LEWIS RIVER AQUATIC COORDINATION COMMITTEE

Facilitator: ERIK LESKO

503-412-8401

Location: TEAMS (online)

Date: January 11, 2024

Time: 9:30 AM – 12:00 PM

AGENDA

	//GE/ID//					
9:30 AM	Welcome Review and Accept 1/11/2024 Agenda Review and Accept 12/14/2023 Meeting Notes					
9:40 AM	Public Comment Opportunity					
9:45 AM	Revision to Ground Rules Discussion (Lesko)					
10:00 AM	Pine Creek Aquatic Fund Update Presentation (Phil Roni)					
10:45 AM	Study/Work Product Updates Flows/Reservoir Conditions (Lesko) Upstream transport of coho adults into Swift (Karchesky, Lesko) Reservoir Shoreline Development Projects (ACC) ATS (Karchesky, ATS) FPS (Glaser, Karchesky) Fish passage/operations (Karchesky) Merwin repairs (Lesko) 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 January 11, 2024 TEAMS Meeting

ACC Representatives and Affiliates Present (22)

Nina Maas, Anchor QEA Sanoe Keliinoi, Columbia Land Trust Phil Roni, Cramer Fish Sciences Nicole, Farless, Cramer Fish Sciences Tyler Rockhill, Cramer Fish Sciences Reid Camp, Cramer Fish Sciences Christina E. Donehower, Cowlitz Indian Tribe Kayla Jensen McMahan, Cowlitz Indian Tribe Steve West, LCFRB Melissa Jundt, NMFS Kathryn Blair, NMFS Erik Lesko, PacifiCorp Levi Pienovi, PacifiCorp Chris Karchesky, PacifiCorp Mark Ferraiolo, PacifiCorp Jeffrey Garnet, USFWS Katie Buchan, USFWS Aaron Roberts, WDFW Bryce Glaser, WDFW Josua Holowatz, WDFW

Public:

None.

Assignments:

Peggy Miller, WDFW

Keely Murdoch, Yakama Nation

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).	Ongoing

Opening, Review of Agenda and Meeting Notes

Erik Lesko (PacifiCorp) called the meeting to order at 9:33 a.m. and reviewed the agenda. No revisions to the agenda were made, and the agenda was accepted. Meeting note revisions from December 14, 2023, 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 informed the ACC that following the vote to approve the revisions to the Ground Rules during the December ACC meeting there was communication from David Price at National Oceanic and Atmospheric Administration who voted "no" and asked for further time to review the documentation. Lesko and Price agreed to complete review by the January ACC meeting, but Price was not present on the call. Melissa Jundt said that another matter arose for Price, who could not be present. Jundt asked for another day to review the Ground Rules because she would be discussing with Price tomorrow. The ACC did not object to this extension. PacifiCorp agreed to follow up with Price the following week. Bryce Glaser stated he was comfortable with the delay, although if the Price's vote continues to be "no," the Ground Rules must be reviewed to move forward with the outlined consensus-based process. He stated that extra time would need to be scheduled for this. Glaser mentioned that Washington Department of Fish and Wildlife (WDFW) is happy to discuss the revisions to the Ground Rules with Price if needed. Lesko reiterated that he will follow up with Price next week.

Pine Creek Aquatic Fund Update Presentation (Phil Rom) (Attachment B)

Phil Roni began an overview of the Pine Creek project (Project) and staff introductions, including Tyler Rockhill, who would be giving the presentation. Rockhill began an overview of the Project team, which included Columbia Land Trust.

The Project focused on Reaches 1 through 6, although it avoids private land along Reach 1. Rockhill stated that Pine Creek is one of the most important Bull Trout spawning streams in the region. The Project began with an assessment of previous data, which showed that Pine Creek was heavily impacted by the 1980 Mount St. Helens eruption, and the area is recovering slowly. Rockhill stated that the future restoration design would focus on benefits to Bull Trout, among other species. Rockhill presented the Project goals and priority needs for restoration.

Rockhill presented the specific Project objectives and stated that the current goal was to identify areas for targeting restoration. Cramer Fish Sciences (Cramer) collected field data, reviewed previously collected data, collected a geomorphic and riparian assessment, hydrologic assessment, and performed a hydraulic analysis. The restoration actions will focus on species of concern, including Bull Trout. Rockhill noted that Bull Trout redds are prominent in Pine Creek areas with complex habitat and shallow water depths. The geomorphic assessment displayed substrate composition, in which lower reaches are more confined.

Rockhill reiterated that the floodplain has been dominated by eruption disruptions, but perennial springs in the upper watershed provide unique hydrologic condition and diverse biologic components.

Rockhill began an overview of hydrologic assessment. He stated that there is limited data availability, but baseflow is consistent and is hydrologically buffered. Pine Creek does not

appear to have a large range between flood flows and baseflows. Cramer also completed a hydrologic model of the upper watershed, and Rockhill presented figures which displayed floodplain areas that had been identified as well suited for restoration.

Rockhill began an overview of Task 2: Design. Cramer has begun alternatives analysis and conceptual design. When an initial design is complete, the design sheets will be distributed to the ACC and other interested parties. Design methodology is focused on spawning and rearing habitats, avoiding existing redd locations, avoiding hydraulically unsuitable areas, and designing for resiliency and compatibility for future conditions.

Rockhill presented an overview of the current design process. He stated that due to the eruption effects, identifying reference reaches for design purposes is unpractical. Due to this, the design is heavily influenced by literature reviews. Based on this evaluation, Pine Creek should contain more braided channels than currently present.

Rockhill then presented a design risk diagram and a photograph of a previously installed engineered log jam restoration in Reach 2. He elaborated that although the jam is stable, it is perched from the channel, and Cramer would like to learn from this. He also discussed the risk assessment using a Bureau of Land Management risk matrix. Using this matrix, the anticipated restoration efforts are classified as low risk.

He presented the design elements being considered, which included three types of jams, floodplain wood loading, and beaver dam analog. Restoration is targeting suitable areas for installation of these elements and uses a tiered system for prioritization. Rockhill mentioned that helicopter-based placement would be likely but would be determined at a later date based on chosen design elements.

Jeremiah Doyle asked about the objectives and why Coho Salmon are not listed on the specified target species. Rockhill clarified that Coho Salmon would benefit from restoration efforts and should have been listed. Roni mentioned that Coho Salmon prefer flood plains slow-water habitat, and restoration will reconnect pockets of floodplain benefiting all species.

Bryce Glaser mentioned he was appreciative of the protection of current successful habitat areas. Roni stated that Cramer identified the current successful habitat, which was incredibly important to them.

Erik Lesko asked for an overview of the prioritization process. Rockhill stated that the framework and philosophy is complete, but identifying exact prioritized locations is currently in process. Priorities include high potential for uplift with low likelihood of affecting redds and hydrologic conditions.

Josua Holowatz mentioned that WDFW has had difficulty mobilizing monitoring crews into rehabilitated areas similar to Pine Creek. He recommended being cognizant of long-term monitoring effects. Rockhill mentioned that a monitoring plan will be part of 60% to 80% design, and the size may lend itself to remote sensing in tandem with in-person monitoring.

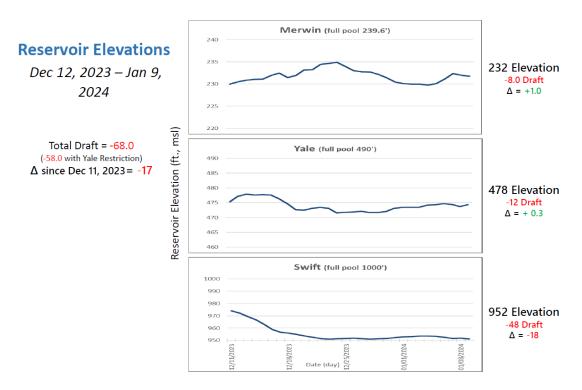
Roni stated that the intent of the presentation was to provide an overview of the progress, and there will be a presentation of design alternatives in spring. Lesko asked when the Project completion date is. Rockhill said October 2024 and mentioned that there is an option to

implement restoration in phases based on timeline and funding. Lesko said the requests for proposals will be distributed in the fall for the Aquatic Fund.

