

LEWIS RIVER AQUATIC COORDINATION COMMITTEE

Facilitator: ERIK LESKO
503-412-8401

Location: TEAMS (online)

Date: February 08, 2024

Time: 9:30 AM – 12:00 PM

AGENDA

9:30 AM	Welcome <ul style="list-style-type: none">➤ Review and Accept 2/08/2024 Agenda➤ Review and Accept 1/11/2024 Meeting Notes
9:40 AM	Public Comment Opportunity
9:45 AM	Revision to Ground Rules Discussion (<i>Lesko</i>)
10:00 AM	Study/Work Product Updates <ul style="list-style-type: none">➤ Flows/Reservoir Conditions (<i>Lesko</i>)➤ Reservoir Shoreline Development Projects (<i>ACC</i>)➤ ATS (<i>Karchesky, ATS</i>)➤ FPS (<i>Glaser, Karchesky</i>)➤ Fish passage/operations (<i>Karchesky</i>)➤ Merwin repairs (<i>Lesko</i>)➤ 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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**FINAL Meeting Notes
 Lewis River License Implementation
 Aquatic Coordination Committee (ACC) Meeting
 February 08, 2024
 TEAMS Meeting**

ACC Representatives and Affiliates Present (13)

Nina Maas, Anchor QEA
 Christina E. Donehower, Cowlitz Indian Tribe
 Steve West, LCFRB
 Melissa Jundt, NMFS
 Erik Lesko, PacifiCorp
 Levi Pienovi, PacifiCorp
 Chris Karchesky, PacifiCorp
 Kevin Young, WDFW
 Douglas Robison, WDFW
 Josua Holowatz, WDFW
 Peggy Miller, WDFW
 Keely Murdoch, Yakama Nation
 Bill Sharp, Yakima Nation

Public:

None.

Assignments:

Assignments from October 12, 2023	Status
Erik Lesko to finalize Northwoods reporting	Ongoing

Assignments from January 11, 2024	Status
Erik Lesko to review reporting procedures in emergency scenarios (i.e., fish kills)	Complete (2/8/24)

Opening, Review of Agenda and Meeting Notes

Erik Lesko (PacifiCorp) called the meeting to order at 9:33 a.m. and reviewed the agenda. Josua Holowatz asked to add an update of WDFW spring Chinook run predictions. Meeting note revisions from January 11, 2024, were reviewed; the notes were approved by representatives present.

Public Comment Opportunity

No comment.

Decision Template: Proposed Revision to Ground Rules (Lesko) (Attachment A)

Erik Lesko provided an update on the revisions to the Ground Rules. Lesko said that he has discussed concerns with David Price and NOAA has voted (via email from Dave Price to Erik Lesko) to approve the draft ground rules. Lesko sent the revised ground rules and decision template to Kendel Emmerson for distribution to the Terrestrial Coordination Committee (TCC) for review. Lesko will attend the February TCC meeting and present the updates. Peggy Miller stated that she will also attend, and they can give updates together. Following the meeting, the TCC will begin a 30-day review period, indicating that the revisions will be voted on by the TCC in March.

Study/Work Product Updates

Flows/Reservoir Conditions Update (see Attachment B)

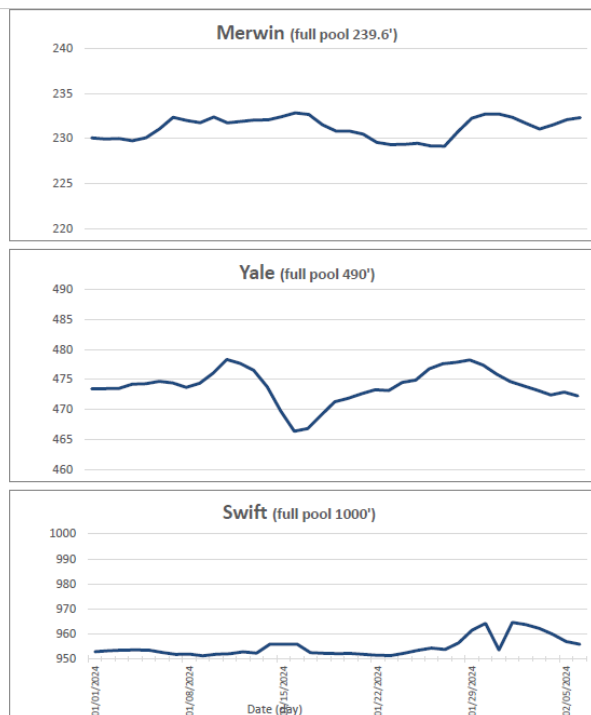
Erik Lesko presented a figure of the reservoir elevations from January to February. He mentioned that since the previous meeting, the Lewis River experienced a 7Q10 high runoff event. Despite the high flow event, reservoirs draft among all three reservoirs remained nearly unchanged since our last ACC meeting. Josua Holowatz asked about the spill event and whether anyone had visited the wasteway. Lesko said Swift No. 2 was scheduled to return to service tomorrow and spill over the power canal wasteway is expected to terminate tomorrow morning. Lesko also mentioned that a fish survey would occur tomorrow and he will provide further updates to the ACC regarding results of the fish survey.

Reservoir Elevations

January 1, 2024 –
February 6, 2024

Total Draft = **-68.0**
(-58.0 with Yale Restriction)
 Δ since Jan 9, 2024 = **0**

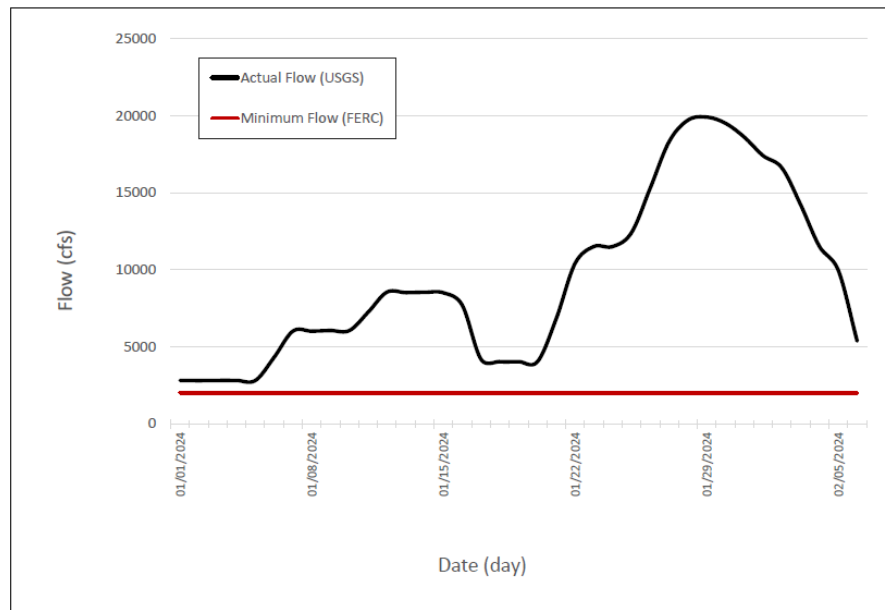
Reservoir Elevation (ft., msl)



Lesko presented the North Fork Lewis River flows below Merwin Dam. In general, the flows increased during the flow event and are currently dropping as weather and temperatures have stabilized natural inflows into the Lewis.

**North Fork Lewis River
Stream flow downstream
of Merwin Dam**

January 1, 2024 –
February 6, 2024



Reservoir Shoreline Development Projects

Josua Holowatz mentioned that Washington State will be adjusting criteria for overwater structures. He is unsure what repercussions would result.

Erik Lesko stated there is a Hydraulic Project Approval currently outstanding for the PacifiCorp’s maintenance work. Holowatz asked whether the Americans with Disabilities Act-accessible fishing structure would be built at Haapa this year. Lesko was unsure and will follow up.

Aquatic Technical Subcommittee Update

Erik Lesko said he continued work on the Annual Operating Plan. Anchor QEA is assisting, and there are many updates, including the new transition plans. The genetics strategy for monitoring is ongoing, and there will be a genetics focus group call scheduled for later in February. The group will focus on identifying data gaps and developing a sampling strategy or needs in 2024. Hook-and-line sampling will begin in the upcoming week and continue through May. Hook-and-line sampling will capture late winter steelhead in the lower river, tagged with passive integrated transponder tagging and released back to the river. A model developed by USGS will be used to estimate both abundance and pHOS based on the proportion of tagged fish that are recaptured at the Merwin or Lewis River ladder. Lower Lewis late winter steelhead redd surveys will begin in early March and continue through June to estimate abundance, including spatial and temporal distribution of spawners.

Chris Karchesky mentioned that he was continuing to work with the United States Geologic Survey to develop the Coho Salmon integrated population model (IPM) and should have a working model framework by the end of next month. The model will be brought to the Aquatic

Technical Subgroup for discussion of covariate additions later this spring. A similar IPM model is scheduled to begin being developed for winter steelhead sometime this year.

Lesko added that the Yale Habitat Preparation Plan (HPP) had a short review period in 2023 and he would like to ensure more review time for the ACC in 2024. He will plan to have a HPP draft ready for review by June 2024. Lesko reminded the ACC there may be changes based on the additions to the Yale facility planned for 2026.

Fish Passage Subcommittee Update

Chris Karchesky said the agenda for the meeting later that in the day would be a discussion on the 60% design presentation from December and the request for additional information that Fish Passage Subcommittee submitted earlier in the week.

Karchesky reminded the ACC that the information previously collected on fish behavior in the forebay of Yale Reservoir was used to make design changes related to the positioning of the facility and related guide net between the 30% and 60% designs. Additional information is needed to better understand hydraulics with the fish collection channel to ensure that the design team is going in the right direction with what is being developed for the Yale FSC. The plan previously discussed within the Fish Passage Subcommittee was to utilize the recent modifications made to the entrance of the Swift FSC that changed the hydraulics within the fish collection channel and eliminated areas of deceleration to address these information needs by the design team. A proposed study plan was sent out for review and will be discussed at today's meeting. Karchesky also mentioned that there will also be a discussion about the existing Yale spillway net, which will be retained under the new net configuration.

Peggy Miller added that the consultants did a good job presenting the 2023 study information at the last meeting, and the 2024 scope of work will build off that information. Miller also added that eventually the 2024 Yale fish behavior study plan will be brought back to the ACC for vote.

