

Lewis River Fish Passage Subcommittee Meeting

Agenda

Thursday August 11, 2022

1:00 to 3:00 pm

Teams

Introductions

Review Agenda and Meeting Notes

All

Updates

PacifiCorp Draft Fish Passage Plan

All

- Review elements
- Identify areas of alignment and/or issues of concern for each element

Next meeting – September 21st

- Agenda
-

**FINAL Meeting Notes
Lewis River License Implementation
ACC Fish Passage Subcommittee Meeting
August 11, 2022
MS Teams Meeting**

Attendees

Eli Asher – Cowlitz Indian Tribe
Christina Donehower – Cowlitz Indian Tribe
Amanda Froberg – Cowlitz PUD
Beth Bendickson – PacifiCorp
Eric Hansen – PacifiCorp
Nathan Higa – PacifiCorp
Chris Karchesky – PacifiCorp
Erik Lesko - PacifiCorp
Todd Olson – PacifiCorp
Bryce Glaser – WDFW
Josua Holowatz – WDFW
Peggy Miller – WDFW
Erin Peterson – WDFW
Bill Sharp – Yakama Nation Fisheries

Introductions, Review Agenda and Meeting Notes

Bryce Glaser, WDFW, briefly reviewed the meeting agenda. Regarding the July (and June) meeting notes, Todd suggested that if there were any significant changes they could be discussed at the meeting, otherwise they'll be finalized. *Action Item:* Review June and July meeting notes and provide comments to Beth Bendickson.

Updates

Eric Hansen, PacifiCorp, provided an update on the Yale downstream fish passage facility. Several technical memos are in the works for fisheries design, hydraulic model, marine design, and guide nets. He recently met onsite with the design team. The project design team is confirming the hydraulic model details and now the FSC is located 100 feet away from the plant intake. The design team will model up to ten feet away from the intake as well. The new FSC will be fabricated adjacent to the Saddle Dam Park launch ramp, on the side of it so as not to interfere with boating recreation. The design team is planning to use full length guide nets. Offloading fish will be a challenge. The project team will work through it to determine best course of action. Bryce asked about the design team, and if the invitations to site visits were extended to others outside of immediate group. Per Eric, so far, we have been just meeting with internal planners and designers as we are still at a high level of design. We could revisit this invite to others in the future. Bryce

said NOAA staff is limited but WDFW has some capacity with Danny Didricksen. It might help facilitate design. Eric said we can bring as many of the group along but at this point he would like to get the 30% design completed to gain more confidence. After that, we can tweak the design further with input from this group and others. Bryce, to clarify, said this subgroup is more of a technical group. When the time is right, please engage. Eric agreed.

Nathan Higa, PacifiCorp, provided an update on the Yale upstream fish passage facility. Most of the efforts so far have been on this upstream facility. Swift upstream is about two to three weeks behind. There is a draft design criteria memo for Yale upstream. They've gone through a round of internal review and the team is currently addressing the comments received. A draft will be ready for circulation to the ACC Subcommittee before the 30% design level is reached. The project team is working on developing design concepts for attraction flow and trying to determine powerhouse operation factors (e.g. plant discharge flows, timing of tailrace flows, etc.). They are also working on the determination of expected daily numbers of fish as well as working on a technical memo for the tailrace hydraulic model. There are configuration-type items to consider based on modelling results. He mentioned the Swift survey data and that the hydraulic models are being set up parallel to Yale.

Chris Karchesky, PacifiCorp, is expecting a preliminary Yale Smolt Behavior technical memo in August. From there he'll provide a narrative of where we're at. The memo looks at May-June data. The final technical memo that includes through the end of the field study (August) will be included in the 30% design materials.

PacifiCorp Draft Fish Passage Plan

Proposal Review Elements

Todd Olson, PacifiCorp, wants everyone to have a clear understanding of what's in the document and agreement on the level of detail that should be in the document. This includes the four project schedules and if there are things the group would like to see added to the schedule, we can talk about those.

As we walk through this, Bryce brought up that it has become apparent that we need to do better in formally documenting alternative analysis for the new fish passage facilities.

Regarding a review of facility alternatives, Todd's key question is what level of review is needed? If this is a 20-page document where it's specific on different items, there is the likelihood we'd have to pull folks off the design team who are working with Eric and Nathan to address them. Eli Asher, Cowlitz Indian Tribe, said he hadn't scoped anything and that it sounds like there has already been an alternative chosen. In particular, since it's called out in the Settlement Agreement for examples, he would like to see the work that was done to identify a floating surface collector (FSC) for Yale. Eli said his interest is in doing things the best way the first time. We are in a time crunch. Your team wants to make substantial progress quickly. He understands the position. He is glad PacifiCorp is doing that, while at the same time he feels like we've rushed to the types of facilities the Utilities are looking at. Regarding upstream facility, he has a hard time with the Whoosh system. He'd like to look at the tramway over the license term (trucking, etc.). The short version being he thinks we need to take a look at alternatives but doesn't necessarily know what they are, to make sure we're keeping with the intention of the Settlement Agreement.