Study/Work Product Updates

Flows/Reservoir Conditions Update (see Attachment C)

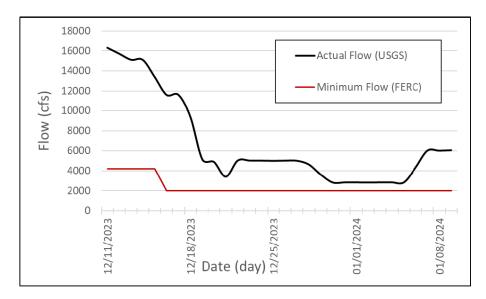
Erik Lesko presented reservoir elevations. There was an overall decrease in total elevation loss of 17 feet. Swift Reservoir was dropped 18 feet from last month to account for ongoing construction. Lekso mentioned that with cold temperatures forecast for the upcoming weekend, Yale Reservoir would likely drop a couple of feet for generation purposes.



Lesko presented downstream flows. Flows have increased to 6000 cubic feet per second (cfs) since the last ACC meeting. Lesko mentioned that flows would likely increase to 9,000 to 10,000 cfs, as a result of generation mentioned previously due to cold weather over the weekend. Lesko shared more photographs of the Highway 503 washout repairs. Levi Pienovi gave a brief update on repairs impact to fish passage. He confirmed that weight restrictions on the repaired road had been lifted, and large trucks are allowed to pass. There were no further impacts to fish passage.

North Fork Lewis River Stream flow downstream of Merwin Dam

> Dec 12, 2023 – Jan 9, 2024



Upstream Transport of Coho Salmon Adults to Swift

Chris Karchesky gave a brief update on the status of Coho Salmon moved upstream. He reminded the ACC that the December high-water event was challenging for fish passage, and the initial annual goal to move 9,000 Coho Salmon upstream was increased to 12,000 fish. A total of 8,400 Coho Salmon had been moved upstream at the time of this meeting. Karchesky was hopeful for continued planning for next year.

Aquatic Technical Subcommittee Update

Erik Lesko began by reminding the ACC of ATS priorities. The ATS is working to develop methodology to determine the proportion of hatchery origin spawners and abundance estimates for late winter steelhead in the lower Lewis below Merwin Dam. Jeremiah Doyle will be leading the hook and line collection in the lower river to collect data for input to the model. Preliminary site visits for this effort will occur in January, with hook and line sampling starting in early February. Lesko is also working on the genetics strategy. He mentioned this has been in draft for a couple of years, but he is committed to finalizing.

Bryce Glaser added that the steelhead program is transitioning based on the approved plans reviewed by the ACC. The steelhead program is transitioning from early winter Chambers Creek stock to a stepping stone-derivative program, using a returns from the conservation program (BWT). The Aquatic Technical Subgroup (ATS) is working through the processes and will be completed by spring 2024. The Chambers Creek program has been formally discontinued. Glaser stated the WDFW is still working on public notification, which will be reviewed by PacifiCorp before it is released.

Chris Karchesky mentioned the integrated population model (IPM) for Coho Salmon was still in development with United States Geological Survey. The model was close to finalization, and covariates, such as temperature, were being evaluated. Once the model is complete, the winter steelhead IPM will begin.

Fish Passage Subcommittee Update

Bryce Glaser said the last meeting primarily covered the 60% design review. The Yale Behavioral Study discussion was set to occur in the January meeting. Chris Karchesky mentioned that he is appreciative of everyone's patience because there has been a lot of information to review in the design reports. He said the January Fish Passage Subcommittee (FPS) meeting would also discuss next steps and data gaps for the design team. He asked Glaser whether the final Yale Behavioral Study would also be presented to the ACC. Glaser mentioned that the requirements of that report were reviewed by the ACC, and his interpretation was that developing studies needs to be reviewed by ACC, but the reports do not need ACC formal review. Karchesky agreed that the action of sharing the report with the ACC would be purely information sharing and not a formal review.

Glaser mentioned that there was some discussion about materials distributed for the 60% review and that there was a request for more documentation to be distributed. A discussion about which documents would be needed for review would occur in the January FPS meeting.

Fish Passage/Operations (Attachment D)

Erik Lesko presented the *Lewis River Fish Passage Report*. Chris Karchesky stated that, in general, fish passage had been difficult due to weather. NORs of Coho Salmon have been high this year and close to the highest year on record. He believed that Merwin trap had been suspended due to weather. Levi Pienovi said both fish collection facilities had been shut off due to snow, with 7 to 8 inches of snow at Merwin and over a foot at Swift. Due to hazardous operations, both facilities are offline and would likely remain off through the weekend. He will provide update when they come back online.

Karchesky began discussion on Merwin conveyance crowder rebuild. He reminded the ACC that the decision to rebuild was the result of the monitoring and evaluation plan because the conveyance crowder caused delays. The outage is scheduled for some time in July through August, and he will provide updates as the rebuild approaches.

Lesko displayed Swift floating collector totals and noted that the 2023 collection totals for Coho Salmon NORs were much greater than previously recorded years. Karchesky pointed out the high number of spring Chinook Salmon collected this year. He was hopeful for high juvenile spring Chinook Salmon returns.

Josua Holowatz stated that the December collection numbers at Swift are similar to migration at Cowlitz, and he was happy to not see a lot of fry pushed out by the high-water event. Karchesky asked whether Cowlitz had a high-water December. Holowatz said yes, but that is typical.

Merwin Repairs

On December 21, 2023, PacifiCorp crews discovered a concrete void along the upper portion of the concrete wall leading from ladder pool No. 1 to the evacuation pump room during routine maintenance. Remnants of fish parts were found in the pump room and estimated to be the remains of approximately 100 unidentifiable adult fish. Lesko said the fish likely entered through the void during the high-water event in December 2023. Lesko said that engineering staff would perform a structural integrity inspection before repairs to seal the void were completed. The repair will include fastening a stainless-steel plate to seal the void and prevent any future passage of fish from the ladder to the evacuation pump room. The proposed repairs and structural inspection are scheduled to be completed in mid-February. Lesko noted that the trap remains fully operational at flows up to 11,000 cfs. Jeffery Garnett asked whether it was known how the

void occurred. Lesko said it was unclear when it occurred or why, but a portion of the concrete had likely fractured and sloughed off. He said that based on the conditions of the fish observed in the pump room, the break likely occurred during the high-water event in early December. Garnett expressed concern about how this occurred to ensure it does not happen again and is hopeful the structural assessment will address this concern. Lesko agreed, and PacifiCorp is committed to ensuring this does not happen again, through use of the steel plate and requesting that internal engineering staff assess the structural integrity and possible causes of the concrete void. He will provide more information as it becomes available. Kayla McMahan asked when this was identified. Levi Pienovi said this was noticed during routine quarterly maintenance, which occurs to inspect the fish ladder sections under concrete and is hard to evaluate from the deck. McMahan asked whether there are other photographs from previous quarterly inspections. Pienovi did not notice it during the August inspection, but he was unsure of whether there are photographs. Pienovi mentioned the room is approximately 22 feet tall, and he is unsure of whether this spot was captured in any old photographs. Karchesky mentioned that he did not recall seeing this during the last inspection.

Bryce Glaser asked what the next steps were for any further determination of fish take. Lesko reiterated that he used the estimate of on-site fish biologists and that the advanced deterioration of fish observed in the pump room made species identification or origin (fin clips) determinations impossible. The estimate was based on a visual assessment of the volume of fish slurry, and he believed this is the best estimate that could be determined. Glaser asked whether there were any steps following the report. Melissa Jundt asked whether the fish slurry had been disposed of. Lesko said yes. Glaser asked whether there was any preservation of fish or fish parts. Lesko said that due to the stage of deterioration, no tissues were preserved. Lesko presented an email from David Price about preserving pieces of fish. Jundt was curious about potential different methods for determining fish estimates (i.e., whether the weight of fish slurry could be used) or whether there was a better way to refine this process following similar events. Glaser said he shared the concern about what type of fish were present—would it have been possible to estimate fish species based on a rough proportion of fish species present at the trap at the time of the event? Glaser said that WDFW would like to be informed on any updates. Lesko clarified that the fish remains had been placed in the appropriate disposal location approved for animal disposition. Jundt asked whether this was consistent with the emergency notification procedures. Lesko said that our biological opinion requires a 48-hour notice requirement for any mortalities and that PacifiCorp provided written notification to both NOAA and WDFW withing 24 hours. Peggy Miller said she was unsure what is in the settlement agreement but would like to state that some Section 401 Water Quality Certifications require reports of dead and dying fish to Washington State Department of Ecology (Ecology) and suggested that PacifiCorp look at their documentation to determine whether Ecology needed to be notified. Lesko said he will review the 401 certification orders, but was unaware of that requirement in these types of incidents.