Fish Passage/Operations (Attachment C)

Erik Lesko presented the *Lewis River Fish Passage Report*. Levi Pienovi reminded the ACC that Swift and Merwin fish passage facilities were disrupted due to inclement weather in December and January. The conditions were too hazardous for operation of the facilities or transporting fish via truck. He presented photographs of the Swift FSC and the Merwin Trap covered in ice. He said the Merwin Trap returned to service after temperatures warmed, but were shut off again shortly after, due to the spill at Merwin Dam that increased tailrace elevation beyond the operational limits of the facility. The Swift FSC was also returned to service after temperatures warmed, but was also shortly taken offline once it was discovered that damage caused by the winter storm had occurred to the entrance of the facility and needed to be repaired. He confirmed that both facilities are now back up and running.

Despite the operations being limited, Pienovi indicated that just over 7,700 total fish were collected at the Swift FSC in January. Pienovi mentioned that this was considerably higher than average January collections. Josua Holowatz asked whether the Merwin Trap was closed off or just turned off during the times of disrupted operation. Pienovi said the entrance to the trap was completely blocked off by a lowered bulkhead. Before the trap was put back in service the bulkhead was pulled up. Pienovi mentioned that the trap was cycled five to six times to ensure there were no fish stranded in the trap during the times of disrupted operation. He noted there were no stranded fish discovered during those cycles.

Pienovi had a meeting with the maintenance manager who is spearheading the repairs to the concrete hole identified in the Merwin Trap and discussed in the January ACC meeting. The current schedule is to dewater the trap on February 19th and install scaffolding to reach the hole. The engineers will then assess the damage and planned permanent repairs. Pienovi is hopeful the hole can be repaired by the end of the week (February 23), but until the engineers assess the damage up close, the timeline is unknown.

Chris Karchesky reminded the ACC that the outage is scheduled for this summer (Tentatively July and August) to completed the modifications to the Merwin Trap lift and conveyance system. The new crowder is being fabricated currently, and a site visit is planned with the engineers this month. He said the outage is likely to be in effect from July through August – and similar to last year. Holowatz said that there will be coordination with hatchery staff to collect brood numbers prior to the outage.

Spring Chinook Updates (Attachment F)

Josua Holowatz gave an update on spring 2024 Chinook Salmon forecast. He presented the Cowlitz, Kalama, and Lewis River Factsheet, which the Washington Department of Fish and Wildlife (WDFW) develops as a summary for spring Chinook Salmon returns, goals and releases. The Lewis River is projected to have approximately 3,300 fish returning to the mouth of the Columbia River, based on average brood relationships. The forecast is an aggregate of hatchery-origin returns (HOR) and natural-origin returns (NOR). Holowatz said that in the future, when collection efficiencies improve, the forecasts will be separate for HORs and NORs.

Holowatz presented a figure of historical returns and mentioned that although there are data beginning in 1980, the figure has been truncated to begin at the year 2000 due to inconsistencies in management. The Lewis River forecast is projected to be similar to 5-year averages but greater than the 10-year average. Holowatz reminded the ACC that in 2019 and 2010 there were very small returns. The Lewis River has exceeded the release goals since 2019 due to excellent survival in the hatchery, resulting in the ability to release subyearlings in June. Holowatz mentioned that the evaluation of smolt to adult projections is ongoing.

He presented the hatchery escapement goals, which are tied to the biological opinion. The Lewis River requires 1,300 fish for the program. The forecast is 3,300 fish. Holowatz mentioned that as the forecast increases, the number of fish caught does as well.

Holowatz stated that spawning crews will perform carcass surveys in August and September. Based on current projections, it is anticipated that there will be sufficient fish to conduct fisheries.

Holowatz presented ocean conditions in the form of the NOAA stoplight chart and reminded the ACC that this is included in the factsheet because ocean conditions play a vital role in the year of entry. The stoplight chart remained largely unchanged from recent years but may change as more data are collected.

Lesko asked to review the planting table and asked why the actual plants are higher than the goals. Holowatz said that these values represent additional releases for southern resident killer whales (SRKWs). Kevin Young agreed and said there was specific SRKW funding received from 2019 to 2022 to rear more fish. Holowatz said the fish are tagged, so in the future, it can be observed how they have survived over time.

Administrative Updates

Erik Lesko asked the ACC about setting a hybrid meeting in April. Josua Holowatz asked where the meeting would occur. Lesko suggested the WDFW Region 5 office. Holowatz suggested getting all hybrid meetings on the calendar to ease the booking. Peggy Miller suggested April, June, and September as hybrid meetings. Lesko suggested moving the meeting in September to potentially October based on the Aquatic Fund release timing. The September meeting type will be decided at a later date, April and June were set as hybrid meetings both occurring at the Region 5 office (pending availability).

Public Comment Opportunity

None present.

Agenda Items for March 14, 2024

- Draft Decision Document: Yale Fish Behavior Study: Informing Yale Downstream Fish Passage Design
- Study/Work Product Updates

Adjourn 10:42 pm

Next Scheduled Meeting

March 14, 2024
Teams Call
9:30 a.m. to 12:00 p.m.

Meeting Handouts and Attachments

- Agenda from 2/08/2024
- **Attachment A** – Decision Document: Proposed Revision to Ground Rules
- **Attachment B** – Flow/Reservoir Conditions (January 2024–February 2024)
- **Attachment C** – Lewis River Fish Passage Report (January 2024)
- **Attachment D** – Merwin Adult Trap Collection Report (January 2024)
- **Attachment E** – Swift FSC Facility Collection Report (January 2024)
- **Attachment F** – Cowlitz, Kalama, and Lewis River Factsheet

**Terrestrial and Aquatic Coordination Committees
Structure and Ground Rules
Revised December 2023 (for ACC review)**

I. Introduction

This document has been established to facilitate the purposes of the Lewis River Terrestrial Coordination Committee (TCC), and the Lewis River Aquatics Committee (ACC), collectively known as the “Committees”. This document does not supersede language in the Lewis River Settlement Agreement or Federal Energy Regulatory Commission (Commission) Licenses issued June 26, 2008, which govern this process. Both Committees reserve the right to amend or modify this document as necessary and upon approval of the other Committee.

II. Purpose

The purpose of the Committees is to coordinate:

- 1) For the TCC, the implementation of terrestrial protection, mitigation, and enhancement (PM&E) Measures described in Section 10 of the Settlement Agreement (Agreement) (including any exhibits, schedules, and appendices related to that Section).
- 2) For the ACC, the implementation of aquatics protection, mitigation, and enhancement (PM&E) Measures described in Sections 3 through 9 of the Agreement (including any exhibits, schedules, and appendices related to that Section).
- 3) The Committee Coordinator(s) shall, as their primary responsibilities, oversee the coordination and implementation of the terrestrial and aquatic PM&E Measures that are the responsibility of their respective organizations as provided in the Agreement.

III. Roles and Responsibilities (Section 14.2.3 of the Agreement, see Appendix A)

Each Committee has the following responsibilities:

- a. Coordinates and Consults on development of plans by the Licensees as provided in the Agreement;
- b. Reviews information and oversees, guides, and makes comments and recommendations by the date agreed to by the Committees on implementation and monitoring of the terrestrial and aquatic PM&E Measures, including plans and reports;
- c. Consults with the Licensees on their respective reports prepared under the Agreement and Licenses regarding implementation of the terrestrial and aquatic PM&E Measures as referred to in Section 14.2.6 of the Agreement, (see **Appendix A**).
- d. Makes decisions, grants approvals, and undertakes any additional duties and responsibilities expressly given to the Committees with respect to the terrestrial or aquatic PM&E Measures;

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- e. Establishes, among other things, (i) procedures and protocols for conducting Committee meetings and deliberations to ensure efficient participation and decision making; (ii) rules for quorum and decision making in the absence of any member; (iii) alternative meeting formats as desired, including phone or teleconference; and (iv) the methods and procedures for updating Committee members on interim progress of development and implementation of the terrestrial and aquatic PM&E Measures;
- f. As deemed necessary and appropriate by either Committee, establishes subcommittees to carry out specified Committee functions and responsibilities described in this Section 14.2.3 of the Agreement (see **Appendix A**), and establishes the size -, membership -, and procedures for any such subcommittees; and
- g. Discusses the protocols and the content of public information releases; provided that each Party, speaking only for itself and not the Committees, retains the right to release information to the public at any time without such discussion.

IV. Comments, Decisions and Recommendations (Section 14.2.4 of the Agreement, see Appendix A)

Each of the Committees shall make comments, recommendations, and decisions in a timely manner as provided below:

- a. Each Party represented on a Committee will have the authority to participate in all Committee discussions relating to, and to provide input and advice on the date agreed to by the Committees; on decisions regarding implementation of the terrestrial and/or aquatic PM&E Measures. If a Representative requests an extension before the agreed upon due date, Licensees will consider accommodating an extension.
- b. The Committees shall strive to operate by Consensus.

