

LEWIS RIVER AQUATIC COORDINATION COMMITTEE

Facilitator: ERIK LESKO
503-412-8401

Location: TEAMS MEETING ONLY

Date: March 9, 2023

Time: 9:30 AM – 12:00 PM

AGENDA

| | |
|----------|--|
| 9:30 AM | Welcome <ul style="list-style-type: none">➤ Review and Accept 03/09/2023 Agenda➤ Review and Accept 02/09/2023 Meeting Notes |
| 9:45 AM | Public Comment Opportunity |
| 10:00 AM | Study/Work Product Updates <ul style="list-style-type: none">➤ Yale License Amendment – Questions/Comments (<i>Lesko</i>)➤ Flows/Reservoir Conditions (<i>Lesko</i>)<ul style="list-style-type: none">○ Merwin flow increase next week 3/14➤ Reservoir Shoreline Development Projects (<i>ACC</i>)➤ WSDOT - Cougar Creek/Beaver Bay updates (<i>ACC</i>)➤ ATS Update (<i>Lesko, Montgomery</i>)➤ FPS Update (<i>Glaser, Olson</i>)<ul style="list-style-type: none">- “Elements” document next steps- ACC design and study reviews per Settlement Agreement➤ Fish Passage/Operations Update (<i>Karchesky</i>)➤ Fish Passage tours March 23-24 |
| 11:45 AM | Public Comment Opportunity Next Meeting Agenda |
| 12:00 PM | Meeting Adjourn |

Note: all meeting notes and the meeting schedule can be located at:
<https://www.pacificorp.com/energy/hydro/lewis-river/acc-tcc.html>

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Phone Conference ID: 214 435 300#

**FINAL Meeting Notes
Lewis River License Implementation
Aquatic Coordination Committee (ACC) Meeting
March 9, 2023
TEAMS Meeting Only**

ACC Representatives and Affiliates Present (17)

Larissa Rohrbach, Anchor QEA
 Nina Maas, Anchor QEA
 Christina E. Donehower, Cowlitz Indian Tribe
 Amanda Farrar, Cowlitz PUD
 Steve West, LCFRB
 Melissa Jundt, NMFS
 Chris Karchesky, PacifiCorp
 Erik Lesko, PacifiCorp
 Todd Olson, PacifiCorp
 Tyanna Blaschak, USFS
 Jeffrey Garnett, USFWS
 Anya Huff, WDFW
 Bryce Glaser, WDFW
 Josua Holowatz, WDFW
 Peggy Miller, WDFW
 Sam Gibbons, WDFW
 Keely Murdoch, Yakama Nation

Guests (0)

None

Calendar:

| | | |
|---------------|-------------|---------------|
| March 9, 2023 | ACC Meeting | TEAMS Meeting |
|---------------|-------------|---------------|

Assignments:

| Assignments from March 9, 2023 | Status |
|---|-----------------|
| Glaser, Miller: Identify the types of decision that should be brought from the FPS to the ACC to clarify protocols for the FPS. | Ongoing. |

| Assignments from February 9, 2023 | Status |
|---|-----------------------------|
| Lesko: Check Aquatic Fund amounts and provide votes for 7-day ACC review. | Complete (2/21/2023) |
| Karchesky: Organize field visit for ACC and FPS to Clackamas River, with potential for a second day added on to visit Lewis River facilities. | Complete (2/21/2023) |

| Assignments from December 8, 2022 | Status |
|--|---------------|
|--|---------------|

| | |
|--|--------------------------------|
| All: Provide comments on the Yale License Amendment to Beth Bendickson by March 8, 2023. | Complete (3/8/2023) |
|--|--------------------------------|

| Assignments from November 10, 2022 | Status |
|--|-----------------|
| Karchesky: Discuss potential impacts of Merwin conveyance system work with the ATS to determine broodstock collection modifications. | Ongoing. |

| Assignments from April 14, 2022 | Status |
|--|-----------------|
| Erik Lesko: Coordinate with the TCC regarding the timing for WSDOT’s Cougar Creek culvert project. | Ongoing. |

Opening, Review of Agenda and Meeting Notes

Erik Lesko (PacifiCorp) called the meeting to order at 9:31 a.m. and reviewed the agenda. No revisions to the agenda were made. Lesko reviewed the February 9, 2023, meeting notes. Editorial edits and comments were accepted, and the February 9, 2023, minutes were accepted with minor edits.

Public Comment Opportunity

None.