Lesko said he can set up a meeting with the PacifiCorp crew who were on site to discuss abundance estimates. Jundt said she would appreciate that. She reiterated her two concerns as follows: whether there was a way to estimate abundance and species better and whether there a better way to notify others if there is a large fish kill.

Garnett agrees that he hopes there would be opportunity to refine the process and protocols for reporting these events so that everyone can work through the situations together.

Glaser asked whether there is a way to prioritize reviewing the reporting of fish kills. He requested follow up for the next meeting. Lesko agreed and said he would look into current requirements.

Lesko asked whether Jundt would follow up with Dave Price given his current schedule. Jundt mentioned she would be discussing with Price tomorrow, and she will discuss with him about setting up a meeting to discuss fish abundance estimates.

Administrative Updates

None.

Public Comment Opportunity

None present.

Agenda Items for February 14, 2024

- Fisheries Update: Spring Returns (Holowatz)
- > Study/Work Product Updates

Adjourn 11:36 pm

Next Scheduled Meeting

January 11, 2024	
Teams Call	
9:30 a.m.–12:00 p.m.	

Meeting Handouts and Attachments

- ➤ Agenda from 1/11/2024
- ➤ Attachment A Decision Document: Proposed Revision to Ground Rules
- ➤ Attachment B Pine Creek Aquatic Fund Update Presentation
- ➤ Attachment C Flow/Reservoir Conditions (December 2023- January 2024)
- ➤ Attachment D Lewis River Fish Passage Report (December 2023)
- ➤ Attachment E Merwin Adult Trap Collection Report (December 2023)
- ➤ Attachment F Swift FSC Facility Collection Report (December 2023)

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;
- 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**).
- 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 Licensees 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:

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.

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.

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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.

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

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each month unless determined otherwise by the TCC.

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.

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).

Commented [MPA(5]: The intent of this section is criteria for calling an additional meeting and when. This information was revised and added with regular meeting times.

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.
- 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.
 - 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.

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".

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.

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.

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

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

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

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

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 aquatics 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 aquatics 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 aquatics 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 <u>TCC and ACC Decision-Making Process and Limitations</u>. 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 aquatics 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 <u>TCC and ACC Meetings.</u> 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 <u>TCC and ACC Reports.</u> 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 aquatics 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 <u>Enforcement of Agreement After ADR Procedures</u>. 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

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	Contigencies for Decision	Date of Decision
2020-XX	mm-dd-yyyy								mm-dd-yyyy

Request No. [2023-02] **Request Date:** [12-14-2023]

North Fork Lewis River Project Request for Decision

Proposed Revisions to the Terrestrial and Aquatic Coordination Committees Structure and Ground Rules (revised June 2020)

Part A – Decision Summary (to be completed <u>after</u> decision is made)

Date of Decision: 12/14/2023

Expected Implementation Date of Action (if applicable):

Expected completion date of action (if applicable):

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

The Aquatic Coordination Committee approved the revised ACC/TCC Structure and Ground Rules as proposed and distributed to the ACC on December 8, 2023. No opposition was presented, and all members present at the December 14, 2023 ACC meeting voted in favor or abstained.

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

1. Representatives and Affiliations

Organization	Representative
PacifiCorp	Erik Lesko
Washington Department of Fish and Wildlife	Peggy Miller, Bryce Glaser

2. Description and Justification of Request

Requested Action: What specifically is the Committee to decide?

PacifiCorp and WDFW are requesting revisions to the Terrestrial and Aquatic Coordination Committees Structure and Ground Rules (revised June 2020). Revisions are intended to update and clarify the ACC/TCC Structure and Ground Rules, which were last revised in June 2020.

Specific revisions include the following:

- Clarification of the term 'parties'
- Clarify the need and process for confidential sessions or agreements
- Definitions for 'subcommittee' and 'Members'
- Additional guidance on when Decision Templates may be necessary
- Clarification on how committee decisions are documented and recorded
- Replace ACC/TCC member tables with PacifiCorp links to updated lists
- Establishes need for subcommittee charter

The updated Terrestrial and Aquatic Coordination Committees Structure and Ground Rules (revised December 2023) is attached.

3. FERC or Settlement Agreement Requirement(s)

What relevant FERC or SA articles justify this action? [Articles xx]

- 1. Section 14.2 of the Lewis River Settlement Agreement
- 2. Terrestrial and Aquatic Coordination Committees Structure and Ground Rules (Revised June 2020)

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

4. Committee Decision

- Was the decision made by consensus? (as defined in the committee ground rules)
 Yes, protocol followed consensus decision making protocol as described in the ground rules
- **Document voting record and tally** (if applicable)

All Representatives in attendance at the December 14, 2023, ACC meeting

Yes = Y; No= N; Abstain= A

Organization	Representative Present	Vote
Cowlitz Indian Tribe	Christina Donehower	Υ
National Marine Fisheries Service	Kathryn Blair	Α
Utilities	Erik Lesko	Υ
Washington Dept. of Fish and Wildlife	Bryce Glaser	Υ
Yakama Nation	Keely Murdoch	Υ

5. Justification for Committee Decision

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

At the May 11, 2023, ACC meeting the topic of revising and updating the structure and ground rules document was discussed as part of the agenda and it was agreed that PacifiCorp would propose additional language in the structure and ground rules to clarify the decision-making process by the ACC. Addition updates were also recommended and have been included in the attached draft.

6. Contingencies or Conditions of the Decision

- Is decision contingent on other actions or information?
 Yes, this decision is preliminary pending 7-day additional review and approval by the Terrestrial Coordination Committee in January.
- Is implementation of decision contingent on specific actions or information? **No**
- Are there any conditions attached to this decision? **No**

7. Additional Information or Notations

None

Pine Creek Restoration Design

Phil Roni^{1,3}, Tyler Rockhill¹, Reid Camp¹, Sanoe Keliinoi², and Ian Sinks²

- ¹Cramer Fish Sciences, Watershed Sciences Lab
- ² Columbia Land Trust
- ³ University of Washington





Client / Contracting Agency:





Project Team



Phil Roni, Principal Scientist

Tyler Rockhill, Restoration Engineer

Reid Camp, Fluvial Geomorphologist

Nate Hough-Snee, Wetland and Riparian Ecologist

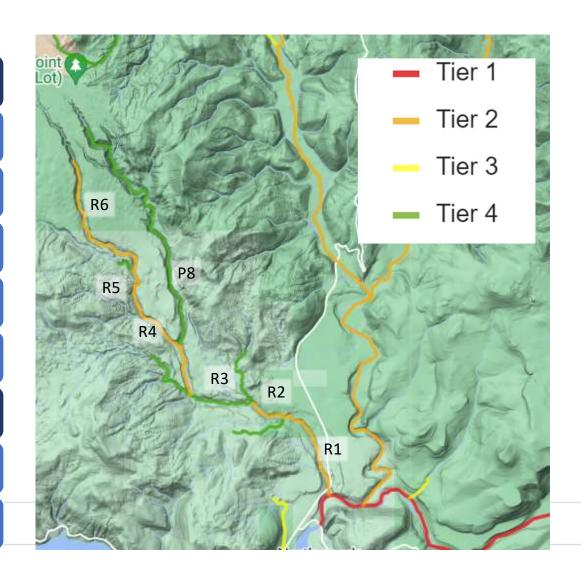
Nicole Farless, Biologist



Columbia Land Trust

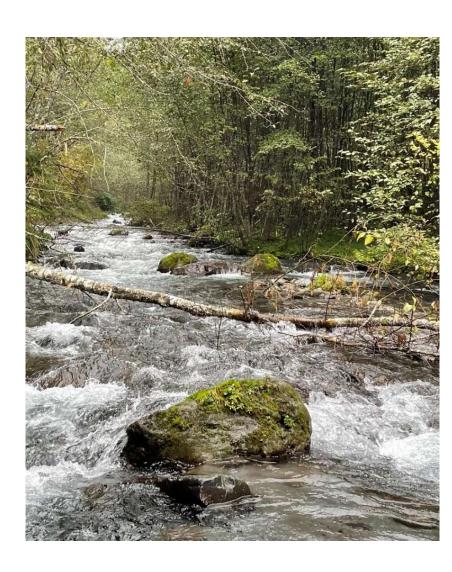
Ian Sinks, Stewardship Director

Sanoe Keliinoi, Natural Area Manager Pine Creek



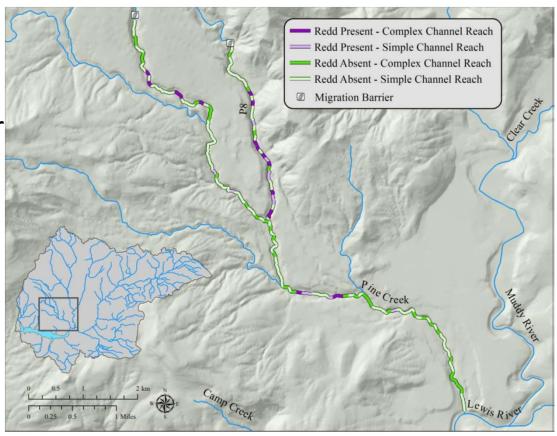
Background

- One of the most important Bull Trout spawning streams
- Multiple reaches are priorities for Bull Trout,
 Steelhead, and Coho
- LCFRB Recovery Plan indicates that Pine is the number one trib for current and potential Bull Trout production in Upper NF
- CLT purchased/obtained easement more than 5,000 acres in 2013/2014 to protect Pine Creek from development and manage the lands to benefit Bull Trout, spotted owls, and wolves



Previous Assessment Data

- Roni and Timm 2016
 - Watershed assessment
- Lamperth et al. 2017 Lewis River Bull Trout habitat restoration identification assessment
- Other
 - USFS 1995,1996
 - LCFRB 2010
 - Beechie and Imaki 2014
 - USGS/PacifiCorp 2016
 - Hudson et al. 2019



Lamperth et al. 2017



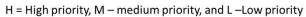
Problem

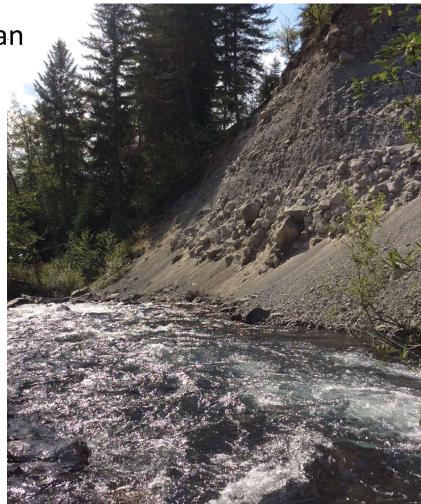
- Heavily impacted by the eruption of Mt. St. Helens with long recovery times for full ecosystem recovery
- Subbasin Plan indicates it could benefit from targeted riparian and stream channel restoration
- Assessments have outlined restoration needs for priority reaches
- Need for a comprehensive holistic restoration plan and designs that protects existing areas of Bull Trout spawning while restoring areas of degraded instream and riparian habitat

Project Goal

 Improve instream habitat complexity and riparian habitat diversity and function in Pine Creek for Bull Trout and other salmonids.

	Pine Creek Reaches and Multi-Species Priority				
Restoration Needs	P1	P2	P4	P5	P6
Off channel and side channel					
habitat	Н	Н	Н	Н	Н
Riparian conditions & functions	Н	Н	Н	Н	Н
Stream channel habitat structure &					
bank stability	Н	Н	Н	Н	Н
Watershed conditions & hillslope					
processes	Н	Н	Н	H	Н
Floodplain function and channel					
migration processes	Н	Н	Н	Н	M
Instream flows	М	Н	M	M	M
Access to blocked habitats	L	L	L	L	L
Regulated stream management for					
habitat functions	L	L	L	L	L
Water quality	L	L	L	L	L





Reach 2, photo by CFS

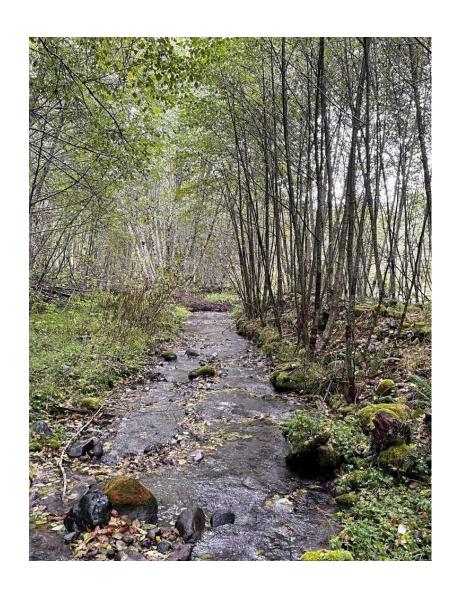


Specific Objectives

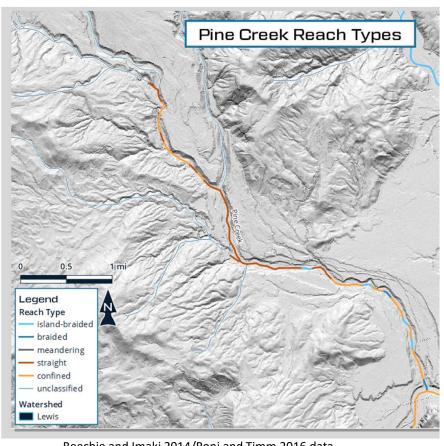
- 1. Improve habitat complexity in simplified reaches through large wood placement
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- 7. Improve overwintering habitat for salmonids
- 8. Reduce or stabilize incision rates in areas with floodplain pockets

Project Tasks

- Task 1: Investigation and baseline assessment
- Task 2: Design
 - 15% concepts and alternatives
 - 30% basis of design
 - 60-80% & permit applications
 - 100% bid ready package
- Task 3: Monitoring and photo documentation
- Task 4: Project management and coordination

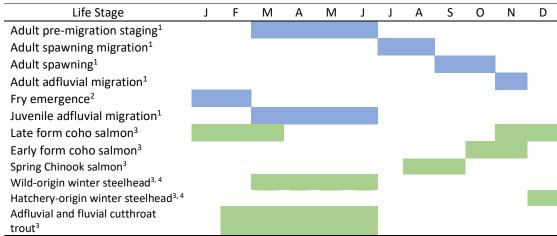


- Existing data review and analysis
 - Focus on Priority Reaches
 - Identify suitable areas within reaches
- Site survey and field data collection
 - Targeted new field data
 - Focusing on suitable areas identified
- Geomorphic and riparian assessment
 - Using field, existing, and remote sensing data
- Hydrologic assessment
- Hydraulic analysis



Beechie and Imaki 2014/Roni and Timm 2016 data

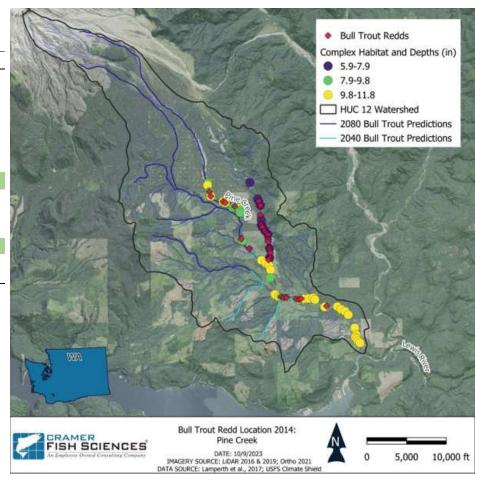
Biological Assessment



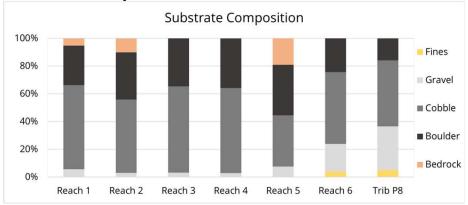
¹Lamperth et al. 2017; ²CLT 2013; ³LCFRB 2010; ⁴PacifiCorp 2018