“Consensus” means that all Parties participating in a committee or other decision-making group consent to a decision. Consent does not necessarily imply that a Party agrees completely with a particular decision, just that the Party is willing to go along with the decision rather than block the action.
- c. Whether or not the Committees have final authority over decisions on PM&E Measures, the Licensees and other Parties may proceed with actions necessary to implement the Licenses or the Agreement, even though Consensus is not achieved; provided that in such cases where “Consultation” is required, the responsible Licensee or Licensees shall provide copies of Committees comments to the Commission and highlight the areas of disagreement. If this circumstance occurs, and the Licensees do not adopt the recommendations of a Committee member, then the material filed with the Commission will also include the member’s comments along with Licensee’s reasons for not adopting the recommendations of a Committee Representative, based on Project specific (see Recital A of Settlement Agreement) information, as identified in the definition of Consult or Consultation in the Agreement and as follows:

“Consultation” or “Consult” means that the Licensees shall obtain the views of and attempt to reach Consensus among the specified Parties whenever this Agreement requires the

*Licensees to Consult with one or more of the Parties. When Consultation is required under this Agreement, the Licensees shall allow a minimum of thirty (30) days for the specified Parties to provide comments prior to filing written plans, reports, or other items with the Commission. If Consensus is not reached, the Licensees shall take action according to the schedule provided in this Agreement or the New Licenses and shall describe to the Commission how the Licensees' submission accommodates the comments and recommendations of the Parties. If the Licensees do not adopt a recommendation, the filing shall include the Licensees' reasons for not adopting the Parties' recommendations, based on Project-specific information. The Licensees shall provide the Commission with a copy of the Parties' comments. Any Party may seek to resolve such disagreements in accordance with the Alternative Dispute Resolution (ADR) Procedures provided under Section 15.10 of the Agreement (see **Appendix A**). The Parties may submit their own comments to the Commission.*

- d. Where one or more Parties have approval authority under this Agreement, Licensees shall notify the Commission of any approvals that were not obtained, include the relevant comments of the Parties with approval authority, describe the impact of the lack of approval on the schedule for implementation of PM&E Measures, and describe proposed steps to be taken to gain the approval, including dispute resolution.
- e. In no event shall the Committees increase or decrease the monetary, resource, or other commitments made by PacifiCorp and the PUD in the Agreement; override any other limitations set forth in the Agreement; or otherwise require PacifiCorp to modify its three Projects' facilities without PacifiCorp's prior written consent or require Cowlitz PUD to modify its Project's facilities without Cowlitz PUD's prior written consent, which consent may be withheld at the applicable Licensee's discretion.
- f. At any juncture where Consultation, discussion or other contact with the Committees is required by the Agreement or Licenses, when requested by the "Services" (National Oceanic and Atmospheric Administration National Marine Fisheries Service and US Fish and Wildlife Service) or as required by the Agreement, the respective Committee Coordinator shall schedule an opportunity to discuss the relevant issue with the respective Committee. This event shall consist of either a conference call, in-person meeting, or other appropriate forum to enable full consideration of the issue.

V. Roles of the Parties

Interested parties

Interested parties are those people or entities that are interested in Committee activities, but were not Parties to the Agreement (e.g., general public) or are Agreement Parties that have not designated Committee representatives for membership. To the extent desired by an individual or party, they may receive respective Committee information and attend meetings; however they will not be included in the Consensus process or during confidential sessions. Time will be provided at each meeting for public comment as needed and determined by respective Committees (e.g., 15 minutes before lunch break and 15 minutes at conclusion of meeting).

Representatives and Alternates

Designated primary and alternate representatives for membership (hereafter referred to as Representatives), are Parties to the Settlement Agreement that have identified (in writing) Representatives to participate in Committee meetings. Representatives, or their designated alternates in the absence of primary Representatives, will have the authority to participate in all respective Committee discussions and to provide input, advice and voting authority on decisions regarding implementation of the terrestrial or aquatic PM&E Measures in the Agreement or Licenses. Representatives are included in the Consensus process. It is expected that TCC Representatives will request to meet in a confidential manner specific to discussions regarding land acquisition interests. Those Representatives wishing to participate in such meetings will be required to sign a Confidentiality Agreement. If the ACC needs to conduct confidential discussions, any Representative may request a confidential session and the session shall be identified on the agenda. Efforts will be made to identify a confidential session before the agenda is released. Confidentiality Agreements are not required for confidential ACC discussions unless agreed to by the ACC.

Links to the most current ACC and TCC Representative list is provided on the PacifiCorp website at:

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Proxy Representation

To provide for absentee representation at Committee meetings, a primary or alternate Representative may designate a proxy Representative via written electronic mail notification to the Licensees' Coordinators. If necessary, written proxy designation may be provided to Signatories external to the entity providing the written proxy designation. Written proxy requests should include the designated proxy Representative, affiliation and duration of the proxy authorization.

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Licensees' Coordinators

The Licensees' Coordinator(s) oversee the coordination and implementation of the respective terrestrial and aquatic PM&E Measures that are the responsibility of their respective organizations (PacifiCorp or PUD of Cowlitz County) as provided in the Agreement. The Coordinators may be the Licensees' Representatives if so designated. The Coordinators shall act as full participants in the Committee process and, as appropriate, will take the lead in developing necessary information and preparing formal documents.

Chairperson(s)

Generally, the role of the Chairperson is to lead the meetings effectively and ensure the written structure and ground rules are followed. Responsibilities include opening and closing the meetings on time, review and modification of the meeting agenda, introducing the purpose and topics on the agenda, introduce guests, ensure participants are provided equal time when discussing issues, ensure that discussion remains relevant, and call for consensus votes when necessary.

Consultants

A Consultant will serve as a source of technical expertise to the appropriate task or assignment. A Consultant will not have the authority to participate as a Committee Representative on behalf of or bind any Party unless the Party specifically delegates that authority (in writing) on specific issues and informs the other Representatives about such delegation.

Facilitator

If deemed necessary by the Licensees or Committees, a facilitator may be utilized during a part or all of the Committee proceedings. The facilitator is an independent third party. The facilitator's role is to help reach Consensus. The facilitator will help the Representatives to identify goals, identify issues, develop and maintain critical paths, accomplish creative problem solving, reach resolution of issues (facilitate and mediate as necessary). The facilitator will also help the Parties to stay organized and keep track of issues, Committee progress, and assignments. The facilitator may assist the development of agendas (for review and input by Representatives) and focus discussions and efforts. If the Committee(s) deems that an outside facilitator is unnecessary at any time, the Licensee(s) Coordinator(s) or any other Representative may assume that role, as determined by the respective Committee.

Subcommittee(s)

The ACC or TCC may request the formation of subcommittees to carry out specified functions and responsibilities. Subcommittee members (hereafter referred to as Members) may be Representatives or other technical support staff of the Agreement Parties. The primary role of subcommittees will be to provide recommendations to the ACC or TCC for their consideration or approval. A charter for the subcommittee will be prepared outlining the size, membership, roles, and procedures and be provided to the relevant Coordination Committee for approval.

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VI. Ground Rules

The Committee and subcommittee meetings are subject to the ACC and TCC ground rules. These ground rules are not intended to modify or limit any party's legal rights, authorities, or remedies. For purposes of this document, days shall be defined as calendar days.

VII. Meetings

Meetings will be open to the public, who may observe and provide comment at the appropriate time. Non-member participants (i.e., interested parties) cannot participate in the determination of Consensus. The Committees and subcommittees may schedule meetings that are not open to the public or interested parties; confidential or otherwise. Consultants and legal representatives of the Parties shall not act as advocates during Committee meetings unless they have been designated as a Representative for a Party.

The Committees will have the respective meeting times:

- 1) The TCC will meet regularly from 9:00am until 3:00pm on the second Wednesday of

each month unless determined otherwise by the TCC.

- 2) The ACC will meet regularly from 9:30am until 3:00pm on the second Thursday of each month unless determined otherwise by the ACC.

Additional meetings may be requested outside the regular meeting times as needed.

In general, Representatives of the Committees shall be given a minimum of thirty (30) days' notice prior to any meeting, unless otherwise agreed to by the Representatives. This does not preclude the Committees from conducting meetings with less notice as needed.

Subcommittee meeting times will be established in the charter or determined within the subcommittee. The Committee establishing the subcommittee will be notified of meeting times.

Agendas

Agenda items for the following Committee and subcommittee meetings will be determined at the close of each meeting. Agendas will identify when decisions are expected to be made and if confidential sessions are needed. Representatives or Members may contact the Coordinator(s) at any time to suggest additional agenda items. Representatives or Members may also request a confidential session and the session shall be identified on the agenda. Efforts will be made to identify a confidential session before the agenda is released. The agenda for each meeting shall be distributed at least seven (7) days in advance of the meeting date. At the beginning of each meeting, the agenda will be reviewed, edited, and amended as necessary by the Representatives or Members. A public comment period will be included in each meeting agenda as needed.

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Meeting Notes

The Coordinators will provide for the preparation, review and distribution of draft meeting notes within seven (7) days following the Committee meeting. Representatives may provide editorial comments directly to the Coordinators by email within ten (10) days prior to the next meeting. Edited meeting notes will be distributed (including attachments) to the Committee with the meeting agenda seven (7) days prior to the next meeting. Substantive comments should be raised during the review of the notes at the next meeting for discussion and resolution, as necessary. Following that meeting, the Coordinators will finalize the meeting notes and post on PacifiCorp website. Any changes to meeting notes that were suggested by a Representative, but not accepted by the respective Committee for inclusion, will be appended to meeting notes.

For large attachments (e.g., presentations), a link will be provided in the meeting notes directing reviewers to the attachment on the PacifiCorp website. All attachments are considered part of the meeting notes and subject to review.

Subcommittee process for reviewing meeting notes will be established in the charter or determined within the subcommittee. The Committee establishing the subcommittee will be provided the meeting notes and materials. Draft materials will be clearly marked (e.g., watermark).

VIII. Responsibilities of Committee Representatives

Attendance

Representatives and Members will make a concerted effort to attend meetings and inform the Coordinators in advance of any absence at a Committee, or subcommittee meeting or any change in representation. A teleconference line or virtual meeting link will be available at each meeting for Representatives and Members who cannot attend in person.

If possible, each Representative will have designated one or more alternates who can represent their organization when needed. Representatives attending remotely, or who have designated a proxy (in writing) are considered present at the meeting, and will be included in the Consensus process with voting authority.

Preparation

Representatives and Members will make a concerted effort to complete action items, come prepared for meetings, and review previously distributed material relating to agenda items. If a Representative or Member is new, the Committee or subcommittee should provide a short introduction briefing during the meeting. If a Representative or Member would like the Committee or subcommittee to consider a specific proposal, that Representative or Member will notify the Coordinator(s) to include the item on the agenda, and prepare and provide a "Request for Decision" template (see **Appendix B**) for distribution to the Committee along with meeting notes and agenda at least seven (7) days prior to the meeting in which the proposal will be discussed. Subcommittees or individual Members may also bring a completed 'Request for Decision' template to the Committees for their consideration.

Emergent issues (e.g., trap outages, stream flow variations, FERC submittals, etc.) may be presented at the meeting without prior notification.

Participation

Each Representative or Member is expected to be a willing contributor at meetings, to communicate actively, to share all necessary factual information, and to strive for Consensus on a timely basis. Each Representative or Member is expected to be open minded, to listen to others, to respect others' points of view, to be direct and considerate, to show respect for the other Representatives or Members, to suggest solutions, and to be willing to explain their concerns to others. If a Representative or Member has a personal communication device, they will strive to limit its use in a manner that is least disruptive to meeting participants (i.e., turn it off or to meeting mode during meetings).

