

**Agenda items for June 10, 2021**

- Review May 13, 2021 Meeting Notes (ACC COMMENTS DUE May 31, 2021)
- Swift Survey’s at Northwoods Update
- ATS Update - tentative
- Study/Work Product Updates

Adjourn 11:20am

**Next Scheduled Meeting:**

<b>June 10, 2021</b>
TEAMS Call Only
9:30 a.m. – 12:00 p.m.

**Meeting Handouts & Attachments:**

- Meeting Notes from 4/8/2021
- Agenda from 5/13/2021
- **Attachment A** – ACC Aquatic Fund Revised 2021/2022 Timeline Comments
- **Attachment B** - Lewis River Fish Passage Report (April 2021)

Date	Agency	Timeline Commnt	Evaluation Questions Comment	Other Comments
4/22/2021	LCFRB	<p>Initiating the ACC grant round does make sense. However, I'm not sure how much this will help sponsors, as the standard in-water-work-window is July 15- Sept. 15. So, if they have on-the-ground projects, I'm not sure this buys them much.</p> <p>Shortening the draft proposal development seems a relative burden for sponsors, as if they are working during the standard IWWW (above), then they are likely working until the very last day allowed (9/15), and may need an extension, which likely would be granted to 9/30. So, this turnaround could be tough.</p> <p>Three week comment period seems workable for ACC. That said, somewhat selfishly the LCFRB may open our grant round that week. So, we will be pretty busy setting that up. Still, I think it's workable.</p> <p>On its face, one month to revise proposals seems fine. However, December is a short month, and a 12/31 due date seems a little rough.</p> <p>I think I understand the 'Activity' entitled "Final Full Proposals submitted to ACC for 30-day review and scoring"; however, whatever this activity is, PacifiCorp essentially has one day to conduct this. And, 1/4/2022- 2/1/2022 is not 30 days, so maybe delete the "30-day review and scoring" verbiage.</p> <p>Why is there an almost two month span between add'l comment due date and FERC submittal?</p>	<p><i>Q1, Does the project provide direct benefit(s) to priority species and habitat reaches?</i> This is not applicable if this is a design only proposal. So, maybe provide clarification on design only proposals. Also, I think more clarification is needed on what the ACC has determined to be "priority species and habitat reaches". The reason I say this is that SpCh and chum utilize entirely different habitats and reaches. From what I understand, Swift tributaries that target SpCh tend to rank higher, but this seems to largely exclude work in the lower NFL and entire EFL, esp. as it relates to chum habitat.</p> <p><i>Q2, Does the project provide tangible, on the ground benefits?</i> This is not applicable if this is a design only proposal. So, maybe provide clarification on design only proposals.</p> <p><i>Q4, Does the proposal apply appropriate and proven methods, designs and technologies?</i> This is fine, but could discourage any "stage 0" approach.</p>	<p>While it is certainly important to the solicit the broader ACC comments, I think it would also be helpful to check w/ potential sponsors on how workable the calendar is for them. I say this as it seems imperative to work with a robust and diverse sponsor base, and each sponsor has seemingly increasing priorities and are likely utilizing numerous grant opportunities. That said, given that the USFS seems to be the most prevalent and consistent sponsor, perhaps reaching out to them is a relatively easy task. Still, reaching out to other potential sponsors may broaden the sponsor base.</p>
4/22/2021	USFS	<p>The Forest Service is supportive of the updated schedule because it will give the FS and PacifiCorp more lead time to complete the agreement modification process for transfer of funds to implement projects in the year they are awarded.</p>	<p>I also think it would be helpful to add a comment column on the scoring template tab for each project (or somewhere else it would make sense). As a first-time scorer, it was difficult to determine if I should submit comments on the rationale behind my ratings with the completed scoring template, or if these comments were instead discussed at the project selection meeting.</p> <p><i>Q7 What constraints or contingencies affect project implementation (permitting, legal, location, funding, etc.)</i> Are there constraints or contingencies that affect project implementation (permitting, legal, location, funding, etc.)</p>	

*Q10 How might other habitat protection, assessments, or restoration actions in the watershed impact the project? Are there other habitat protection, assessments, or restoration actions in the watershed that could impact the project?*

*Q11 Will the project be cost shared with other funding sources (e.g., matching contributions, in-kind participation, grants, etc.)? To what degree are the project costs shared with other funding sources (matching contributions, in-kind participation, grants, etc.)*

*Q14 Is the project self-maintaining once completed? If not, how will maintenance be achieved? To what degree is the project self-maintaining once completed? If the project requires additional maintenance, how will this be achieved?*

4/23/2021	WDFW	Moving the timing up 1 month will help ensure adequate review and response throughout the process. We also hope that this will help attract more proposals.	At this time, we do not have comments to the questions as we just completed a cycle using the current questions. Once the groups who had issues with the current questions make their proposals, we may have a response, but until then, we are ok with the current questions.	