Restoration Recommendations:

- Focus on conditions identified in Lamperth et al.
 2017 for spawning and rearing
- Complex channels with relatively low depths and velocities



Geomorphic Assessment

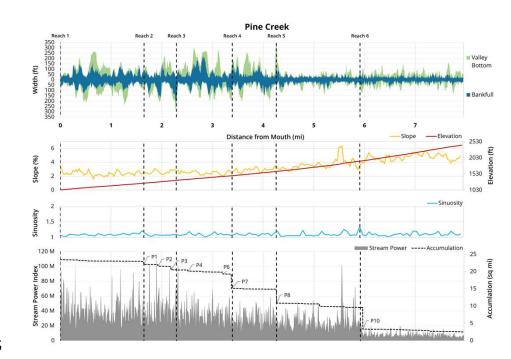


Summary:

- Primarily confined cobble/boulder plane bed channel, "locked in"
- Spawning and rearing habitat is concentrated in upper watershed and Reach 3 (as well as P8)
- Post-eruption conditions still dominant, fines and gravels present only interstitially

Restoration Recommendations:

 Retain gravel and fines, especially in complex channels and floodplains



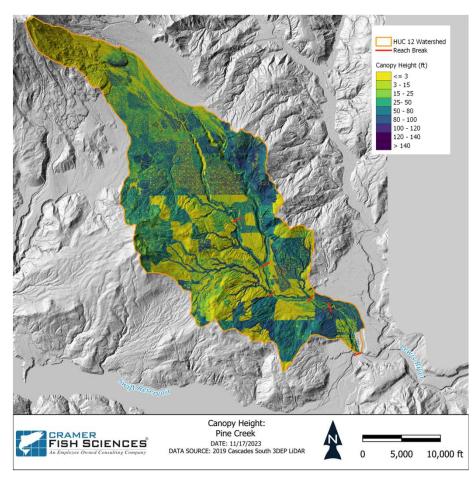
Riparian Assessment

Summary:

- Eruption reset many floodplains and surrounding forests to early-successional landscapes
- Floodplain dominated by riparian shrubs (Salix sp.) and immature alder (Alnus rubra)
- Existing conifer-dominated forest matrix is disconnected from the active channel and inset floodplain

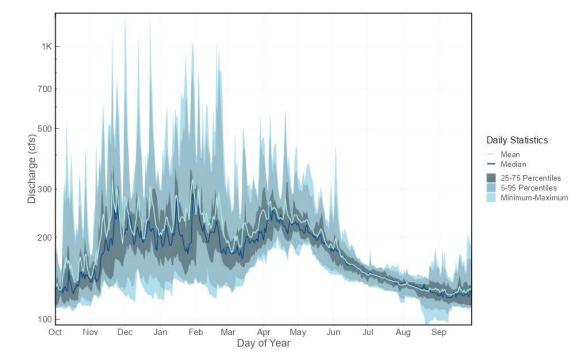
Restoration Recommendations:

- Shift immature species in the floodplain to later successional conifer species by building disturbanceresilient, depositional landforms (higher bars)
- Advance floodplain large wood cycle through formation of forest mosaic and mature vegetation "hardpoints"
- Perennial springs within the upper watershed contain diverse biota and harbor unique hydrologic conditions



Hydrologic Assessment

Location	Recurrence Interval	Bulletin 17C Peak Discharge (cfs)
Pine Creek at confluence with NF Lewis River	500 200 100 50 25 10 5 2 1.5	3746.3 3273.2 2934.3 2609.7 2296.1 1892.8 1588.1 1152.6 982.2 820.1
	1.01	524.0



Summary:

- Limited data availability
- Consistent elevated baseflow, critical to spawning life stage
- Baseflow buffers climate change, both flow and temperature

Restoration Recommendations:

Protect upper watershed hydrogeologic characteristics

Hydraulic Assessment

Reach		lain Cha Flow De _l (ft)			Floodpla Flow De _l (ft)		Main	Channel (ft/s)	Velocity	Floo	dplain V (ft/s)	•		Channe tress (lb,		Floodplain Shear Stres (lb/ft²)					
	2-yr	10-yr	100-yr	2-yr	10-yr	100-yr	2-yr	10-yr	100-yr	2-yr	10-yr	100-yr	2-yr	10-yr	100-yr	2-yr	10-yr	100-yr			
1	3.59	4.63	5.71	1.24	1.67	2.20	6.96	8.13	9.23	2.40	2.77	3.19	5.25	6.67	8.06	1.71	2.23	2.93			
2	3.46	4.33	5.28	1.20	1.65	2.16	7.18	8.37	9.36	3.43	4.29	5.19	5.53	7.02	8.18	1.83	2.59	3.22			
3	2.95	3.73	4.52	1.01	1.35	1.77	6.90	7.99	8.99	3.00	3.66	4.24	4.84	6.00	7.04	1.60	2.12	2.69			
4	2.52	3.15	3.84	0.83	1.15	1.54	6.18	7.21	8.15	3.20	4.03	4.56	4.95	6.16	7.31	1.67	2.29	2.79			
5	2.52	3.32	4.21	0.81	1.20	1.68	6.94	8.19	9.42	2.58	3.17	3.74	5.99	7.60	9.27	1.84	2.62	3.52			
6	1.30	1.70	2.13	0.30	0.50	0.72	5.23	6.22	7.15	1.64	2.34	2.97	3.97	5.24	6.49	0.86	1.49	2.15			

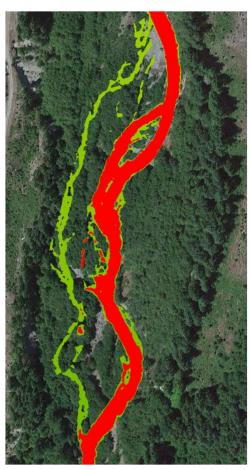
Reach	Main Ch Flow D (ft)	epth	Floodp Flow D (ft)	epth	Main Chann (ft/		Floodplain Ve	elocity (ft/s)	Main Chani Stress (I		Floodplain Shear Stress (lb/ft²)						
	Spawning	Rearing	Spawning	Rearing	Spawning	Rearing	Spawning	Rearing	Spawning	Rearing	Spawning	Rearing					
1	1.08	1.67	0.05	0.34	3.36	4.37	0.21	1.16	1.79	2.61	0.1	0.51					
2	1.07	1.66	0.04	0.33	3.49	4.59	0.27	1.41	1.9	2.87	0.1	0.56					
3	0.96	1.47	0.03	0.28	3.52	4.53	0.2	1.31	1.82	2.6	0.07	0.48					
4	0.94	1.38	0.07	0.28	3.36	4.26	0.42	1.51	2.02	2.8	0.16	0.58					
5	1.01	1.49	0.05	0.28	3.88	4.94	0.28	1.3	2.48	3.54	0.13	0.62					
6	0.78	1.07	0.04	0.17	3.86	4.62	0.3	1.17	2.51	3.28	0.19	0.51					

Summary:

- Model results consistent with observations
- · Assist in identifying potential side channel / floodplain connections