Study/Work Product Updates

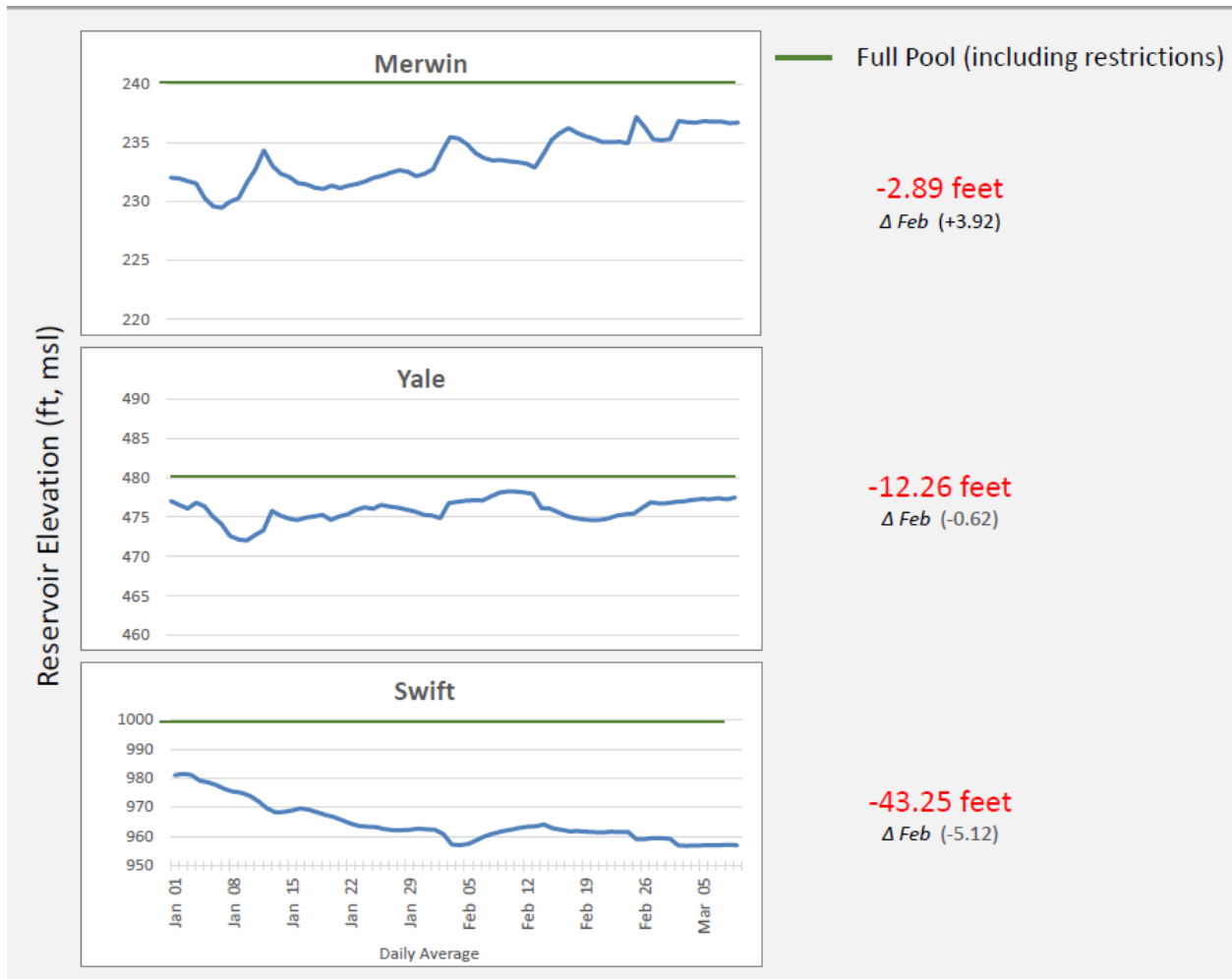
Yale License Amendment

Todd Olson thanked contributors for providing comments. Olson will work with the PacifiCorp team to reply to the comments and add information to the application in response to those comments. A final review and assembly of the package will be done within PacifiCorp and submitted to FERC within the next month or so; however, there is no final deadline yet.