# Lewis River Fish Passage Report

## April 2021

### Merwin Fish Collection Facility and General Operations

During the month of April, a total of 650 fish were captured at the Merwin Dam Adult Fish Collection Facility (MFCF). The monthly catch was mostly composed of spring Chinook (74.0%) and winter steelhead (22.9%). All hatchery spring Chinook were transported to Lewis River hatcheries to be brood stock or to be held for possible transport upstream in the future. All natural origin adults were transported upstream.

The MFCF remained operational throughout the month of April. Flow below Merwin Dam decreased from approximately 4,800 cfs at the beginning of the month to 2,870 cf. on April 7<sup>th</sup>, where it remained for the remainder of the month (Figure 1).

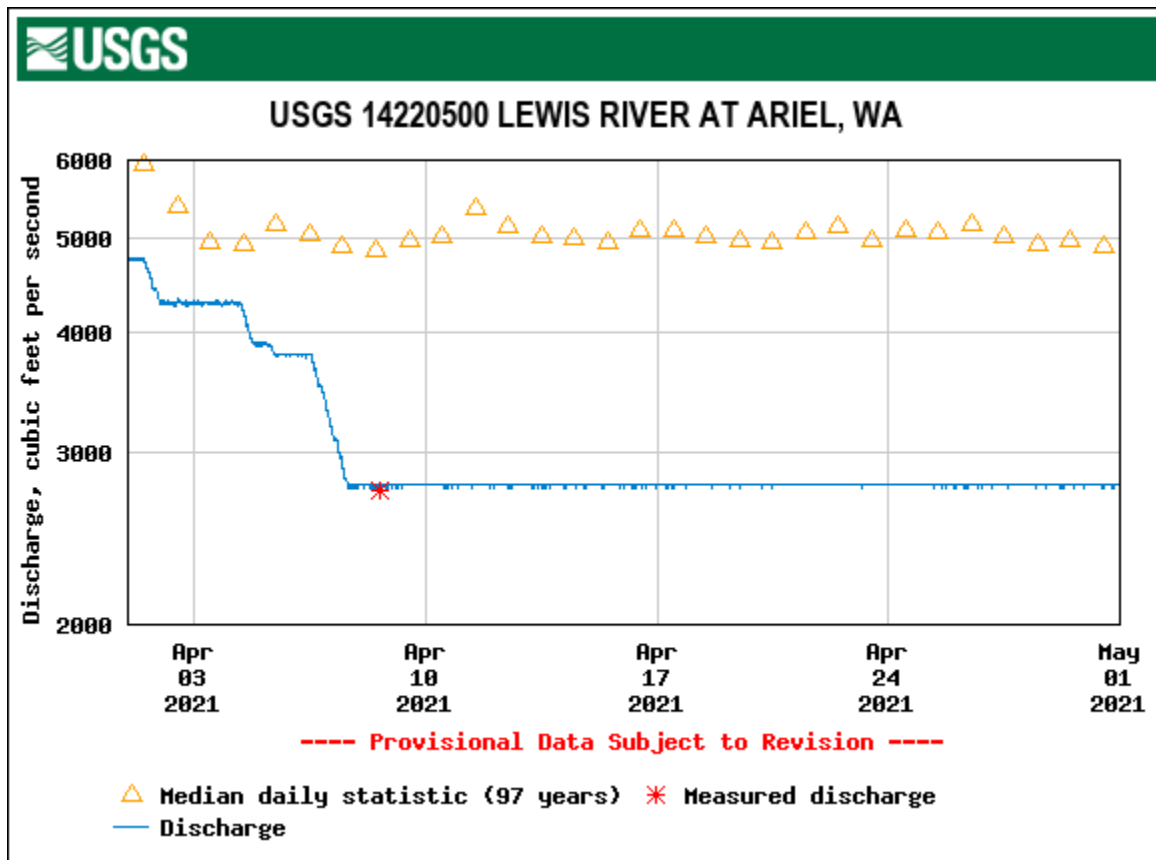


Figure 1. Discharge in cubic feet per second recorded at the USGS Ariel, WA gauge (14220500) located immediately downstream of Merwin Dam.