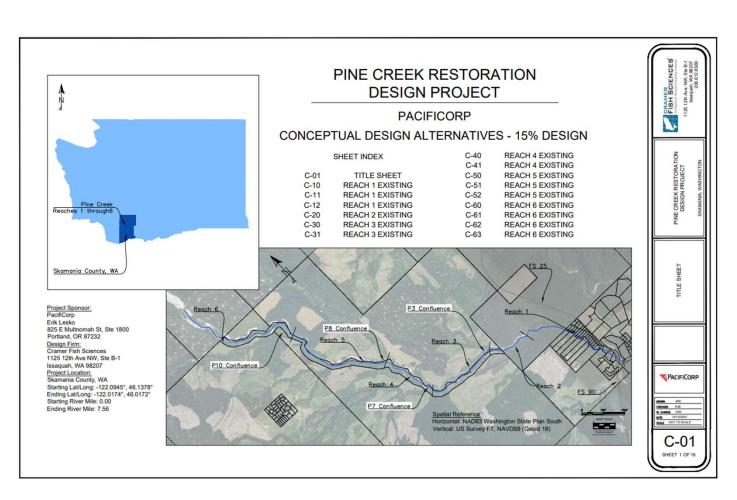
Restoration Recommendations

- Identify areas that are hydraulically suitable for restoration actions
- Energy grade drops from large wood are not common currently



Task 2 -Design

- Alternatives analysis and conceptual design – 15%
- Preliminary design– 30%
- Permit ready designs 60-80%
- Final design –90/100%
- Environmental compliance and permitting



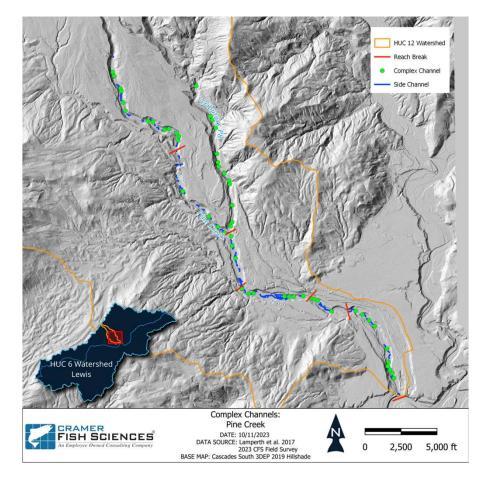
Design Methodology

Table Limiting factors and restoration needs (LCFRM 2010, LCFRB 2018, SalmonPORT)

LCFRM 2010	LCFRB 2018	SalmonPORT
Habitat Diversity	Habitat Diversity	Off channel and side channel
		habitat
Habitat Connectivity	Cold Water Refugia	Riparian conditions & functions
Channel Stability		Stream channel habitat
		structure & bank stability
Riparian Function	High Quality Floodplain	Floodplain function & channel
	Habitat	migration processes
Substrate and	Mature Riparian and	Watershed conditions &
Sediment	Upland Forest	hillslope processes
Water Quality	Instream Flow	Instream flows

Restoration Recommendations:

- Focus on spawning and rearing habitats
- Avoid impacting existing redd locations
- Avoid hydraulically unsuitable areas
- Design for resiliency and compatibility with future conditions





Confluence with P8, photo by CFS

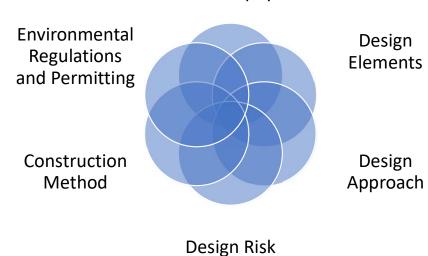
Specific Objectives

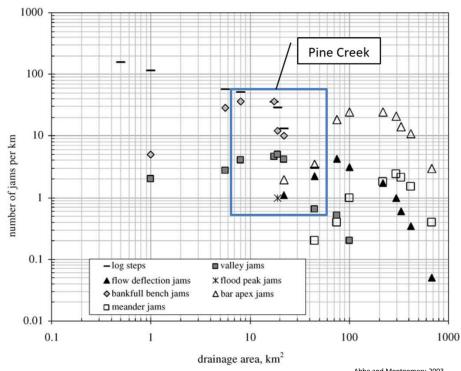
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Design Methodology Design

Philosophy





Abbe and Montgomery 2003



Design Philosophy

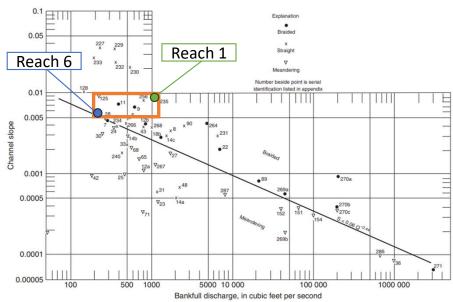
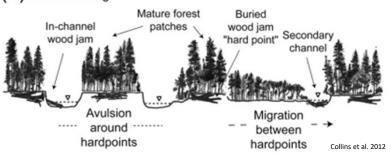


Fig. 3 Channel pattern (meandering, straight, braided) as a function of channel slope and bankfull discharge. Reproduced from Leopold LB and Wolman MG (1957) River channel patterns: Braided, meandering, and straight. Washington, DC: US Geological Survey Professional Paper 282-B, pp. 39-84 (US public domain).

(B) Anastomosing



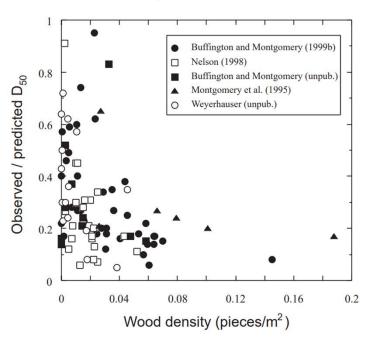
- Improve habitat to meet the limiting factors of target aquatic species
- Reestablish normative rates and magnitudes of physical, chemical, and biological processes that create and sustain river and floodplain ecosystems
 - (1) restoration actions should address the root causes of degradation,
 - (2) actions must be consistent with the physical and biological potential of the site,
 - (3) actions should be at a scale commensurate with environmental problems, and
 - (4) actions should have clearly articulated expected outcomes for ecosystem dynamics.

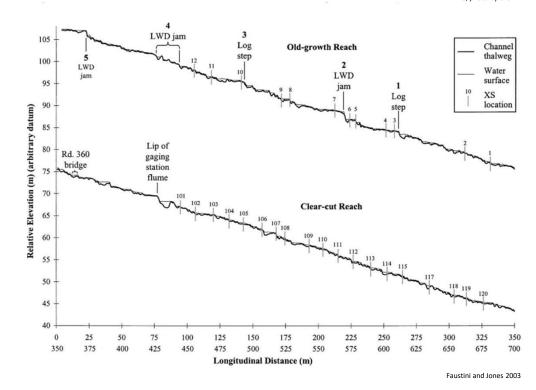
Reach 5 side channel, photo by CFS



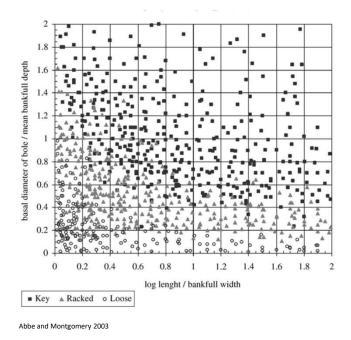
P8, photo by CFS

Design Philosophy

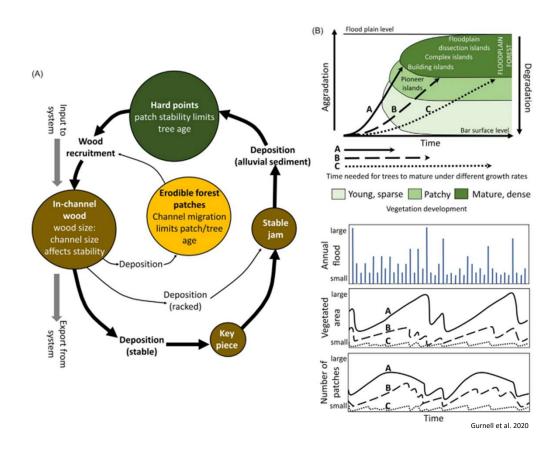




Design Approach



- Emulate density, spacing, orientation, dimensions of pre-disturbance conditions
- Work within current watershed processes
- Avoid hydraulically unsuitable areas and redd locations