Authority

If a Representative or Member does not have authority to bind its organization, the Representative or Member will keep its organization briefed on an on-going basis about the activities of the respective Committee or subcommittee, the issues being addressed, and possible solutions to those issues. The Representative or Member will incorporate the input

they have received from their internal discussions into their participation at Committee or subcommittee meetings.

Response Time

Representatives will have at least thirty (30) days unless otherwise agreed to by the Committee Representatives or the period as specified by the Settlement Agreement or Licenses, to review reports, documents, and draft deliverables to be filed with the Commission, so that Representatives can meaningfully participate in the collaborative process. In some instances, additional time will be provided to enable the Representatives' internal review as agreed to by the Committee Representatives. Specifically, Representatives will have sufficient time for internal review of major policy matters before making decisions on such matters. Future decision points will be noticed in meeting notes.

Subcommittee process for reviewing reports, documents, and draft deliverables shall be established within the charter of each subcommittee.

Brainstorming

To allow open discussion and collaboration, Representatives and Members will be encouraged to "brainstorm" a variety of solutions to specific issues. When a Representative or Member identifies possible solutions as part of this process it is on behalf of the Committee or subcommittee, not their individual organizations, and a Representative or Member will not be held to any brainstorming ideas until such time as they have indicated a willingness to agree with a proposed solution.

Decision Making

Committees will make decisions by Consensus, as defined in the Agreement and Section IV of this document. With respect to ensuring that all Representatives have a voice in the Consensus process, the following protocol will be applied:

- 1) Discuss the issue to identify all points of view. Invite everyone to speak.
- 2) The group will decide when there has been enough discussion about a topic and are ready for a decision vote.
- 3) Votes in favor and against shall be tallied from each Representative present, or from Representatives identified through written proxy by absentee Representatives prior to the meeting.
- 4) Those voting in the **minority** get the floor. They're invited to say whatever they want and convince others of the rights of their view by:
 - Adding to the body of information already presented.
 - Clarifying their position.
 - Point out flaws, errors, or deficiencies in the other's point of view.
- 5) Continue to ask those in the minority:

- Do you think you have now been heard by the others in the group?
 - Is there more you want to say?
 - Are you ready to have the entire group vote again?
- 6) Vote again. Those voting in the **minority** again get the floor.
- 7) Invite them again to voice their argument to try and convince others to agree with their point of view.

This process will continue until those in the minority are able to say: “We are clear about what the majority would like to do. While we personally would not make that choice, we do think the others understand what our alternative is. We’ve had sufficient opportunity to persuade others to our point of view, and we do think we have been heard.”

If agreement is not possible, minority parties may pursue Dispute Resolution (see below), or other agreed upon approach.

To account for the absence of a Representative during a decision making process and for which no proxy is provided, decisions will be considered preliminary for a period of seven (7) days, post-decision, unless extended by the Committee. If all Committee Representatives are present or have provided a proxy, the additional review period is not needed. The Coordinators will notify absent parties of the preliminary decision via email promptly after the Committee meeting and request a decision response by the end of the seven (7) day period. If a Representative fails to respond within the seven (7) day period, their silence will be considered as no objection to the decision.

The process by which Subcommittees make decisions shall be established within the charter. The level of the decision making authority granted to the subcommittee by the ACC/TCC shall be established within the charter.

Request for Decision

The Request for Decision template (see **Appendix B**) is designed to describe the outcome and justification for major Committee decisions. Guidelines for determining a major decision include but are not limited to:

1. Clarification of actions associated with the Settlement Agreement intent or goals.
2. Documentation of ACC or TCC “Consultation” when the license or Settlement Agreement identifies “Consultation” or to “Consult” with a Committee.
 - a. For example, where the Settlement Agreement requires “Consultation” with the ACC and final approval of the Services.
 - b. Exceptions may include “Consultation” for ACC or TCC annual reports that require a minimum of thirty (30) day comment period (see Section IX or **Appendix A** 14.2.6).

Commented [MPA(6): New: Replaces formal and informal decisions. Establishes guidance for when to prepare a Request for Decision rather than hard requirements.

3. Key recommendations from subcommittees presented to Committee for decision.
4. Approval of subcommittee charters.

The determination for a major decision and the use of a ‘Request for Decision’ template will be made by the respective Committee on a case-by-case basis.

A completed ‘Request for Decision’ template shall be presented to the Committee for their approval. The Committee, through consensus decision making, may decide to act, not to act or defer action on any requested action or decision.

Commented [MPA(7): Moved from Formal Committee Decisions.

Representatives or subcommittees requesting review or decision by the Committee, shall complete the ‘Request for Decision’ template (see **Appendix B**) for distribution to the Committee prior to the meeting as described under ‘Preparation’. A completed ‘Request for Decision’ template shall be attached to the meeting notes for the meeting in which the request was considered. Decisions by the Committee shall follow procedures outlined under “Decision Making”.

Commented [MPA(8): Moved from Documentation of Committee Decisions.

Documentation of Committee Decisions

Commented [MPA(9): Combined Documentation of Committee Decisions and Tracking of Committee Decisions under Documentation of Committee Decisions.

All Committee decisions (Major or otherwise) shall be documented in the meeting notes using **red bold font**, and included in the record of decision matrix (see **Appendix C**). Completed and final ‘Request for Decision’ templates (see **Appendix B**) shall be attached to the notes of the meeting in which the decision was made.

A record of decisions matrix (see **Appendix C**) shall be maintained to provide a list of Committee decisions. The record of decision matrix shall include for each decision, a unique code, date of the decision, a summary of the decision and where appropriate, a tally of the vote. While a Representative will not be precluded from reopening a resolved issue, the Representatives will make a concerted effort to move forward once decisions have been made and to only request that the group revisits decisions if Representatives wish to discuss information or perspectives not previously shared with the Committee, or if questions arise from implementation of the decision.

Decisions made within the reporting period and included on the record of decisions matrix shall be included in the Licensees’ ACC/TCC annual report filed with the Commission in June of each year and maintained available on the PacifiCorp website.

Commented [LE(10): Provide link during technical editing

Dispute Resolution

The Coordinators or facilitator will use a variety of dispute resolution techniques, including mediation, to work through difficult issues and reach Consensus. If necessary, the Representatives may follow the Alternative Dispute Resolution Procedures as defined in Section 15.10.2 of the Agreement (see **Appendix A**).

Caucuses

Time will be allowed at each meeting for caucuses, as necessary.

Information

Representatives and Members will have access to all documents developed during Committee or subcommittee activities. To ensure transparency and inclusion, the Coordinators, Representatives, and Members will distribute or make available via a website (<http://www.pacificorp.com/es/hydro/hl/lr.html#>) or email necessary information on a timely basis to all the Representatives. Some information (most likely from the TCC) will need to be subject to a Confidentiality Agreement. It is the responsibility of a Representative or Member providing confidential information to ask the group to treat it confidentially. All Representatives and Members will honor the Confidentiality Agreement to the limits defined by the law. To the extent that non-confidential data or information is draft, preliminary or otherwise qualified, if Representatives or Members use such data/information outside of the context of meetings or activities, they will appropriately qualify the data/information.

IX. Annual Reports

The Coordinators for the Committees shall prepare and file with the Commission detailed annual reports on Committee activities, monitoring and evaluations, and implementation of the terrestrial and aquatic PM&E Measures occurring during the prior year, as well as plans for the coming year as required in the Agreement. The annual reports may also include, but not be limited to, plans and reports required pursuant to Sections 4.9.1, 7.7.1 8.2.3, 8.2.4, 10.5, 10.8.3 of the Agreement (see **Appendix A**), and any other applicable sections. Copies of such reports will be made available to each Party. The annual reports shall be prepared in Consultation with the Committee Representatives and shall be submitted to the appropriate Committee for review each year, in accordance with the Settlement Agreement. Committee Representatives shall have a minimum of thirty (30) days to review and provide comment on a draft report before a final report is prepared and filed with the Commission. The Licensees shall submit the final report to the Commission not later than thirty (30) days after the close of the comment period. To the extent that comments are not incorporated into the final report, an explanation will be provided in writing, and such explanation shall be included in the report.

Appendix A

Lewis River Hydroelectric Projects Settlement Agreement

14.2.1 Committee Coordinators. Within 30 days after the Effective Date, PacifiCorp and Cowlitz PUD each shall designate one Committee Coordinator for the TCC and one Committee Coordinator for the ACC. PacifiCorp and Cowlitz PUD shall make their designations by notice to the Parties in accordance with the notice provisions in Section 16.6. The PacifiCorp Committee Coordinator(s) shall be employed or retained by PacifiCorp and may represent PacifiCorp on the TCC and the ACC. The Cowlitz Committee Coordinator(s) shall be employed or retained by Cowlitz PUD and may represent Cowlitz PUD on the TCC and the ACC. The PacifiCorp Committee Coordinator(s) shall, as their primary responsibilities, oversee the coordination and implementation of the terrestrial and aquatic PM&E Measures that are the responsibility of PacifiCorp as provided in this Agreement. The Cowlitz PUD Committee Coordinator(s) shall oversee the coordination and implementation of the terrestrial and aquatic PM&E Measures that are the responsibility of Cowlitz PUD as provided in this Agreement. PacifiCorp and Cowlitz PUD Committee Coordinators together shall oversee the coordination and implementation of terrestrial and aquatic PM&E Measures for which PacifiCorp and Cowlitz PUD have joint responsibility as provided in this Agreement.