Flows/Reservoir Conditions Update

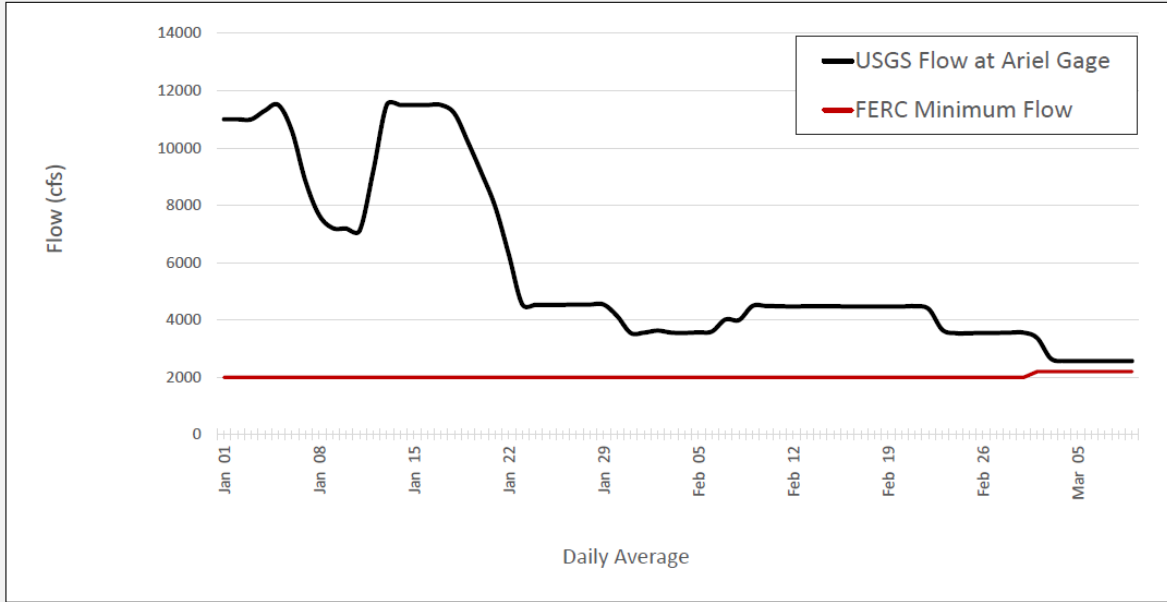
Erik Lesko shared the flows and reservoir conditions update:

Lesko said Lake Merwin has gained in elevation, Swift has lost elevation, resulting in a net loss of approximately 2 feet across all projects, which was relatively stable since the last update to the ACC on February 9.

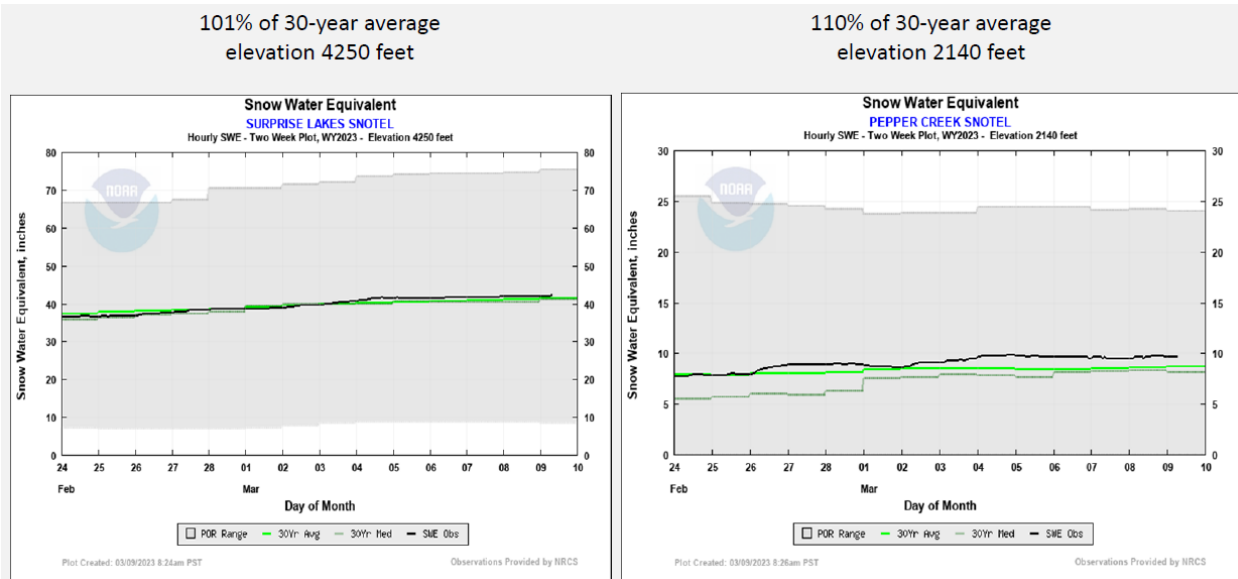


FERC Minimum flows downstream of Merwin Dam were bumped up to 2,300 cfs on March 7, and the river remains in a low flow status. Operations will bump flows up to 7,000 cfs on Tuesday to support temperature model calibration with an Acoustic Doppler Current Profiler (ADCP) downstream of Merwin Dam, which requires a high flow event lasting approximately a day. Flows will come down at approximately 6 p.m. on that same day. This work is being done by PacifiCorp with Washington Department of Ecology to meet conditions in PacifiCorp's 401 Water Quality Certification. There is a press release regarding the flow increase available on PacifiCorp's website for reference.