### Upstream Transport

Upstream transport for adult salmonids increased throughout the month of April, with a total of total of 160 adult fish being transported upstream by the end of the month. The majority (66.9%) of the

adults transported upstream in April were winter steelhead (n=107), followed by natural origin (NOR) spring Chinook (n=38), and cutthroat trout (n=15). Spring Chinook collection totals at the MFCF continued to increase throughout the month and are greater than the 2014-2020 average (Figure 2). Upstream transport for winter steelhead remains below the 2012-2020 average (Table 1).

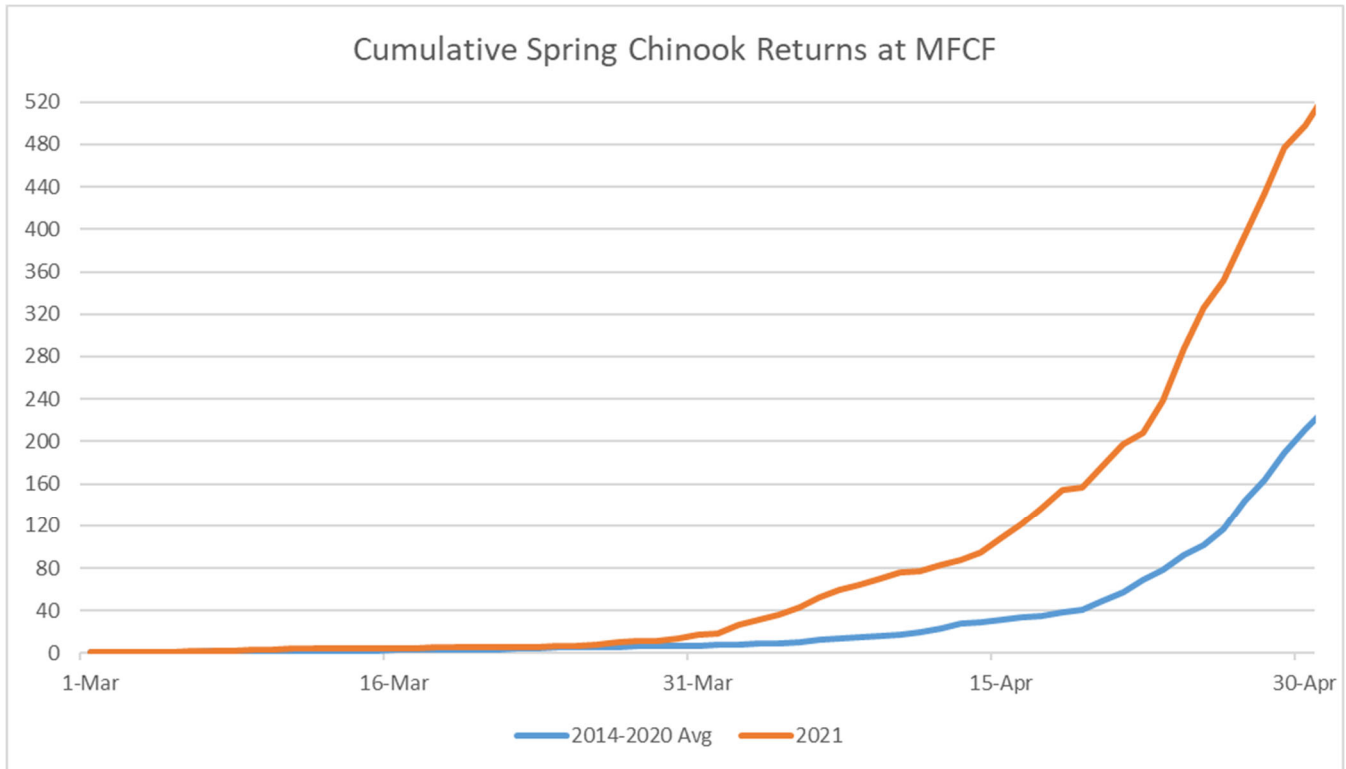


Figure 2. Cumulative number of Spring Chinook collected at Merwin Adult Fish Collection Facility in 2021, relative to the 2014-2020 average.

