

MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 02 July 2019 Willamette Fish Facility Design Work Group meeting.

The meeting was held in the Fireside Conference Room, USACE Block 300, Portland, OR. In attendance:

Last name	First Name	Agency	Email
Ament	Jeff	NWP-PM-F	Jeffrey.M.Ament@usace.army.mil
Buccola	Norm	NWP-EC-HR	Norman.L.Buccola@usace.army.mil
Fielding	Scott	NWP	Scott.D.Fielding@usace.army.mil
Hudson	Mike	USFWS	michael_hudson@fws.gov
Janes	Kelly	NWP-PM-E	Kelly.A.Janes@usace.army.mil
Jundt	Melissa	NMFS	melissa.jundt@noaa.gov
Kelley	Elise	ODFW	elise.x.kelley@state.or.us
Khan	Fenton	NWP-PM-E	Fenton.o.khan@usace.army.mil
Kovalchuk	Erin	NWP-ODT-F	Erin.H.Kovalchuk@usace.army.mil
Loffink	Ken	ODFW	Ken.j.loffink@state.or.us
Murauskas	Josh	Four Peaks Consulting	jmurauskas@fourpeaksenv.com
Phillips	Marie	NWP-ENC-HD	Marie.J.Phillips@usace.army.mil
Pierce	Todd	NWP	Todd.M.Pierce@usace.army.mil
Reis	Kelly	ODFW	Kelly.E.Reis@state.or.us
Rerecich	Jon	NWP-PM-E	Jonathon.G.Rerecich@usace.army.mil
Richards	Natalie	NWP	Natalie.A.Richards@usace.army.mil
Royer	Ida	NWP-PM-E	Ida.M.Royer@usace.army.mil
Schlenker	Steve	NWP	Stephen.J.Schlenker@usace.army.mil
Schwabe	Lawrence	Grand Ronde Tribe	Lawrence.Schwabe@grandronde.org
Trachtenbarg	Dave	NWP-PM-E	David.A.Trachtenbarg@usace.army.mil
Weiland	Mark	Four Peaks Consulting	mweiland@fourpeaksenv.com
Ziller	Jeff	ODFW	Jeffrey.S.Ziller@state.or.us

On the phone: Hudson, Kelley, Loffink, Murauskas, Pierce, Reis, Richards, Schwabe, Weiland and Ziller.

Meeting Purpose:

Finalize previous meeting notes. Provide an update on status of active design projects and presentations and discussion of the Cougar High Head Bypass Alternatives Workshop and Foster Fish Ladder Improvements.

1. Final decisions or recommendations made at this meeting.
 - 1.1. June meeting minutes were approved.
2. Upcoming reviews

Document	Review Dates
Cougar DSP 60% Plans and Specs	August

Cougar physical model site visit	end of July
Detroit EIS public review	Closes 23 July
Foster Ladder Draft Assessment Report	September

3. Updates on active design/construction projects

3.1. Fall Creek AFF – The newly installed pipe lining is sloughing off into the ladder. The contractor is coming out to look at the pipe but it requires a ladder outage. Richards is writing an MOC as soon as the dates are known from the contractor. Richards will coordinate with Walker and Taylor. The outage will be two to three days. The project traps fish on Monday and Thursday. Richards is trying to see if can do the outage on Tuesday and Wednesday but it might not be possible. Reis asked why they need to do the outage now rather than waiting till there are less fish. Richards said that the lining pieces could impede the flow and cause injuries to the fish. No damage to the pipe is expected. Kelley asked what the lining material is like. Richards said that this is like an epoxy that is very hard. The contractor did not install the lining thick enough originally and had to go back and add a second coat. Richards thinks that this second coat is coming off but they need to verify this with the camera.