Previous restoration Engineered Log Jam , photo by $\ensuremath{\mathsf{CFS}}$



Design Elements



Channel Spanning Jam

- Aggrade suitable substrate upstream
- Form pool downstream of jam
- Provide WSE drop and reconnect adjacent floodplain/side channels



Apex Jam

- Develop resilient channel splits
- Increase side channel and floodplain activation





- Emulate log jams from bank erosion processes
- Sort substrate and provide diversity of hydraulic conditions
- Encourage bank erosion and pool formation



- Emulate conditions provided by mature riparian forest
- Slow water down in the floodplain and retain sediment
- Provide future source of wood for entrainment and transport

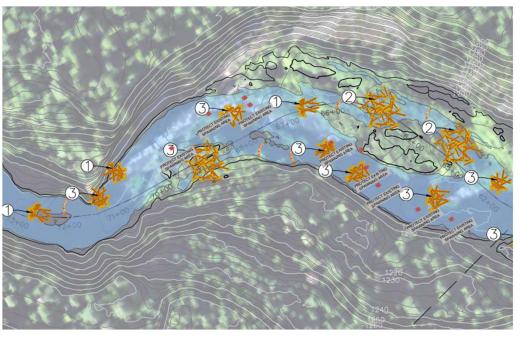
Beaver Dam Analogue (BDA)

- Hand built side channel and floodplain features
- Increase fine sediment deposition and riparian forest development
- Retain and store water in alluvium





Design Elements



- Identify suitable areas and appropriate design elements
 - Avoid consistently used redd areas
 - Must have suitable hydraulic conditions
 - Focus on potential complex channels and/or side channels
- Tiered prioritization system allows for scalability
- Focus on limiting factors, minimizing disturbance, and protecting common redd locations

Construction / Environmental Compliance



Hilton Turnbull

- Assuming helicopter placement of logs
- Environmental compliance for staging and access
- Additional noise disturbance compliance for endangered species

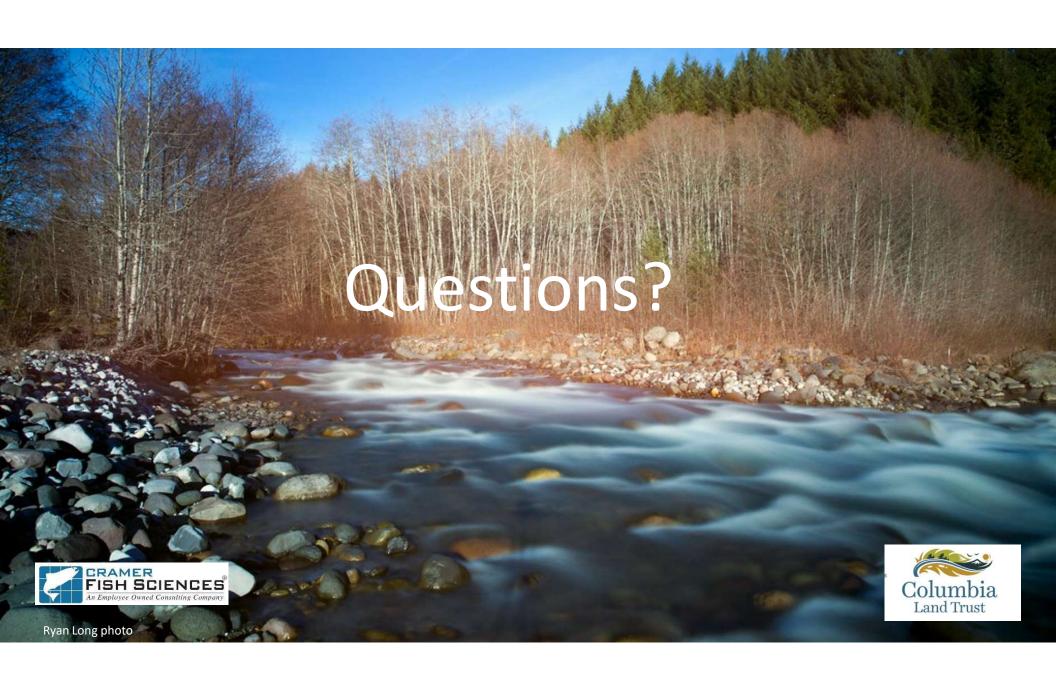


Tiffany Royal/Northwest Indian Fisheries Commission



Summary

- Pine Creek is priority Bull Trout spawning stream and a priority for restoration
- Degraded instream and riparian areas due to Mt St Helens and other factors that will take many decades to recover naturally
- Work with Columbia Land Trust to develop restoration plan and designs for riparian and instream area that will compliment CLT upland restoration efforts
- Build out from existing areas of high-quality Bull Trout habitat to improve habitat
- Complete a holistic analysis and successful restoration design to restore riparian and aquatic habitat function for Bull Trout and other salmonids in Pine Creek.
- Meets all major objectives of Lewis River Aquatic Fund