North Fork Lewis River Flows, Daily Average: Jan 1, 2023 to Mar 9, 2023



There was a lot of snow last month near Merwin Dam, however based on current SNOTEL gages, the snow water equivalent levels are near average. For reference, Lesko provided charts from two SNOTEL sites: a high elevation site at Surprise Lakes which has average snowpack, and lower elevation site at Pepper Creek, which is at approximately 110% of average.



Reservoir Shoreline Development Project Update

There were no updates on known shoreline development projects within the project limits.

Peggy Miller noted that at the TCC meeting yesterday, it was mentioned that hybrid milfoil was found around the area of Camper's Hideaway and there was concern that it could be spread

during construction. Miller asked that if the permit has not yet been issued, whether some Best Management Practices (BMPs) could be added to help control the spread. Todd Olson said the permit applications have been submitted to agencies, but he has not seen any updates and suggested checking within WDFW to determine if they have already issued the permits. If not, that could be an opportunity to add the BMPs. Kendel Emmerson (PacifiCorp's wildlife biologist) informed Olson about the milfoil earlier this week and will be working with the Counties to try to mitigate that.

WSDOT – Cougar Creek/Beaver Bay updates

Washington State Dept. of Transportation (WSDOT) has submitted their US Army Corps of Engineers (USACE) and Washington Dept. of Ecology (ECY) permit applications and will submit their Hydraulic Project Approval application to WDFW in the next week. The project will also require a land use permit from PacifiCorp as the project falls with Wildlife Habitat Management Program (WHMP) lands. WSDOT anticipates completing the project before bull trout start entering Cougar Creek in early July.

Miller said Emmerson had shared the documentation with her and she was happy with changes to protect the highway using large wood instead of riprap, although gravel will still be excavated from the streambed. The excavated gravel will be placed between the trees and boulders that will be used for armoring at the point of erosion near the culvert. The TCC has a concern that access to the site goes through Wildlife Habitat Management Plan (WHMP) lands, and are working with WSDOT to determine in-kind mitigation.

ATS Update

Erik Lesko said the final 2023 AOP was distributed to the ATS. The group will focus on changes that would be implemented in 2024. The ATS is now addressing the list of priorities that have been identified for technical work, mainly evaluating methods for monitoring and evaluation. Lesko has been focused on finalizing a genetic monitoring plan to establish the genetic baselines for Lewis Basin populations.

Bryce Glaser said a draft of the Lewis River Coho Transition Plan was distributed among the ATS. WDFW would like the ATS to review the draft transition plan prior to being presented to the ACC.. WDFW would like to receive comments before the next ATS meeting, by March 23, 2023. Erik Lesko said the plan has been circulated among PacifiCorp staff, and they will provide comments on or before the due date.

FPS Update

“Elements” document next steps

Bryce Glaser said the Fish Passage Subgroup (FPS) discussed comments on the 30% design documents, which were submitted to PacifiCorp. The design team worked on comment responses that were distributed to the FPS ahead of this afternoon's meeting. An initial draft of a color-coded matrix was developed to concisely capture the process to select a preferred alternative in the fish passage proposal. There are assignments to provide comments back on that.

Todd Olson said he appreciated people reviewing the fish passage facility alternatives evaluation documents. Regarding Yale downstream passage, in general PacifiCorp can accept most changes and a couple will be discussed later this afternoon. There are some comments on the upstream passage to review. Chris Karchesky discussed fish passage capacity at the facilities at the last meeting. Hopefully some language can be considered in the document to focus on Merwin Dam

downstream passage and a kokanee evaluation. The FPS is making progress toward meeting deadlines at the end of April.

Glaser said the last part of the elements document, which will be an issue for the ACC, will be the compensatory mitigation response from PacifiCorp. Olson agreed and said the intent is that agreement can be reached on all the other elements at the subcommittee level. The FPS can have the discussion around the funds, but it will be an ACC discussion.

Olson said he is working on text for section 7 of the Elements Document for discussion in today's meeting.

ACC design and study reviews per Settlement Agreement

Erik Lesko said Section 4.1.1 of the Settlement Agreement requires Consultation with the ACC regarding studies to inform on fish passage designs. This review process has been handled predominately by the FPS. To be consistent with the Settlement Agreement, the Consultation process will need to include the ACC and the approval of these study designs highlighted in the ACC notes.

Lesko said with regard to fish passage design review (Section 4.1.2), PacifiCorp will ensure this will be on the ACC agenda for the ACC to approve, consistent with the Settlement Agreement. In addition, a decision document for the "Elements of Fish Passage" document will be prepared for approval by the ACC.