3.2. High Head Bypass

3.2.1. Presentation and discussion to prepare for the Cougar HHB workshop scheduled for July 17 – This presentation is of conceptual ideas of bypass for Cougar. The major problem for bypass is that the elevation difference between maximum forebay and minimum tailwater is about 400' and the seasonal forebay fluctuation is ~150'. The workshop is scheduled for Block 300 on 17 July but the room location is to be announced. Reis suggested having the meeting in Salem but the AE contract is limited to Portland for travel. The charrette (or workshop) will focus on ideas for a bypass not RME studies. The 30% EDR is planned for late August and the final EDR should be completed in June of next year. Detroit bypass alternatives is an option within the same contract if funding is available. The AE team is evaluating 6 alternatives for Cougar. The goal of the contract is for the contractor to provide a minimum of one alternative for Cougar that meets all the NMFS criteria and all the rest of the alternatives will meet the HHB criteria. Phillips gave an overview of the six passage routes being considered for Cougar. Khan reminded the group that the fish collector (FSS) is common and would be connected to all 6 bypass passage routes/alternatives. The 150 feet of operational range is a major hurdle to connecting a pipe to the FSS. Phillips reviewed the current ideas for moving fish down the slope of the dam without an extreme vertical drop. Jundt asked if any Archimedes screw were still in existence. Trachtenbarg thought there was one used in Sacramento but it was decommissioned. Ament pointed out that at this point all ideas are on the table. This presentation is just an overview; more details will be provided at the charrette on July 17. An RME study is scheduled for late summer/early fall at Green Peter to evaluate fish stress in pipe vs truck transport.

3.3. Foster AFF ladder Improvements

3.3.1. Presentation and discussion of alternatives for improvements – Budai has requested a delay in the schedule. Three members of the PDT have turned over and the team spent additional time on operational alternatives. The report would not be ready in the timeframe original proposed. Schlenker summarized the problem of temperatures and intake locations at Foster. Buccola modeled the flows from Green Peter to see if using spill could warm up the

Foster adult ladder water but it was not enough of a temperature increase to meet the design criteria and it also warmed up the holding ponds and hatchery intake. The team would like to use temperature targets in the South Santiam rather than a standard temperature in the spring and cold wet years. When the South Santiam is cooler, not only would it be very hard to warm up the fish ladder enough but the fish would probably delay migration and arrival in the Foster tailrace. The draft assessment report is due in September and the final assessment report is scheduled for December. The DDR process starts after the assessment report.

- 3.4. Foster DSP - Fish Weir Design Improvements- Managers have decided to delay awarding the contract this summer because of time constraints and the design is not complete. There are concerns about how safe the plunge pool is for fish and using the Obermeyer weirs because this is a new design. Ebner will use a 3D CFD model to verify some concerns ahead of a new contract. The team feels like the construction will still be next February/March. The EDR will be out for review in the next couple of months.
 - 3.5. Cougar DSP – Plans and Specs 60% is about to go out for internal review and should be out to the WFFDWG group in August. A regional model site visit is scheduled for the end of July/early August. The PDT had an internal meeting at the model last week. No entrance modifications were made. Fielding said that the contractor will make a video showing different elevations in a side by side comparison. EA update- Janes needs to submit the biological assessment and Jundt offered to help facilitate a meeting with a NOAA representative due to some absences. Hudson will be mailing a copy to Chris Allen. Fielding will send out information on the model site visit.
 - 3.6. Cougar DSP 2.0 (new PDT) – Ament is the PM of this newly formed PDT. The focus for this team is to determine the best method of fish passage without hydropower generation. That is, re-evaluating if the FSS is the right solution if hydropower goes away. This effort will be contracted out. The contract is out for bid and once a contractor in-place, the Corps will be host meetings with WFFDWG to brainstorm ideas.
 - 3.7. Detroit Temp Control and DSP – There are four main efforts going on – SWS DDR, FSS DDR, SWS Plans and Specs and the EIS. The SWS DDR is almost wrapped up; the team is addressing the last of the comments. The FSS DDR comments were received from ODFW and NOAA. SWS Plans and Specs 30% is expected to be out for FFDWG review in September. The EIS is currently out for public review until 23 July. There are two upcoming IEPR – independent external peer reviews. The final EIS will include the comments and the responses. Janes is setting up a meeting to discuss the effects/no effect to fish, basically blasting impacts if fish are placed above the dam. Jundt suggested having a meeting with her Supervisor Marc Liverman.
4. Next Steps
 - 4.1. Next WFFDWG meeting currently scheduled for August 6
 - 4.2. Upcoming reviews – No reports are currently out for review. RME Lookout Point fry survival report comments are due 03 July.