Bryce said we should be doing due diligence of the Settlement Agreement and asked if there was other information used for each location (Merwin, etc.) as far as alternatives? Could we summarize that information and then add on to it? Maybe develop a table for each facility and consider the alternative/technologies available and also any obvious reasons why they aren't feasible. We could then cross them off the list. We could come up with a framework of things that we can look at.

Todd said this discussion was helpful as it defines the work product folks are looking for. He and Chris have talked about it. For the 30% design, some of this is already being looked at. Having a table and identifying pros/cons around effectiveness, O&M, costs (high level), will help us narrow things down.

Chris Karchesky, PacifiCorp, added that there has been effort done and lessons learned from designing and operating the Swift FSC. We don't want to get too far down the road but we are trying to get preliminary information together to provide meaningful conversations. As Eric mentioned, it's high level design considerations so far. There is a lot of discussion going on regarding getting fish out of a facility especially within a confined space such as the Yale intake. We are trying to get to a next step phase with the design where we can have more conversations going forward.

Bill Sharp, Yakama Nation Fisheries, asked about the tram and why was it not considered. Adaptability for the future. Funicular that runs up the side of the dam. Eric said, as with Merwin, it's quite a long distance to the top of the dam. In basic civil engineering designs, it looks good, however the project team is concerned with its operation. What scares us is mechanical failure. With a long distance to run, there is likelihood of more fish mortality in a system like that. We are concerned about power outages, water temp and oxygen levels in this long distance and what happens if a tram-car full of fish and gets stuck halfway up the dam.

Going back to the Settlement Agreement, Bryce, added that he would like to see an alternatives section. For example, Technology – here's what we think would work or not (pros/cons), then agree and move forward. Eric said he is getting an understanding of what folks want. We are lucky that we have a premier design team that's involved or has been involved with a number of fish passage projects. Todd said he liked Bryce's idea to put together a table that will ultimately fulfill the Settlement Agreement intent for alternatives. This would slow things down a bit, but he's agreeable to working up a table with items to continue the conversation so folks can move forward. Bryce doesn't want to delay progress but he doesn't want to reach the 60% design and then say why didn't we do this?

Eli asked about fish transport plan. Todd said Chris is looking at the one prepared prior to phase one fish passage and will update it for the new facilities/operations. The next step is to identify the key things we want Chris to consider as he is developing this plan. Bull trout (Consult w/Jeff at USFWS) and summer steelhead. What do we want to point out in the Fish Passage Elements document? Bryce liked the idea of pointing to the need to develop the Transport Plan. Formally WDFW requires permits to move resources. In FERC license situations, the Transport Plan fulfills that. He envisions the document to be a living document, updated annually or as we learn things. We should make a species list. Issues with non-natives and other such as hatchery origin vs. natural origin. We'll eventually be transitioning to natural origin fish. Regarding summer steelhead, WDFW may be bringing forward summer steelhead as a transport species. It will be an ACC

decision to formally adopt it. In his view, it doesn't change a lot other than transport of steelhead during all months of the year. Bryce, Eli, and Todd are in agreement with developing a Transport Plan.

Eli asked about the title of the future fish passage draft document. Todd is open to ideas; it's intended to guide the design teams and identify the intent of future operations. For example, it should use NMFS and USFWS fish passage criteria. We've heard the USFWS is still working on their bull trout passage document. Bryce said WDFW is ok with a facility that works for all species subject to the Services approval. Todd said yes, we can give guidance to the design team that meets the needs of bull trout and anadromous salmonids, but with the understanding that the Services need to give approval of all designs.

Todd said the next revision of the document will be more of a guidance document. It will not go into what happened over the last few years, but be forward-looking. Eli added if we are going to point to the Settlement Agreement, then maybe remove section 4.1.9. Bryce agreed.

Downstream Fish Passage Facilities

Eli appreciated moving from March to June to November to June for the period of fish passage operation at Yale downstream passage facility. Go with adaptive management but error on the side of a wider operation window. It could be in the fish Transport Plan. Todd said there will need to be allowance for maintenance shutdowns. It would be good to identify a general timeframe. To Eli's point about water quality and fish decisions, we need to look back to what the ACC approved on operating the Swift FSC. It had to do with water temperature and fish numbers. We intend to apply at Yale what we applied at Swift. Eli acknowledged the engineers need facility downtime, but hesitates to apply the same temperature regimes from one facility to another. Josua Holowatz, WDFW, said we could miss a significant amount of fall migration by not operating in October. He doesn't want to be so descriptive saying November to June. Bryce said maybe instead of "expected operation period" we could use "core operation is expected to be...based on evidence in September..." and have some language related to what we learn from operation. Todd said what's important is to let the design team know based on the water quality, maintenance could be from July through September.