Peggy Miller asked how ACC members would be informed about the methods for studies, like the fish behavior studies. Lesko said it should be the responsibility of the Fish Passage Subgroup to bring documentation to the ACC. Miller said the Elements of Fish Passage document being reviewed by the FPS is high level, and asked if that is sufficient for the ACC, or if the methods are being reviewed at the ATS level. It would be good to document the process and level of detail for the review. There will be a lot of materials going back and forth now and in the coming years, so it's important that everyone understands and agrees with the protocol. Glaser agreed the FPS should talk through how the major plans will be brought back to the ACC. Implementation-type recommendations can be made at the subgroup level, but we should look ahead at how decisions are brought to the ACC during these updates, which may require a decision document or may be recommendations that are approved within the meeting notes. Glaser said he could work with Miller to identify the types of issues that should be brought forward through the ACC to clarify those protocols for the FPS. Lesko agreed with that approach.

Merwin Fish Passage Update (see also Attachment B)

Chris Karchesky informed the ACC fish that upstream adult collection at Merwin Dam has been slow due to cold water temperatures, with few steelhead observed, both hatchery-origin returns (HORs) with blank wire tags (BWTs) and natural origin returns (HORs).

The first spring Chinook was observed earlier this week at the Merwin Fish Collection Facility. It was an NOR with no passive integrated transponder (PIT) tag, and it was passed upstream after scales and tissues were collected for the monitoring program. A brief, day-long outage was necessary at the Merwin facility in early-March to take measurements related to the planned improvements which will take place in July and August, but the Merwin trap was back in service yesterday.

A sea lion has been observed at the Merwin Fish Collection Facility ladder trap, and several were observed at the mouth of the river and lower river. They are typically observed when eulachon come in and seem to increase in number every year. PacifiCorp staff are noting these observations and providing to WDFW.

Karchesky said he is working on an agenda for a 2-day tour of facilities at the Lewis River (existing facilities and proposed construction sites) and PGE facilities on the Clackamas River (existing facilities). If time allows, the group may also visit the Swift FSC. The group will meet in Estacada Oregon on the second day; tour the North Fork Collection facility and no-touch adult facilities, and then if time allows, the River Mill facility, where a bypass is used.

Swift Floating Surface Collector (see also Attachment C)

Chris Karchesky said there is a quite a bit of snow at Swift Dam and temperatures have been cool. Fewer juvenile fish were observed passing through the Swift FSC in February. Hopefully there will be a cool spring to extend the outmigration season. Daily Outmigrant numbers have been between 50 to 200 fish per day.

Lewis River Fish Passage

See Attachment B.

Administrative Updates

None.

Public Comment Opportunity

None present.

Agenda Items for April 13, 2023

- Study/Work Product Updates

Erik Lesko said the utilities are working on their Annual Operating Report. A highlights presentation will be given at the May meeting on Monitoring and Evaluation activities. That will kick off a 30-day review for that report, which is due to FERC by late June. Bryce Glaser noted that the ATS discussed having a summary presentation of results that would lay out the key results in a more digestible format to improve communication to the ACC. A summary should include whether the various requirements were met and the implementation status of each objective at a high level. He suggested that the process may benefit from some ATS members attending the May ACC meeting.

Lesko said PacifiCorp will be coordinating internally the format and level of detail for the May meeting. Lesko suggested the ATS discuss and consider a summary template format during their meeting on March 30. The ATS may also discuss format and content recommendations in their April 27 meeting in preparation for the May ACC meeting.

Adjourn 10:32 pm

Next Scheduled Meeting

| |
|------------------------|
| April 13, 2023 |
| Teams Call |
| 9:30 a.m. – 12:00 p.m. |

Meeting Handouts & Attachments

- Meeting Notes from 2/9/2023
- Agenda from 3/15/2023
- **Attachment A** – Merwin Adult Trap Collection Report (February 2023)
- **Attachment B** – Swift FSC Facility Collection Report (February 2023)
- **Attachment C** – Lewis River Fish Passage Report (February 2023)

Lewis River Fish Passage Report

February 2023

Merwin Fish Collection Facility and General Operations

During the month of February, a total of 55 fish were captured at the Merwin Dam Adult Fish Collection Facility (MFCF), which was a drop in fish numbers from 686 the previous month (January). As is typical for this time of year, winter steelhead were the most prevalent species collected (n= 53). A single Cutthroat trout (n= 1), and Fall Chinook (n= 1) made up the balance. Three Blank Wire Tag (BWT) steelhead and one NOR winter steelhead were given to WDFW for broodstock needs. No adult spring Chinook were collected at Merwin trap in February.