14.2.3 TCC and ACC Functions. The TCC and the ACC will:

- a. Coordinate and Consult on development of plans by the Licensees as provided in this Agreement;*
- b. Review information and oversee, guide, and make comments and recommendations on implementation and monitoring of the terrestrial and aquatic PM&E Measures, including plans;*
- c. Consult with the Licensees on their respective reports prepared under this Agreement regarding implementation of the terrestrial and aquatic PM&E Measures as referred to in Section 14.2.6 below;*
- d. Make decisions, grant approvals, and undertake any additional duties and responsibilities expressly given to the TCC or the ACC with respect to the terrestrial and aquatic PM&E Measures;*
- e. Establish, among other things, (i) procedures and protocols for conducting committee meetings and deliberations to ensure efficient participation and decision making; (ii) rules for quorum and decision making in the absence of any member; (iii) alternative meeting formats as desired, including phone or teleconference; and (iv) the methods and procedures for updating committee members on interim progress of development and implementation of the terrestrial and aquatic PM&E Measures;*
- f. As deemed necessary and appropriate by the TCC or the ACC, establish subcommittees to carry out specified committee functions and responsibilities described in this Section 14.2.3, and establish the size of, membership of, and procedures for any such subcommittees; and*
- g. Discuss the protocols and the content of public information releases; provided that each Party retains the right to release information to the public at any time without such discussion.*

14.2.4 TCC and ACC Decision-Making Process and Limitations. The TCC and the ACC shall make comments, recommendations, and decisions in a timely manner as provided below:

- a. Each Party represented on the TCC and the ACC will have the authority to participate in all committee discussions relating to, and to provide input and advice on, decisions regarding implementation of the terrestrial or aquatic PM&E Measures;*
- b. The TCC and the ACC shall strive to operate by Consensus. Whether or not the TCC or the ACC has final authority over decisions on terrestrial and aquatic PM&E Measures, the Licensees and other Parties may proceed with actions necessary to implement the New Licenses or this Agreement, even though Consensus is not achieved; provided that in such cases the responsible Licensee or Licensees shall notify the Commission of the comments of the ACC or TCC members and the areas of disagreement. If the TCC or ACC does not reach Consensus, then any member of the TCC or ACC, respectively, may initiate the ADR Procedures as provided in Section 15 below.*
- c. Where one or more Parties have approval authority under this Agreement, Licensees shall notify the Commission of any approvals that were not obtained, include the relevant comments of the Parties with approval authority, describe the impact of the lack of approval on the schedule for implementation of PM&E Measures, and describe proposed steps to be taken to gain the approval, including dispute resolution.*
- d. In no event shall the TCC or the ACC increase or decrease the monetary, resource, or other commitments made by PacifiCorp and Cowlitz PUD in this Agreement; override any other limitations set forth in this Agreement; or otherwise require PacifiCorp to modify its three Projects' facilities without PacifiCorp's prior written consent or require Cowlitz PUD to modify its Project's facilities without Cowlitz PUD's prior written consent, which consent may be withheld in the applicable Licensee's discretion.*
- e. At any juncture where discussion or other contact with the ACC or TCC is required by this Agreement, when requested by the Services or as required by the Agreement, the ACC or TCC Committee Coordinator, respectively, shall schedule an opportunity to discuss the relevant issue with the ACC or TCC. This event shall consist of either a conference call, in-person meeting, or other appropriate forum to enable full consideration of the issue.*

14.2.5 TCC and ACC Meetings. Commencing in the first year after the Effective Date and each year thereafter for the terms of the New Licenses, the TCC and ACC Committee Coordinators shall arrange and provide an agenda for an annual meeting of their respective committees. The TCC and ACC Committee Coordinators also shall arrange and provide an agenda for any additional meetings deemed necessary by either coordinator for a committee or at the request of any two Parties on that committee, which request shall be sent simultaneously to all members of that committee. Members of the TCC and the ACC shall be given a minimum of 30 days' notice prior to any meeting, unless otherwise agreed to by the members of the applicable committee.

14.2.6 TCC and ACC Reports. The Committee Coordinators for the TCC and the Committee Coordinators for the ACC shall prepare and file with the Commission detailed annual reports on the TCC and ACC activities, monitoring and evaluations under the M&E Plan, and implementation of the terrestrial and aquatic PM&E Measures occurring during the prior year, as well as plans for the coming year as required in this Agreement. The annual reports may also include plans and reports required pursuant to Sections 4.9.1, 7.7.1, 8.2.3, 8.2.4, 10.5, and 10.8.3. Copies of such reports will be made available to each Party. The annual reports shall be prepared in Consultation with the TCC and ACC committee members and shall be submitted to the committees for review each year, commencing after the Effective Date.

Committee members shall have a minimum of 30 days to review and provide comment on a draft report before a final report is prepared and filed with the Commission. The Licensees shall submit the final report to the Commission not later than 30 days after the close of the ACC and TCC comment periods. To the extent that comments are not incorporated into the final report, an explanation will be provided in writing, and such explanation shall be included in the report.

15.10 Alternative Dispute Resolution

15.10.1 General. The Parties intend that disputes under this Agreement be resolved as expeditiously and informally as possible, and that issues within the scope of the TCC and the ACC be discussed in those committees before being referred to the ADR Procedures. All remaining disputes among the Parties regarding the obligations of the Parties under this Agreement shall, at the request of any Party, be the subject of nonbinding ADR Procedures among the disputing Parties. Each Party shall cooperate in good faith promptly to schedule, attend, and participate in the ADR Procedures. The Parties agree to devote such time, resources, and attention to the ADR Procedures as are needed to attempt to resolve the dispute at the earliest time possible. Each Party shall implement promptly all final agreements reached through the ADR Procedures, consistent with the Party's applicable statutory and regulatory responsibilities. Nothing in Sections 15.10.1 through 15.10.2 is intended or shall be construed to affect or limit the authority of the Commission, the Agencies, or any other agency with jurisdiction over the Projects to resolve a dispute brought before it in accordance with its own authorities and procedures, or to alter the statute of limitations or other requirements for Appeal of any action.

15.10.2 ADR Procedures. A Party claiming a dispute shall give notice of the dispute within 60 days of the Party's actual knowledge of a dispute, event, or omission that gives rise to the dispute, unless this Agreement provides otherwise. If a Party communicates with another Party informally and believes that the dispute is being resolved, the time for notice will not commence until it has been determined that such informal efforts have failed to resolve the dispute. Notification under Section 16.6 shall constitute actual knowledge. At a minimum, in any dispute subject to the ADR Procedures, the Parties shall hold two informal meetings within 30 days after notice, to attempt to resolve the disputed issue or issues. If, within 15 days after the second meeting or any meeting thereafter, a Party notifies the other Parties that such informal meetings failed to resolve the dispute, the Parties may agree to attempt to resolve the dispute using a neutral mediator. The agreement to use a neutral mediator will address allocation of costs and the scope of the dispute. The neutral mediator will be selected by the Parties participating in the mediation. Upon selection, the mediator will mediate the dispute for 60 days. Any of these time periods may be reasonably extended or shortened by agreement of the Parties, or as necessary to conform to the procedure of an agency or court with jurisdiction over the dispute. Unless otherwise agreed among the Parties, each Party shall bear its costs for its own participation in the ADR Procedures. Pending resolution of any dispute under the ADR procedures, and subject to the authority of the Commission or other agency with jurisdiction to order otherwise, PacifiCorp and Cowlitz PUD may continue operating their respective Projects in the manner of their operation prior to the point at which the dispute arose.

15.10.3 Enforcement of Agreement After ADR Procedures. Any Party may seek specific performance of this Agreement by any other Party at the Commission or in a court of competent jurisdiction after compliance with the ADR Procedures, where required, and, to the extent allowed by applicable law, may seek to recover its costs and fees associated with bringing such action. No Party shall be liable in damages for any breach of this Agreement, except that a Party may seek monetary penalties under applicable law. Nothing in Sections 15.10.1 through 15.10.3 is intended or shall be construed to affect or limit the jurisdiction of any agency or court as established under applicable law.

RECITAL A

“Project” and “Projects” - The Lewis River Hydroelectric Projects consist of the Merwin Project (Project No. 935), Yale Project (Project No. 2071), Swift No. 2 Project (Project No. 2213), and Swift No. 1 Project (Project No. 2111) (each individually referred to as a “Project” and collectively as the “Projects”) and associated powerhouses, transmission facilities, recreational facilities, hatcheries, reservoirs, canals, and lands within the Projects’ Boundaries and wildlife lands managed outside the Project Boundaries. PacifiCorp owns the Merwin Yale and Swift No. 1 Project, while Cowlitz PUD owns the Swift No. 2 Project (the combined Projects of Swift No. 1 and Swift No. 2 are referred to collectively as the “Swift Projects”). Construction of the Projects began with the Merwin Dam in 1929 and was completed with the construction of Swift No. 1 and Swift No. 2 ending in 1958. The Federal Power Commission issued the first license for Merwin on November 29, 1929, which expired on November 29, 1979. That license was renewed on October 6, 1983 and was originally due to expire on April 30, 2009 but was accelerated by a Commission Order and now expires on April 30, 2006. The original license for Yale was issued on April 24, 1951 and expired on April 30, 2001. The original license for Swift No. 1 was issued on May 1, 1956 and expires on April 30, 2006. The original license for Swift No. 2 was issued on November 29, 1956, effective May 1, 1956, and expires on April 30, 2006.

Appendix B

Request for Committee Decision Template

Request No. [yyyy – #]
Request Date: [mm-dd-yyyy]

North Fork Lewis River Project Request for Decision Template [Project Title]

Part A –Decision Summary (to be completed after decision is made)

Date of Decision: [mm-dd-yyyy]
Expected Implementation Date of Action (if applicable): [mm-dd-yyyy]
Expected completion date of action (if applicable): [mm-dd-yyyy]

- **Decision Summary** (brief summary of decision or action made by Committee)

Part B –Decision Request (to be completed by Representative(s) requesting decision)

1. Representatives and Affiliations

- List all Representatives and Affiliations requesting Committee decision

2. Description and Justification of Request

- **Requested Action:** What specifically is the Committee to decide?
- Introduction and background
- Justification for requested action

3. FERC or Settlement Agreement Requirement(s)

- What relevant FERC or SA articles justify this action? [Articles xx]
- Are there any other regulatory requirements to support the requested action?

Part C – Committee Decision (to be completed by Committee)

4. Committee Decision

- Was the decision made by consensus (as defined in the Committee ground rules)?
- Document voting record and tally (if applicable)

5. Justification for Committee Decision

- What information (i.e. empirical data) and how was this information used to inform decision?

6. Contingencies or Conditions of the Decision

- Is decision contingent on other actions or information?
- Is implementation of decision contingent on specific actions or information?
- Are there any conditions attached to this decision?

