

Lewis River Fish Passage Subcommittee Meeting

Agenda

Wednesday May 18, 2022

3:00 to 5:00 pm

Teams

Introductions

Review agenda and meeting notes

Updates

- Yale DS Design – Hansen
- Yale DS Studies – Karchesky

Introduction /Presentation

Olson/Higa

- Upstream Projects

Subcommittee Discussion

Glaser/Group

- Upstream Projects – Vision for and Timing of full fish passage

Next meeting – June 15th

FYI: Fish Passage Conference

13–16 June 2022, Pacific Northwest National Laboratory

Fish passage 2022 - opportunities and innovation in a changing world

[Fishpassage – Fish Passage 2022 \(fisheries.org\)](https://fisheries.org)

(In-person and virtual options)

FINAL Meeting Notes
Lewis River License Implementation
Aquatic Coordination Committee (ACC)
Fish Passage Subcommittee
May 18, 2022
MS Teams Meeting

Attendees:

Steve Manlow – LCFRB
Peggy Miller – WDFW
Bryce Glaser – WDFW
Josua Holowatz – WDFW
Eli Asher – Cowlitz Indian Tribe
Bill Sharp – Yakama Nation
Jeffrey Garnett – USFWS
Logan Negherbon - NMFS
Todd Olson – PacifiCorp
Eric Hansen – PacifiCorp
Chris Karchesky—PacifiCorp
Amanda Froberg – Cowlitz PUD
Erin Peterson—WDFW
Aaron Roberts—WDFW
Sam Gibbons—WDFW
Nathan Higa—PacifiCorp

Bryce briefly reviewed the meeting agenda sent out by Peggy. The group conducted a round of introductions.

Eric Hansen provided an update on the Yale downstream fish passage facility. He reported that PacifiCorp expected the facility to be similar to the Swift Floating Surface Collector. He reported that the design team has been assembled, including members that worked on Baker, North Umpqua, and Lewis River facilities. He explained that the team is currently working on developing design criteria for the facility, including fishery-related criteria and biophysical setting. In response to a timing-related question from NMFS, Eric said that the immediate goals were to finish bathymetry surveys in May, and complete CFD modeling by the end of July, a technical memo is expected by October, and a presentation summarizing this information provided to the ACC by the end of 2022. Logan mentioned that he expected that the Yale downstream facility would be substantially improved over the Swift FSC. Eric explained that lessons learned from the Swift facility and other similar northwest facilities will be incorporated into the design for Yale and noted that debris loading in Yale is expected to be less problematic than in Swift but will remain a challenge. He also noted that reservoir level fluctuations is a formidable challenge in the Lewis River.

Bryce reminded the group that early review of design criteria, schedules, and studies would be helpful to prevent late-stage issues. Eric agreed that early communication and interim deliverables will help to keep the project on schedule and on track.

Chris Karchesky provided an update on the Yale fish migration study (see slide, embedded). He noted that the study was being conducted simultaneously with the Swift Reservoir floating surface collector’s annual collection efficiency study. He reported that 300 juvenile coho were being collected in Swift, tagged, and released both upper- and mid-reservoir in Yale to determine behavior in the forebay. He summarized the most current data from the May 11 release which show that a number of tagged fish had already been detected near the dam, but that the majority of tagged coho were still widely distributed throughout the reservoir. Chris reported that 119 of the 300 planned fish had been released to date. The evaluation is currently on schedule.

Yale Fish Behavior Study – Spring 2022

Release Point	Study Goal	Released as of 5/11/22
Upper	195	79
Mid-Reservoir	105	40
	300	119

Preliminary Data Summary

- From receiver data downloaded on May 13, 2022, 44 individually tagged coho were detected at fixed stations near the dam.
- From last mobile survey (May 16, 2022), showed that tagged coho were still widely distributed throughout the reservoir.

Lewis River Fish Passage Subcommittee Meeting
May 12, 2022

Todd provided an update on the schedule for Yale and Swift upstream transport facilities design, and introduced Nathan Higa, the project manager for the projects. Nathan reported that his teams were conducting survey work and planned to complete the survey by next week. Following the survey work, he expects to begin facility siting. Nathan also provided slides with plan-view images of the Swift and Yale facilities with initial siting options.

Bryce introduced the topic of the vision and timing for full fish passage through the Lewis River. He suggested that the group discuss and develop short- and long-term objectives/vision to make recommendations to the ACC. He explained that he had reviewed documents from the discussions going back to 2016 to provide context. He reviewed a conceptual passage model developed in 2016, and discussed the “swim-through” and more selective options.

Eli offered that the Tribe's position during relicensing was in support of volitional passage but noted that he was not a technical expert and didn't know if volitional passage was technically feasible through the high-head dams. Eric noted that the distance and elevation change through the basin was imposing and creates technical challenges. He also solicited ideas from the group (and outside resources) for technological solutions to passage through the Lewis.

Bryce suggested stepping through passage by life stage. The group briefly discussed downstream transport of juveniles and generally agreed that juvenile salmon and steelhead collected at the collection facilities should be transported directly to the lower river below Merwin Dam.

The group discussed the upstream transport vision, including recovery goals, VSP parameters, hatchery interaction. Steve Manlow noted that outcome goals for healthy, harvestable populations had been developed within the Columbia Basin Collaborative process. He also suggested developing several alternatives and working through a pro/con analysis of the options was appropriate. Eli noted his preference for an eventual operation of fish passage that allow adults to self-sort through reservoirs to fulfill VSP parameters. Josua noted that passage should be considered for multiple species, particularly lamprey. He reported numerous Pacific lamprey interactions on the lower Lewis. Chris noted that one of the problems with lamprey passage is that outbound juveniles tend to be benthic, preventing their collection at high-head dams. Bryce noted that several "non-transport" species will require discussion and coordination, and Eric identified Kokanee as a design criteria and management issue. Bryce expanded on the topic, noting tiger muskellunge, summer steelhead, and fall Chinook.

The group discussed kokanee and anadromous sockeye. Chris noted that kokanee are often spilled from Merwin, and that anadromous sockeye have not returned to the Merwin trap as a result. Bill reported that he had spoken with the Tribe's sockeye expert, and he confirmed Chris's observation that kokanee rarely returned as anadromous sockeye.

Bryce reviewed next steps identified during the meeting:

- Review settlement agreement language around adult passage
- Develop a pro/con list for various passage configurations
- Develop thresholds for switching from selective passage to swim-through passage (assuming this order of operation)
- Develop a list of management issues (initial list below)
 - Management of passage vs non-passage species
 - Kokanee fishery