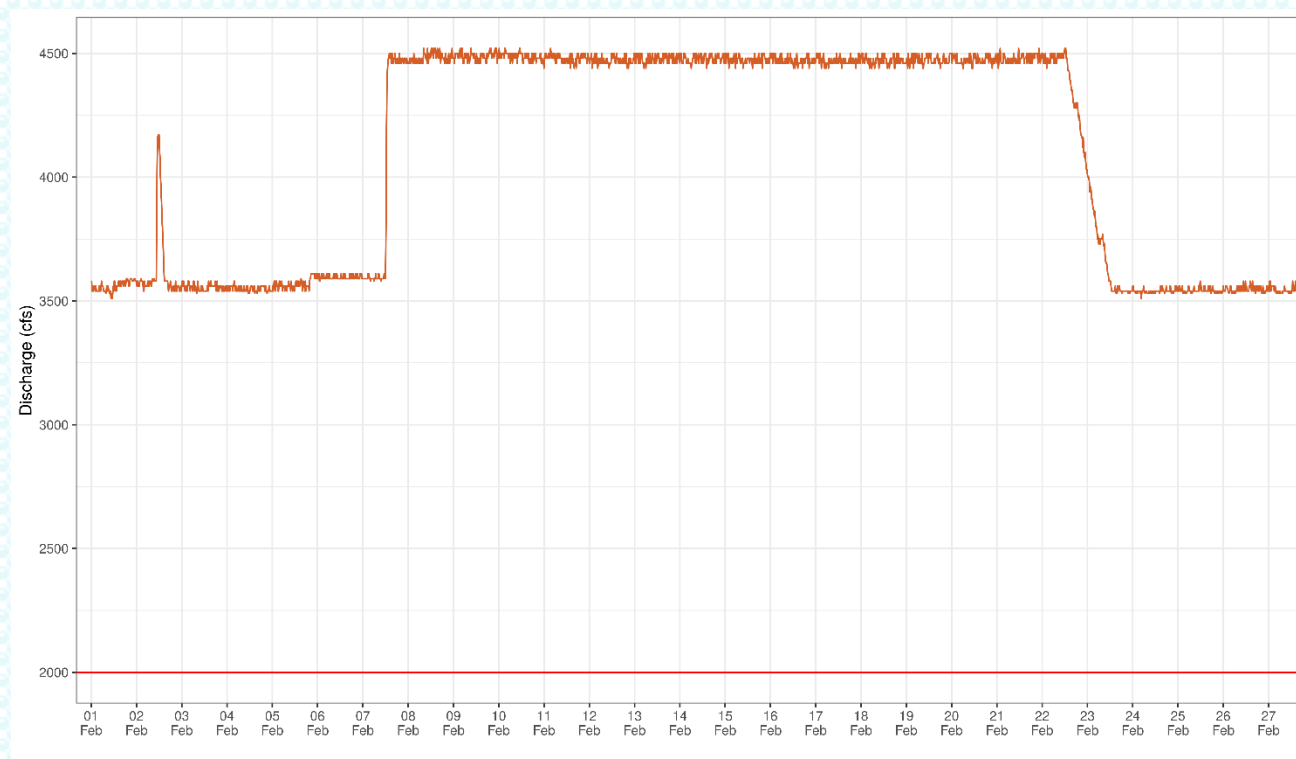


Figure 1. Flow in cubic feet per second recorded at the USGS Ariel, WA gauge (14220500) located immediately downstream of Merwin Dam.

The MFCF lift and conveyance system was taken out of service on February 1 through February 2 and again from February 20 through February 26 due to unsafe operating conditions caused by severe winter weather. Flows below Merwin Dam ranged from approximately 3,500 to 4,500 cubic feet per second in February (Figure 1).

None of the fish collected at the MFCF in February contained PIT tags. For calendar year 2023 to-date, one natural origin coho and one natural origin winter steelhead containing PIT tags have been collected at the Merwin Trap. Tagging history and detections of PIT tagged fish passing through the Lewis River Fish Passage Facilities are available through Columbia Basin PIT Tag Information System (PTAGIS).



Figure 2. A sea lion hunts near the mouth of the fish ladder at the Merwin Fish Collection Facility.

Upstream Transport

A total of total of 15 adult fish were transported upstream in February. The majority of the fish transported upstream were winter steelhead (7 BWT and 7 NOR). One cutthroat trout was also transported upstream of Swift Dam in February. For calendar year 2023 to date, a total of 41 winter steelhead (21 BWT and 20 NOR), 38 late run coho, and eight cutthroat trout have been transported upstream of Swift Dam.

Floating Surface Collector (FSC)

The Swift Reservoir Floating Surface Collector (FSC) was taken out of service from February 1 through February 3, and again from February 20 through February 28 due to unsafe operating conditions caused by severe winter weather.