Regarding the Merwin downstream facility, Bryce noted a bypass facility is a deviation from what's called for in the Settlement Agreement. Todd disagreed reading SA 4.1.8(d). Bryce said lower down it talks about consulting with agencies on downstream passage. More discussion is needed because it deviates from the Settlement Agreement standard. It's different than the initial described approach. Todd wanted to make sure that Bryce was aware of the language. Eli noted he would like to see more of the conceptual design. Todd asked what information would he like to see? Eli wasn't sure what the Services are going to want; and the ACC will need to agree on the facility. The facility should be able to mark fish and provide for collection. At a minimum we would want to see examples of bypass systems at dams or a conceptual to get our minds around what Services are wanting with respect to bypass. We don't have any information to make that call of deviating from the Settlement Agreement. Bryce added we may need to have the capability to handle all fish. The big issue is temperature concerns. We need more detail about what it's going to look like before we can support it. Todd said he appreciated all the feedback.

Expansion of Upstream Fish Passage Facilities

Specific to designing for the appropriate numbers of fish, Todd said that Jeremiah provided the proposed bull trout numbers based on years of tailrace netting. Chris has looked at salmon and steelhead and said essentially it's about capacity. There is a lot of history at the Merwin trap and haul collector. The perspective from the initial selective approach and what has been the historical run size at Merwin. We have ten years of data. The initial consideration was to look at an annual basis for three target species and what was the total number of adults that arrived. What was the percentage in one or two days? For coho, they are currently working with 10% to 12% possibly showing up in one as worst case scenario. Other consideration is that you're putting them in a reservoir. Combined with resident fish and others, you start to see what capacity looks like. With swim-through operations, how many do we expect to swim through Merwin reservoir and get collected at Yale?

Eli talked about future capacity to gather fish. He's interested in the worst-case scenario when we get 12% showing up in one day at an upstream facility. Chris said the most we've collected is 2,000-3,000 fish (we're collecting 14-16,000 annually). He didn't think 150 fish was that far out considering how many we take in at Merwin. You design the trap attraction according to criteria and it's good for 1, 10, or 100 fish.. The "entrance door" needs to be a certain size. Eli wanted to make sure the door is sized for all capacities. Bryce is concerned in using EDT values. The language is such that future facility expansion will be limited.

Chris said this is a difficult conversation since we don't have all the information. We can make this more descriptive based on our understanding and approach. Bryce said hatchery fish as well as natural origin fish should be considered leading to potentially larger transport numbers. Having a buffer will save us rather than having to go back and rebuild something after the fact. Todd asked if Bryce was thinking of placing all hatchery fish and having them swim up Merwin, rather than it be a selective process. Bryce said we may want to always transport some hatchery fish into the reservoirs. EDT numbers are helpful to get us to a general number of fish, but we need a buffer to give us more flexibility so we aren't having to go back and redesign after two years. Todd asked what kind of buffer would he be looking at? As far as what Bryce has heard on previous updates, he said we would be using Merwin as a guide to size the entrance and holding areas that would be used to truck transport fish. He's concerned with designing to a daily collection of only five bull trout. He is on board in designing entrance and attraction flows, and have ability to add fish holding capacity in the future. Chris said we are on the same page. It's the holding capacity of around 150 fish that is the starting point, but we will have the ability to expand the holding area if needed in the future. Again, he said we are currently working on this, and this will all be a more meaningful conversation once the 30% design is out for review.

Determination for Upstream Swim-Through Fish Passage Operations

Todd asked what other information is needed to describe the intent to explore the Swim Through option in the future? Bryce noted we should also consider a combination option (select trap/haul for types of fish or certain numbers and swim through for some portion of the run). We may not want to be locked into "legal" descriptive language. Todd noted the document should identify the process that the ACC could work through and reach a recommendation. Ultimately the Services have the final authority.

No discussion occurred for the sections below.

Timing of Fish Passage Measures
Fish Marking
Kokanee Mitigation
Habitat Preparation and Transportation Plans
Monitoring and Evaluation Plans
Lewis River Habitat Enhancement Fund

Todd shared the tentative project schedules and asked if there were other milestones to add. Bryce mentioned the Alternative Analysis. Eric said in the past, usually the Alternative Analysis is done concurrent with the 30% design. Bryce said the Settlement Agreement calls out a WDFW and Services design review. Todd thought it could be included in both the 30% and 60% design and that he would align it with the Settlement Agreement requirements. Bryce added that he thought the Settlement Agreement also called for formal delivery of the detailed schedule itself. A suggestion for the fish passage document was made to add an introduction and include a brief summary of planned studies and how those would be brought forward to the team.

Todd said he appreciated everyone’s discussions. He’s on vacation next week but his intent is to get a new draft plan out to the team before the next meeting.

Action Items from August 11, 2022	Status
Review June and July meeting notes and provide comments to Beth Bendickson.	

Next meeting: September 21, 2022.

Meeting adjourned at 3:00 PM.