7. Additional Information or Notations

Appendix C

Record of Decision Matrix

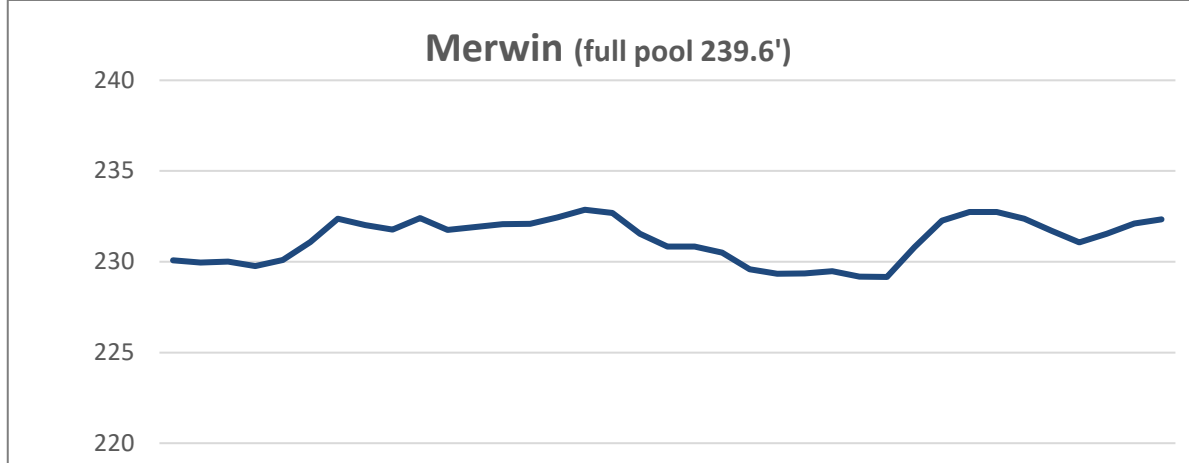
Request No	Request Date	Representative(s) and Affiliation(s)	Title of Request	Requested Action (from decision template)	FERC License or Settlement Agreement Reference	Vote Tally	Description and Justification of Decision	Contingencies for Decision	Date of Decision
2020-XX	mm-dd-yyyy								mm-dd-yyyy

Reservoir Elevations

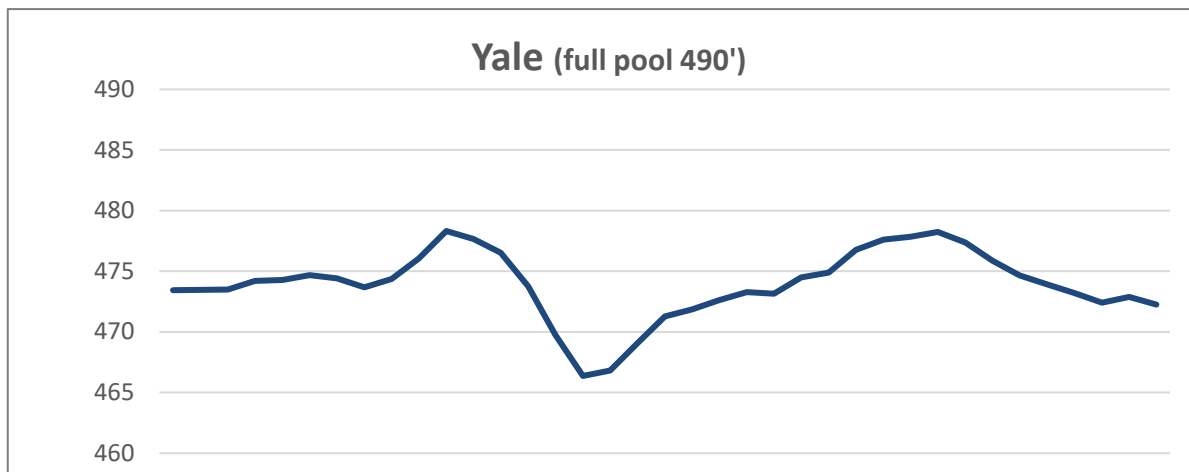
January 1, 2024 –
February 6, 2024

Total Draft = **-68.0**
(-58.0 with Yale Restriction)
 Δ since Jan 9, 2024 = **0**

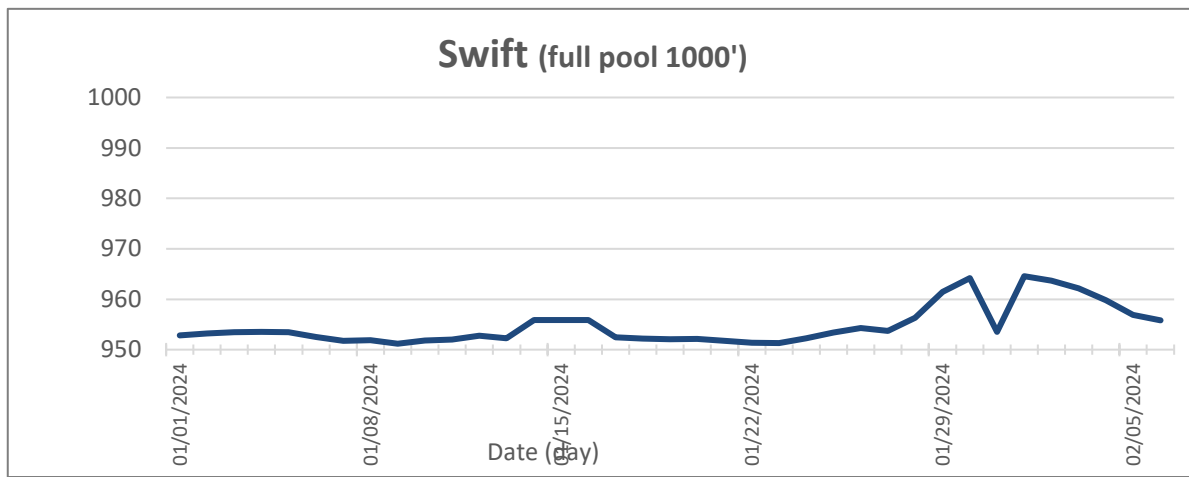
Reservoir Elevation (ft., msl)



235 Elevation
-5 Draft
 $\Delta = +3$



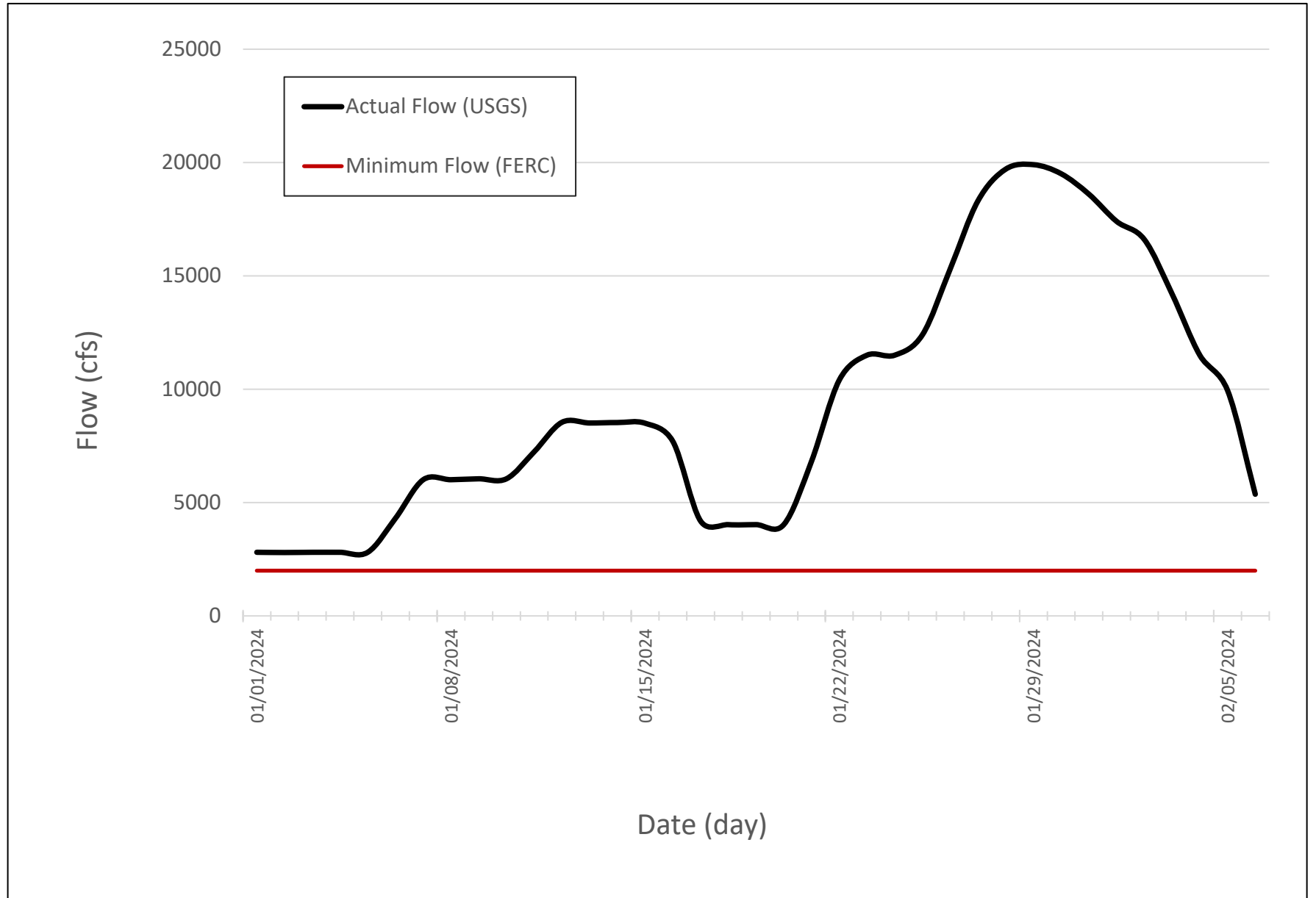
473 Elevation
-16 Draft
 $\Delta = -5$



954 Elevation
-47 Draft
 $\Delta = +2$

North Fork Lewis River Stream flow downstream of Merwin Dam

January 1, 2024 –
February 6, 2024



Lewis River Fish Passage Report

January 2024

Merwin Fish Collection Facility and General Operations

During the month of January, a total of 375 fish were captured at the Merwin Upstream Transport and Collection Facility (MUCTF). As is typical in January, winter steelhead were the most prevalent species collected (n= 352), followed by late run coho (n= 12), cutthroat trout (n= 11), and Fall Chinook (n= 2). All BWT and NOR winter steelhead were transported upstream, while all hatchery steelhead were given to WDFW. Brood collection for the BWT program is scheduled to begin the week of February 5th.



Figure 1. Large icicles hang from a transfer tank at the Merwin Upstream Collection and Transport Facility in January 2024.