There was a considerable decrease in fish collection totals at the Swift FSC in February, relative to January (1,241 vs. 4,875, respectively). The majority of the fish collected were juvenile coho ($n=1,061$), followed by spring Chinook ($n=155$), steelhead ($n=14$), cutthroat trout ($n=6$), and hatchery rainbow trout ($n=5$). The average number of fish collected in February since the commissioning of the Swift FSC is approximately 2,494 collection totals are approximately half the 2013-2022 average for the month ($n=2,494$) (Table 1).

Table 1: Total number of out-migrating juvenile salmonids (by species) collected at the Swift FSC during the month of February since 2013.

| | February Collection Totals by Run Year at the Swift FSC | | | | |
|-----------------|--|----------------|------------------|------------------|--------------|
| Run Year | Coho | Chinook | Steelhead | Cutthroat | TOTAL |
| 2013 | 100 | 34 | 1 | 7 | 142 |
| 2014* | 0 | 0 | 0 | 0 | 0 |
| 2015 | 5,917 | 554 | 8 | 98 | 6,577 |
| 2016 | 6,600 | 1,058 | 45 | 83 | 7,786 |
| 2017 | 753 | 9 | 1 | 5 | 768 |
| 2018 | 429 | 1,001 | 27 | 90 | 1,547 |
| 2019 | 151 | 60 | 2 | 4 | 217 |
| 2020* | 0 | 0 | 0 | 0 | 0 |
| 2021 | 928 | 179 | 36 | 51 | 1,194 |
| 2022 | 6,244 | 434 | 18 | 12 | 6,708 |
| 2023 | 1,061 | 155 | 14 | 6 | 1,235 |

***Swift FSC was not operational.**

The observed length frequency distributions for juvenile coho and spring Chinook were generally consistent with those previously observed during the month of February. Coho outmigrants consisted of primarily smaller, mostly 2021 brood year fish, with a few larger “hold-overs” being collected as well (Figure 3). Spring Chinook length frequency distributions also indicated that brood year 2021 fish made up the majority of the catch, albeit to a lesser extent than coho (Figure 4). Too few juvenile steelhead were collected in February to make a meaningful length frequency distribution.

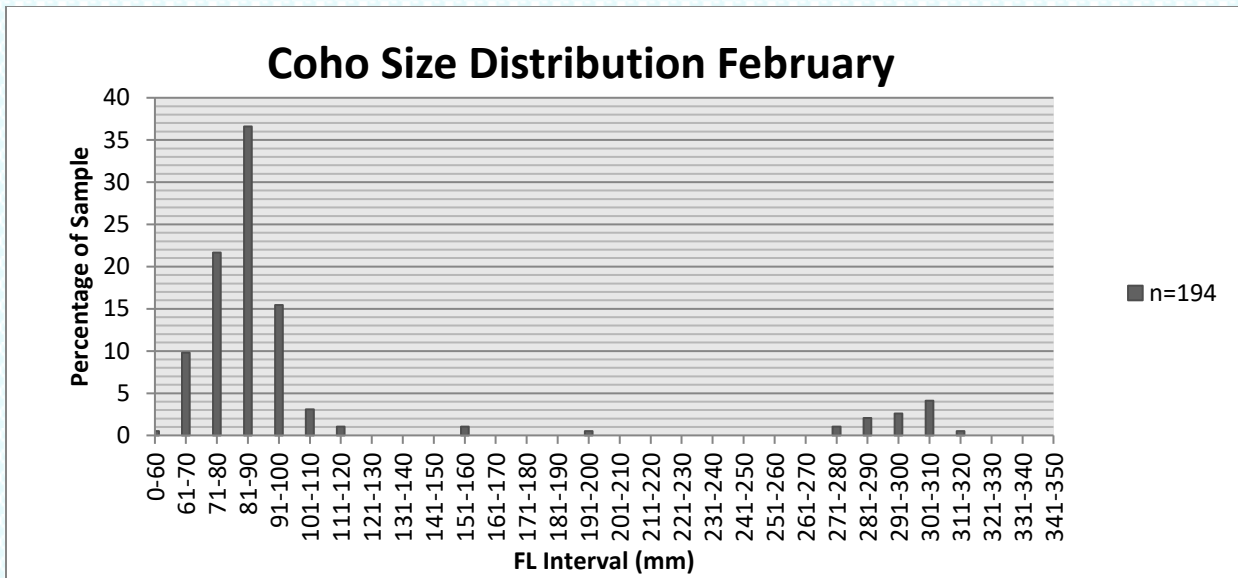


Figure 3. Coho length frequency distributions observed at the Swift FSC during the month of February.