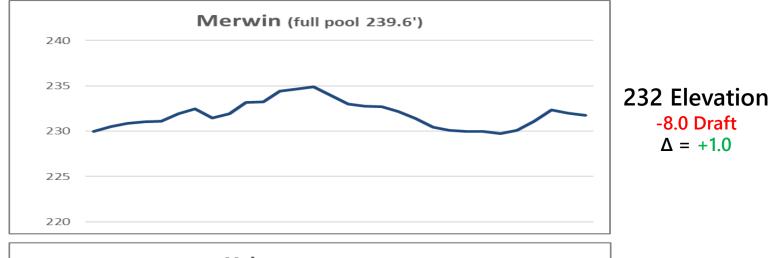


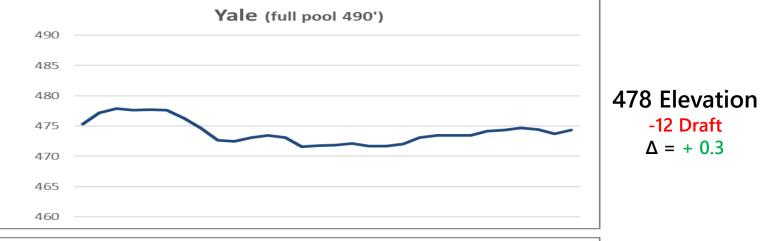
Reservoir Elevations

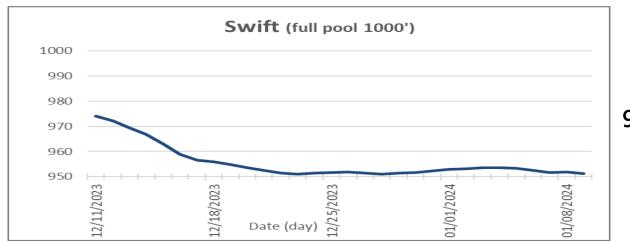
Dec 12, 2023 – Jan 9, 2024

Total Draft = -68.0(-58.0 with Yale Restriction) Δ since Dec 11, 2023 = -17









-8.0 Draft

 $\Delta = +1.0$

-12 Draft

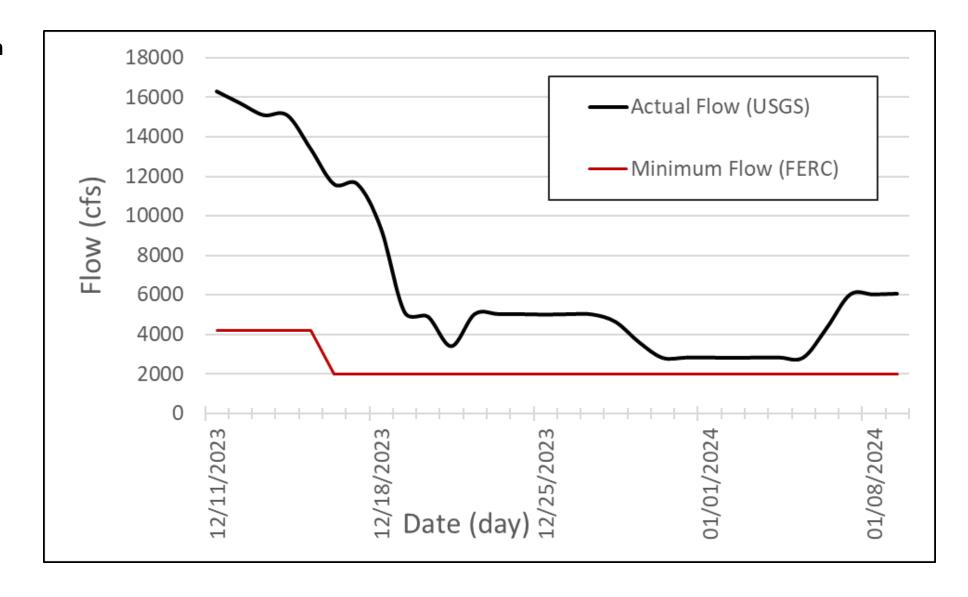
 $\Delta = + 0.3$

952 Elevation

-48 Draft $\Delta = -18$

North Fork Lewis River Stream flow downstream of Merwin Dam

Dec 12, 2023 – Jan 9, 2024



Hwy 503 Washout Dog Creek









Lewis River Fish Passage Report

December 2023

Merwin Upstream Collection and Transport Facility and General Operations

During the month of December, 1,296 fish were collected at the Merwin Upstream Collection and Transport Facility (MUCTF), which is less than the November total of 2,580. Winter steelhead) were the most prevalent species collected (n= 1,076), followed by late coho (n= 114), early coho (n= 84), summer steelhead (n= 15), Cutthroat (n= 6), and fall Chinook (n= 1). The number of NOR coho collected at the MUCTF in 2023 is approximately double the 2014-2022 average (Figure 1).

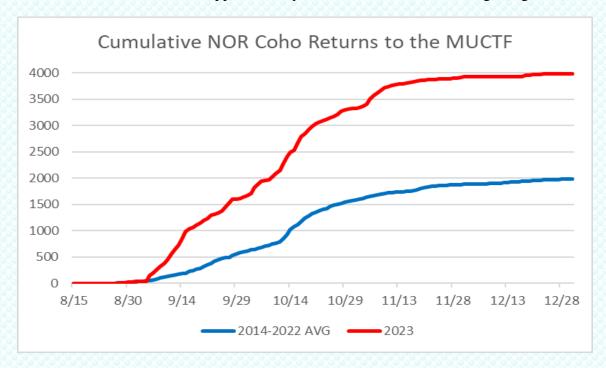


Figure 1. Cumulative number of Natural origin (NOR) coho collected at Merwin Adult Fish Collection Facility in 2023, relative to the 2014-2022 average.

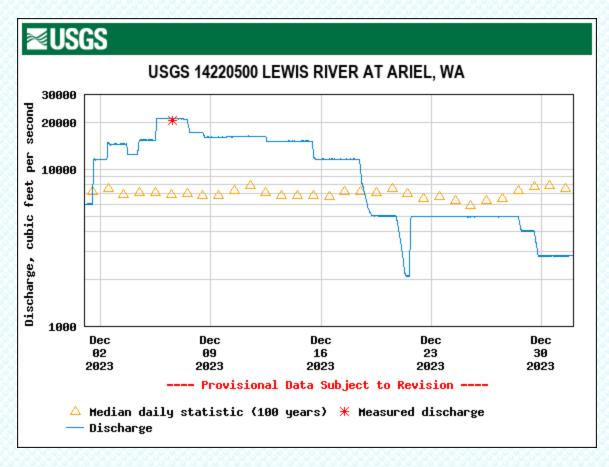


Figure 2. Flow in cubic feet per second recorded at the USGS Ariel, WA gauge (14220500) located immediately downstream of Merwin Dam.

The MUCTF was taken out of operation from December 4 through December 18, 2023, due to spill at Merwin Dam and scheduled quarterly maintenance activities. Lewis River flows below Merwin Dam ranged from approximately 2,100 to 21,000 cubic feet per second (Figure 2).

One coho collected at the MUCTF in December had been previously PIT tagged. This fish was tagged as a juvenile at the Swift Floating Surface Collector in November 2021. For calendar year 2023 to-date, a total of 135 previously PIT tagged fish have been collected at the MUCTF (92 natural origin coho, 32 winter steelhead, nine cutthroat trout, and two spring Chinook). 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).

Upstream Transport

Fish transported above Swift Dam slowed in December, relative to November (205 and 1,720, respectively). Similar to the previous few months, coho were the predominant species transported upstream (n= 199). Six (6) cutthroat trout and four winter (4) steelhead were also transported upstream in December. Year-to-date in 2023, a total of 7,110 early run coho (3,584 NOR and 3,526 HOR), 1,855 spring Chinook (1,594 HOR and 261 NOR), 1,728 late run coho (533 NOR and 1,195 HOR), 814 winter steelhead (633 BWT and 181 NOR)and 129 cutthroat trout have been transported upstream of Swift Dam. An additional 1,790 HOR coho have been transported into Yale Reservoir, as part of the Yale Habitat Preparation Plan.

Swift Floating Surface Collector (FSC)

The Swift Reservoir Floating Surface Collector (FSC) was taken offline December 5 through December 21, due to the SR 503 wash out and extreme debris loading in Swift Forebay. The facility was taken out of operation again December 25-26 due to extreme debris loading in the fish channel. A total of 12,032 fish were collected in December, which is the greatest number collected for the month since the facility began operation in 2012 (Table 1). The majority of fish collected were coho (n= 10,045), followed by Chinook (n= 1,930), steelhead (n= 31), cutthroat trout (n= 16), and Bull Trout (n= 1). The Bull Trout (620 mm fork length) was subsequently returned to Swift Reservoir.

Table 1: Total number of out-migrating salmonids (by species) collected at the Swift FSC and transported downstream of Merwin Dam during the month of December since 2013.

	Dec	ember Collection	n Totals by Run Y	Year at the Swift	FSC
Run Year	Coho	Chinook	Steelhead	Cutthroat	TOTAL
2013	11	148	1	7	167
2014	424	179	7	73	683
2015	1,795	642	40	105	2,582
2016	162	39	3	3	207
2017	3,452	1,819	112	190	5,573
2018	992	25	10	15	1,042
2019	42	74	5	4	125
2020	380	41	20	35	476
2021	3,756	511	61	33	4,361
2022	535	70	16	12	633
2023	10,045	1,930	31	16	12,022

Date																					N	Ierw	in A	ity R dult er 20	Trap																													< 20 inches)			
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31-Dec				$oldsymbol{\sqcup}$																								Ш					10						oxdot														2	ш		24	
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Annual	1204	528	135	12	0	0 0	5762	3513	2244	673	417	1681	1342	319	0	0	0	545	549	23	20	74	275	298	105		0	774	141	289	-	12	928	834	344	311		113	103	235	123	79	115	74	0	0	0	16	6	- 0			130	۰	0	28672	

Only hatchery verses wild distinctions are currently being made. All hatchery fish are labeled as "AD-Clip". 2 Total counts do not include recaptured salmon.

Fish Facility Report

Swift Floating Surface Collector December 2023

		Coho			Chinook			December 202 Steel	lhead			Cutthroat			Planted	
Day	fry	parr	smolt	fry	parr	smolt	fry	parr	smolt	kelt	fry	<13 in	> 13 in	Bull Trout	Rainbow	Total
1		45	7			17			0		į.			0	0	69
2		35	6		7	13	1		0		ŀ			0	0	62
3		98	10			12		1	2					0	0	123
4		65	6	ļ		23			0		1	2		0	0	96
5																1
6				İ							İ					İ
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20				į							ļ					İ
21																İ
22		1647	424	!		251			3		1	3		0	0	2328
23		511	312		3	99		1	4			1		0	0	931
24		645	277	1	1	50			3		1	4		0	0	981
25				ļ												i
26																
27		504	228	İ		16			0					0	3	751
28		1354	202			580			5			1		1	1	2144
29		1463	170			356			6			1		0	1	1997
30		1164	195	1		341			0		1	4		0	4	1708
31		583	94	İ		160			5		İ			0	0	842
Monthly	0	8114	1931	1	11	1918	1	2	28	0	0	16	0	1	9	12032
Total	341	27230	69004	234	239	6086	17	55	4407	31	0	548	48	14	2046	110300