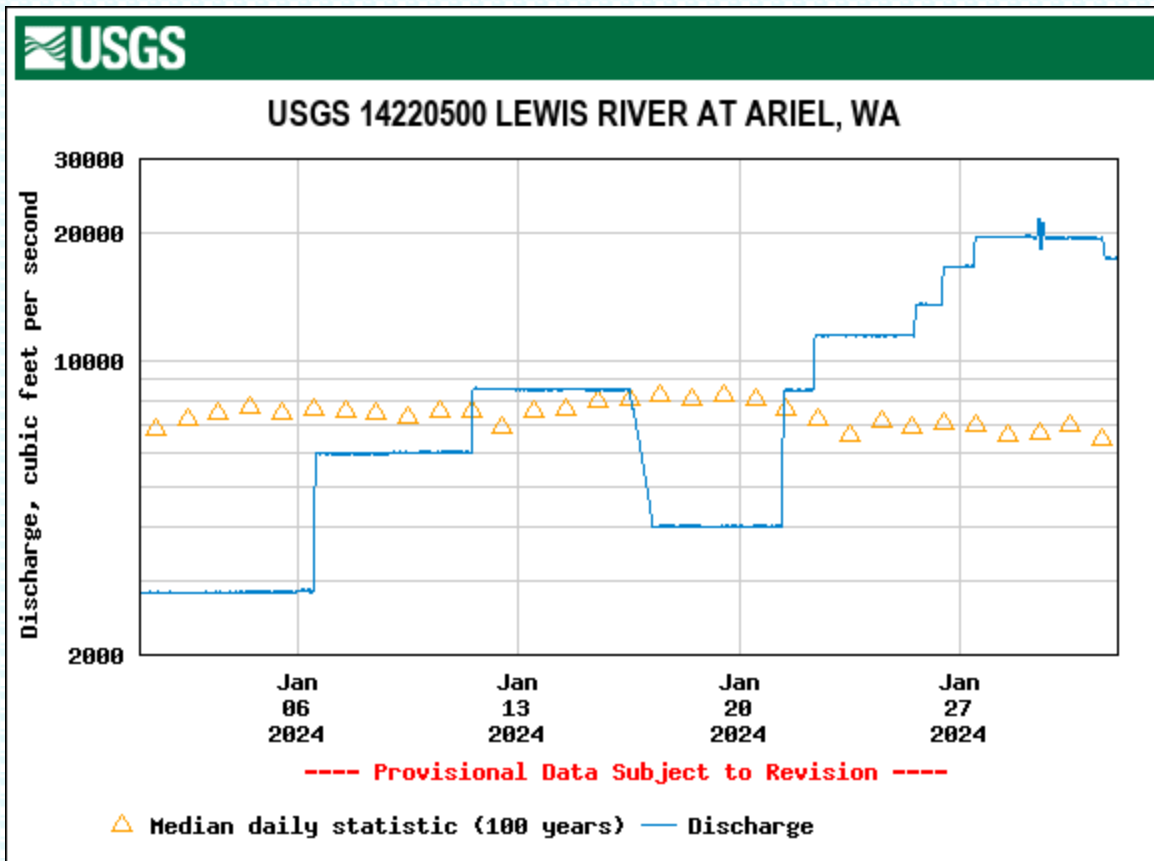


Figure 2. Discharge in cubic feet per second recorded at the USGS Ariel, WA gauge (14220500) located immediately downstream of Merwin Dam.

The MUCTF lift and conveyance system was taken out of service on January 10 through January 24 due to unsafe operating conditions caused by severe winter weather (Figure 1). The facility was taken out of service again from January 27 through the end of the month due to high flows that exceeded the operational limits of the facility. Total river flows below Merwin Dam ranged from approximately 2,800 to 21,500 cubic feet per second in January (Figure 2).

Upstream Transport

A total of total of 40 adult fish were transported upstream in January. Blank wire tag winter steelhead made up the majority of the fish transported upstream (n= 14), followed by cutthroat trout (n=11), late coho (n= 10), and NOR winter steelhead (n= 5). Fish transport was suspended from January 10th through January 24th due to hazardous driving conditions.

Floating Surface Collector (FSC)

The Swift Reservoir Floating Surface Collector (FSC) was taken out of service from January 11 through January 24, due to severe winter weather and freezing conditions (Figure 3). The facility was taken out of service again from January 27 through February 2, so that repairs to the facility's Net Transition Structure could be completed. High wind and wave action damaged the structure as well as the new side walls that were installed last summer.



Figure 3. Ice accumulates on the Swift Floating Surface Collector during a winter storm in January 2024.

A total of 7,787 fish were collected this month, which is more than any other January since the facility was commissioned (Table 1). The majority of the fish collected were juvenile coho (n= 6,366), followed by spring Chinook (n= 1,364), steelhead (n= 29), hatchery rainbow trout (n= 24), and cutthroat trout (n=4).

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

Run Year	January Collection Totals by Run Year at the Swift FSC				
	Coho	Chinook	Steelhead	Cutthroat	TOTAL
2013	186	49	0	17	252
2014	0	0	0	0	0
2015	796	501	6	45	1,348
2016	5,993	1,537	42	89	7,661
2017	173	55	5	8	241
2018	1,359	508	30	49	1,946
2019	591	16	2	0	609
2020	0	0	0	0	0
2021	2,515	223	60	80	2,878
2022	3,633	416	46	34	4,129
2023	4,646	132	41	39	4,858
2024	6,366	1,364	29	4	7,763

Fish Facility Report
Swift Floating Surface Collector
January 2024

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		603	137			220		1	0					0	0	961
2		1259	257			203			11					0	7	1737
3		1052	83			155	13		1					0	5	1309
4		381	326			199			0					0	0	906
5		185	35			39			0					0	6	265
6	21	233	52			73			0					0	4	383
7	25	141	63			38			2					0	1	270
8		114	110			126			0			1		0	1	352
9		134	75			58			0			1		0	0	268
10		118	78			57			0					0	0	253
11																
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21																
22																
23																
24																
25		458	39	9		81			0			1		0	0	588
26		326	61		2	104			1			1		0	0	495
27																
28																
29																
30																
31																
Monthly	46	5004	1316	9	2	1353	13	1	15	0	0	4	0	0	24	7787
Total	46	5004	1316	9	2	1353	13	1	15	0	0	4	0	0	24	7787

**Cowlitz, Kalama, and Lewis River
Spring Chinook Fact Sheet
January 2024**

2024 Spring Chinook Forecasts

Spring Chinook forecasts are commonly based on average brood year relationships, where: age-3 (jacks) predict age-4 adults, age-4 predict age-5 adults. The forecasts provided below are estimated by using a suite of sibling regression, cohort ratio, and average return models to estimate runsize and are an aggregate of hatchery and natural origin. The forecast returns of spring Chinook returning to the Columbia River mouth (for Washington tributary stocks below Bonneville Dam) are:

- Cowlitz River= 4,719 adult spring Chinook
- Kalama River= 1,892 adult spring Chinook
- Lewis River= 3,368 adult spring Chinook

Additional information on Columbia river spring Chinook forecasts can be found at: <https://wdfw.wa.gov/fishing/management/columbia-river/compact/other-information#2024>.

Historic Spring Chinook returns to these lower Columbia tributaries (after accounting for mainstem fisheries) and the forecasted return for 2024 are provided in Figure 1 below.

- The 2024 Cowlitz River forecast to the tributary mouth is greater than the recent 5-year average return of 3,800 and less than the 10-year average return of 9,700.
- The 2024 Kalama River forecast to the tributary mouth is similar to the recent 5-year average return of 1,800 and less than the 10-year average return of 2,300.
- The 2024 Lewis River forecast to the tributary mouth is similar to the recent 5-year average return of 3,200 and greater than the 10-year average return of 2,400.

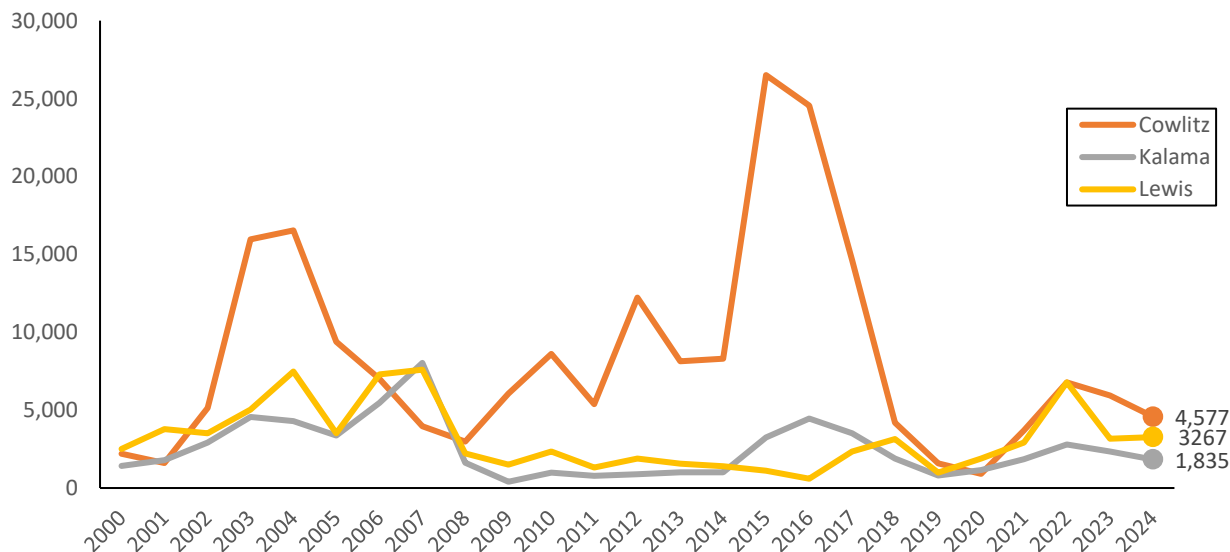


Figure 1. Adult spring Chinook returns to the Cowlitz, Kalama, and Lewis rivers by return year and forecast return for 2024.