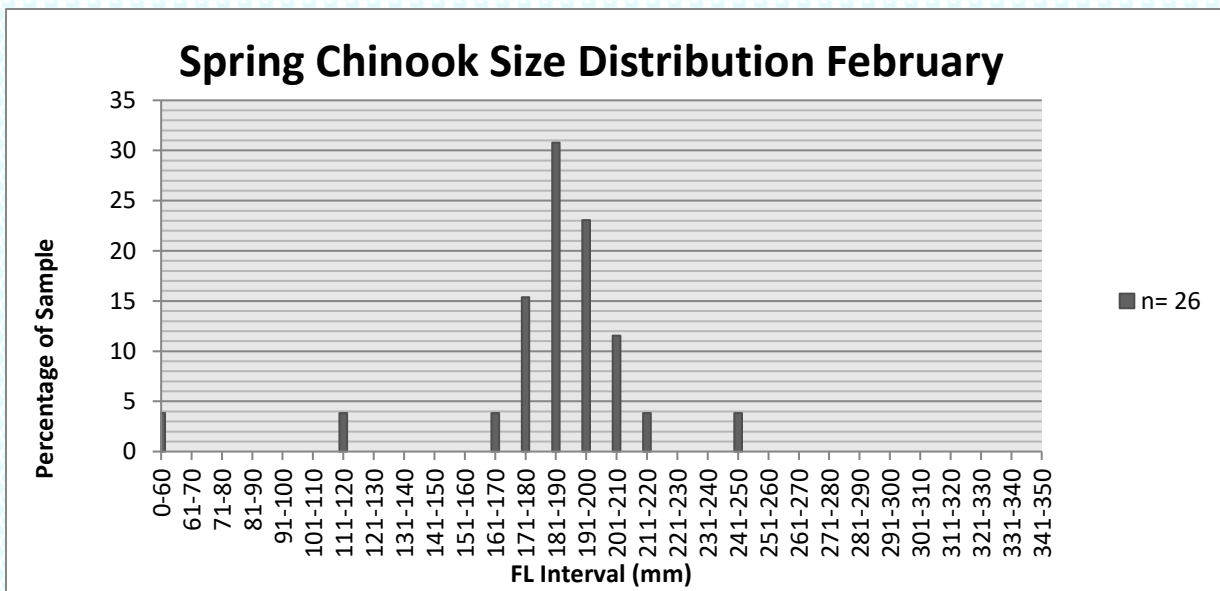


Figure 4. Spring Chinook length frequency distributions observed at the Swift FSC during the month of February.

Fish Facility Report
Swift Floating Surface Collector
February 2023

| 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 | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | |
| 4 | 1 | 14 | 32 | | | 1 | | | | 1 | | | | 0 | 0 | 49 |
| 5 | 1 | 21 | 95 | | | 2 | | 2 | | 1 | | | | 0 | 0 | 122 |
| 6 | | 24 | 0 | | | 0 | | | | 0 | | | | 0 | 0 | 24 |
| 7 | | 43 | 0 | | | 0 | | | | 0 | | | | 0 | 0 | 43 |
| 8 | | 44 | 2 | | | 1 | | | | 0 | | 1 | | 0 | 0 | 48 |
| 9 | | 56 | 8 | | | 1 | | | | 0 | | 2 | | 0 | 0 | 67 |
| 10 | | 12 | 117 | 1 | | 20 | | | | 4 | | | | 0 | 0 | 154 |
| 11 | | 96 | 11 | | | 10 | | | | 0 | | 1 | | 0 | 0 | 118 |
| 12 | | 28 | 82 | | | 32 | | | | 1 | | | | 0 | 0 | 143 |
| 13 | 1 | 37 | 2 | | 1 | 25 | | | | 2 | | | | 0 | 0 | 68 |
| 14 | | 44 | 3 | | | 9 | | | | 0 | | 1 | | 0 | 0 | 57 |
| 15 | | 54 | 6 | | 3 | 6 | | | | 0 | | | | 0 | 0 | 69 |
| 16 | | 47 | 32 | | | 21 | | | | 1 | | | | 0 | 0 | 101 |
| 17 | | 52 | 13 | | | 8 | | | | 0 | | 1 | | 0 | 4 | 78 |
| 18 | | 46 | 4 | | | 9 | | | | 0 | | | | 0 | 1 | 60 |
| 19 | | 7 | 26 | | | 5 | | | | 2 | | | | 0 | 0 | 40 |
| 20 | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | |
| Monthly | 3 | 625 | 433 | 1 | 4 | 150 | 0 | 2 | 12 | 0 | 0 | 6 | 0 | 0 | 5 | 1241 |
| Total | 46 | 4470 | 1191 | 3 | 12 | 272 | 2 | 14 | 39 | 0 | 0 | 45 | 0 | 1 | 21 | 6116 |