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

Run Year	Male	Female	Total adult winter steelhead taken upstream of Swift Dam
2012	141	48	189
2013	440	301	741
2014	452	581	1,033
2015	746	477	1,223

<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>	517	535	<b>1,052</b>
<b>2021</b>	98	146	<b>244</b>

By the end of April 2021, 161 BWT winter steelhead, 83 coho, 73 NOR winter steelhead, 42 NOR spring Chinook, and 26 cutthroat trout have been transported upstream of Swift Dam since the beginning of the year.

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

The Swift Reservoir Floating Surface Collector (FSC) was taken out of operation from April 28<sup>th</sup> - April 29<sup>th</sup> so that submerged debris could be removed from holding tanks and modifications could be made to screens in the adult fish holding tank; the FSC operated continuously otherwise. A total of 3,410 out-migrants were collected throughout the month, which is an increase from March's total of 1,949. There was a considerable increase in the number of juvenile steelhead collected at the FSC in April (n=661) relative to the number collected in March (n=31). The majority (37.3%) of the fish collected in March were juvenile coho (n=1,271), followed by spring Chinook (n=878), steelhead (n=661), planted rainbow trout (n=529), cutthroat trout (n=59), and bull trout (n=4). April 2021 collection totals are considerably less than what was collected during the same timeframe for the past few years (Table 2).

**Table 2. Number of coho, Chinook, and steelhead juveniles transported downstream from the Swift Floating Surface Collector by run-year.**

<b>Run Year</b>	<b>April Collection Numbers by Run Year at Swift FSC</b>			
	<b>Coho</b>	<b>Chinook</b>	<b>Steelhead</b>	<b>TOTAL</b>
<b>2013</b>	953	173	5	<b>1,131</b>
<b>2014</b>	2,174	175	65	<b>2,414</b>
<b>2015</b>	739	535	143	<b>1,417</b>
<b>2016</b>	10,504	282	499	<b>11,285</b>

<b>2017</b>	902	340	219	<b>1,461</b>
<b>2018</b>	2,795	657	815	<b>4,267</b>
<b>2019</b>	6,117	610	223	<b>7,070</b>
<b>2020</b>	2,106	6,519	1,282	<b>9,907</b>
<b>2021</b>	1,271	878	661	<b>2,810</b>





**Fish Facility Report**  
**Swift Floating Surface Collector**  
**April 2021**

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		16	11		1	30			4			2		0	7	71
2		8	34			48			1					0	13	104
3		13	18			71		1	6			3		1	19	132
4		10	47		1	57			11			5		0	9	140
5		10	44			30			4					0	15	103
6		11	18			28			2			2	1	0	14	76
7		11	7			39			7			3		0	11	78
8		3	11			27			8			6		0	4	59
9		7	52		1	53			7			1	1	0	28	150
10		4	8			21			3					0	27	63
11	2	9	14			22			6			1		0	12	66
12			27			28			21			1		0	14	91
13		2	12			24			14			1		0	15	68
14		1	30			22			11					0	18	82
15		2	46			58		1	13			2		0	21	143
16		1	79			47			19			3	1	0	25	175
17	2	1	29			28			18			3		0	22	103
18	4		63			62			18			3		0	23	173
19			85			40			23			3		0	33	184
20			44			26		2	56					1	23	152
21			57			8		43	0			3		0	23	134
22			7			6			14			2		0	7	36
23			34			19		1	25			2		1	41	123
24			46			11			24	4		2		0	17	104
25		4	36			3			18			4		1	7	73
26		2	20			3			20			1		0	3	49
27			32			8		2	35			3		0	17	97
28			114			31		3	111	2				0	28	289
29																
30			123			25		2	107	2				0	33	292
<b>Monthly</b>	8	115	1148	0	3	875	0	55	606	8	0	56	3	4	529	3410
<b>Total</b>	274	3727	2022	10	38	1670	8	82	697	9	3	205	6	5	745	9501