Hatchery Releases

- Hatchery spring Chinook releases from Cowlitz, Kalama, and Lewis facilities for 2012-2022 are shown in Table 1.
- Adults (age 4-6) returning in 2024 were released in 2019-2022.
- Cowlitz release goals increased in 2013-2014 as a result of changes in release strategies.
- Cowlitz releases in 2014-2020 were near or above goal.
- Cowlitz 2019 included an additional June release of 118,000 subyearling smolts as a result of surplus production.
- Cowlitz 2022 release was reduced due to lack of adult brood returns. This release was a combination of Cowlitz and a one-time backfill of Kalama origin production.
<https://wdfw.medium.com/anglers-may-see-more-unmarked-chinook-smolts-on-the-cowlitz-river-this-spring-heres-why-e53fc6bfc0ef>
- Kalama releases in 2011-2022 have been near or above goal.

Table 1. Spring Chinook hatchery releases from Cowlitz, Kalama, and Lewis facilities in 2011-2022. Shaded rows correspond to releases contributing to the 2024 adult return.

Release Year	COWLITZ			KALAMA			LEWIS		
	Goal	Plant	% Of Goal	Goal	Plant	% Of Goal	Goal	Plant	% Of Goal
2012	942,369	881,337	94%	500,000	559,575	112%	1,350,000	1,410,270	104%
2013	1,464,849	1,601,472	109%	500,000	521,462	104%	1,250,000	1,286,170	103%
2014	1,797,115	2,051,598	114%	500,000	515,038	103%	1,675,000	1,516,940	91%
2015	1,793,529	1,958,471	109%	500,000	549,558	110%	1,925,000	1,814,469	94%
2016	1,793,529	1,874,482	105%	500,000	481,624	96%	1,250,000	717,742	57%
2017	1,741,899	1,852,960	106%	500,000	533,954	107%	1,250,000	402,224	32%
2018	1,741,899	1,844,162	106%	500,000	509,425	102%	1,250,000	710,708	57%
2019	1,741,899	2,011,018	115%	500,000	509,909	102%	1,350,000	2,294,425	170%
2020	1,741,899	1,968,336	113%	500,000	479,961	96%	1,350,000	1,760,485	130%
2021	1,741,899	1,290,014	74%	500,000	499,859	99%	1,350,000	1,739,959	129%
2022	1,741,899	911,240	52%	500,000	522,702	105%	1,350,000	1,600,544	118%

- Lewis releases in 2014-2018 were below goal due to a combination of reduced in-hatchery survival and subsequent low adult returns for use as hatchery broodstock.
- Changes in release size and timing strategies have been made at Lewis Hatchery to address the challenges with in-hatchery survival that have occurred in recent years. A program has been implemented to evaluate this changes, including sub-yearling smolt releases in June and October. The release goals and release numbers in Table 1 include all strategies.
- 2019-2022 Lewis releases included additional sub-yearling smolts released in June to supplement forage for Southern Resident Killer Whales.

Hatchery Escapement Goals

- Hatchery escapement needs for Cowlitz, Kalama, and Lewis rivers are shown in Table 2.

- The on-station escapement needs at each hatchery in Table 2 are the number of adults needed to meet broodstock needs for the in-basin hatchery release goals and harvest programs.
- On-station hatchery escapement needs for the Cowlitz and Lewis are defined in the *U.S. v. Oregon* Biological Opinion (BIOP) issued by NOAA Fisheries. Available at: [https://media.fisheries.noaa.gov/dam-migration/s7- usvoregon 2018-2027 mgmagmnt final signed.pdf](https://media.fisheries.noaa.gov/dam-migration/s7-usvoregon_2018-2027_mgmagmnt_final_signed.pdf)
- Based on preseason forecasts for 2024, the Cowlitz, Kalama, and Lewis River spring Chinook fisheries will be open, although season open periods and reduced daily limits may be initially needed in some locations to help ensure hatchery broodstock collection goals are met. Fishery managers will closely monitor in-season return information and notify anglers through emergency rule changes if season and/or regulation changes are warranted.
- ESA obligations (MA Biological Opinion) guide hatchery-origin adult escapement goals so that conservation objectives can be met to continue efforts to re-introduce fish into the upper basins in the Cowlitz and Lewis rivers.

Table 2. Cowlitz, Kalama, and Lewis River spring Chinook run-size forecasts for 2024 and hatchery escapement needs. Actual annual hatchery escapement needs may vary slightly to account for changes in fecundity, sex ratios, pre-spawn loss, etc.

2024 Expectations			
Details	Cowlitz	Kalama	Lewis
Forecasted return to Col. R. Mouth	4,719	1,892	3,368
Expected CR mainstem harvest for 2024	142	57	101
Forecasted return to tributary mouth	4,577	1,835	3,267
Avg. % natural-origin return	13.16%	4.0%	5.1%
Natural-origin return	602	74	166
Hatchery-origin return to trib. mouth	3,975	1,761	3,101
Hatchery-origin escapement need to trib. mouth*	1,949	662	1,606
Est. tributary hatchery spawners below hatchery	612	62	226
Total Broodstock need at hatchery (from MA BIOP when applicable)	1,337	600	1,380
Upstream transport	TBD**	NA	TBD**
Unmarked Cowlitz hatchery origin not available for harvest	1,366	NA	NA
Harvestable hatchery-origin surplus	660***	1,099	1,495

*Includes fish spawning in the wild outside the hatchery

**Fish above hatchery program needs are transported and released above dams for population recovery; exact numbers 'To Be Determined' (TBD) through in-season management

***Projected return of 4 year old Kalama origin backfill intended for harvest only

Ocean Conditions

- Ocean conditions have been identified as a leading contributor to adult salmon returns along the Pacific coast of the U.S. and Canada.

- Table 3 presents NOAA’s Northwest Fisheries Science Center “stoplight” chart of ocean ecosystem indicators that are measured and collectively provide a gauge of the “ocean conditions” experienced by some salmonids during their marine residence. The specific factors most closely related to survival of each species and population vary, so this chart is meant merely as a “snapshot” of a variety of ocean condition indices.

Table 3. NOAA Fisheries – Northwest Fisheries Science Center Ecosystem Indicator “Stoplight” chart, available at: <https://www.fisheries.noaa.gov/west-coast/science-data/ocean-conditions-indicators-trends>

2023 OCEAN CONDITION INDICATORS TREND

■ good ■ fair ■ poor

ECOSYSTEM INDICATORS		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
CLIMATE & ATMOSPHERIC	PDO (Sum Dec-March)	23	9	5	17	10	25	16	21	18	13	7	2	20	6	4	11	14	26	24	22	15	19	12	8	3	1
	PDO (Sum May-Sept)	14	5	11	8	13	23	18	21	17	19	7	16	9	4	3	10	24	26	25	20	15	22	12	6	2	1
	ONI (Average Jan-June)	25	1	1	9	17	19	18	21	10	15	3	13	22	6	8	10	12	23	26	16	7	24	20	5	4	14
LOCAL PHYSICAL	SST NDBC buoys (°C; May-Sept)	21	7	9	5	6	13	26	14	2	17	1	12	3	8	10	19	24	23	22	15	18	25	11	4	20	16
	Upper 20 m T (°C; Nov-Mar)	25	14	11	13	8	19	20	16	17	7	1	12	22	6	4	9	3	26	24	23	18	21	2	10	15	5
	Upper 20 m T (°C; May-Sept)	18	12	14	5	1	3	26	21	10	11	2	7	19	9	8	20	24	15	16	13	17	25	23	4	22	6
	Deep Temp (°C; May-Sept)	25	7	10	5	1	12	15	17	13	6	2	9	8	11	4	16	24	21	14	19	20	18	26	3	23	22
	Deep Salinity (May-Sept)	25	4	12	5	7	21	22	13	8	2	3	18	17	15	16	14	26	20	10	9	6	11	24	1	23	19
LOCAL BIOLOGICAL	Copepod richness (May-Sept anom)	24	3	1	11	10	19	18	23	20	14	12	13	22	6	9	4	15	25	26	21	17	16	7	5	2	8
	N copepod biomass (May-Sept anom)	24	19	14	15	6	21	18	25	20	16	9	13	11	3	5	7	8	22	26	23	10	4	2	1	17	12
	S copepod biomass (May-Sept anom)	26	2	7	4	3	18	20	25	17	14	1	9	21	13	10	8	15	23	24	22	16	19	12	5	6	11
	Biological transition	24	13	9	8	11	19	15	23	18	5	1	2	21	3	12	6	6	24	24	22	17	19	14	10	4	16
	Nearshore Ichthyoplankton (Jan-Mar)	21	4	14	8	1	25	26	20	11	22	3	17	2	10	5	13	23	18	19	16	12	24	9	6	15	7
	Near & offshore Ichthyoplankton (community index Jan-Mar)	11	6	4	8	10	13	20	24	1	16	3	12	18	5	2	7	9	22	25	26	21	23	19	15	14	17
	Chinook salmon juvenile catch	23	2	7	20	6	10	18	25	14	12	1	8	5	16	3	4	9	17	22	26	21	15	24	13	11	19
	Coho salmon juvenile catch	24	13	21	5	7	6	23	25	19	2	4	10	11	20	15	1	12	18	17	26	3	16	22	14	9	8
MEANS & RANKS	Mean of ranks	22.1	7.6	9.4	9.1	7.3	16.6	19.9	20.9	13.4	11.9	3.8	10.8	14.4	8.8	7.4	9.9	15.5	21.8	21.5	19.9	14.6	18.8	14.9	6.9	11.9	11.4
	Rank of the mean rank	26	5	8	7	3	19	21	23	14	13	1	10	15	6	4	9	18	25	24	21	16	20	17	2	12	11
NOT INCLUDED IN THE MEAN OF RANKS OR STATISTICAL ANALYSES	Physical Spring Trans (UI based)	4	8	24	21	5	15	18	25	15	1	7	3	10	13	22	11	23	12	6	20	13	15	9	2	26	19
	Physical Spring Trans. Hydrographic	25	4	14	9	6	13	17	26	7	10	1	10	21	4	12	2	19	8	20	24	17	16	22	2	22	15
	Upwelling Anomaly (sum April-May)	12	4	21	8	11	18	16	25	12	6	9	10	19	21	19	14	23	1	3	24	7	5	16	2	26	15
	Length of Upwelling Season (UI based)	6	2	22	14	1	16	12	26	5	3	9	3	18	21	18	17	24	13	8	15	7	10	20	10	24	23
	Copepod Community Index (May-Sept)	25	5	7	10	4	20	18	24	21	13	1	9	17	12	8	6	15	23	26	22	16	19	14	3	2	11