

## MEMORANDUM FOR THE RECORD

Subject: DRAFT minutes for the 16 November 2016 HMT meeting.

The meeting was held at the ODFW Adair Office in the large conference room. In attendance:

Last	First	Agency	Email
Couture	Ryan	ODFW	<a href="mailto:ryan.b.Couture@state.or.us">ryan.b.Couture@state.or.us</a>
Garletts	Doug	NWP-OD-V	<a href="mailto:Douglas.F.Garletts@usace.army.mil">Douglas.F.Garletts@usace.army.mil</a>
Graham-Hudson	Bernadette	ODFW	<a href="mailto:Bernadette.n.graham-hudson@state.or.us">Bernadette.n.graham-hudson@state.or.us</a>
Grenbemer	Greg	ODFW	<a href="mailto:Greg.A.Grenbemer@state.or.us">Greg.A.Grenbemer@state.or.us</a>
Helms	Chad	NWP-OD-V	<a href="mailto:Chad.K.Helms@usace.army.mil">Chad.K.Helms@usace.army.mil</a>
Kovalchuk	Erin	NWP-OD-TF	<a href="mailto:Erin.H.Kovalchuk@usace.army.mil">Erin.H.Kovalchuk@usace.army.mil</a>
Kruzic	Lance	NMFS	<a href="mailto:lance.kruzic@noaa.gov">lance.kruzic@noaa.gov</a>
Kremers	Kurt	ODFW	<a href="mailto:kurt.kremers@state.or.us">kurt.kremers@state.or.us</a>
Sharpe	Cameron	ODFW	<a href="mailto:Cameron.sharpe@oregonstate.edu">Cameron.sharpe@oregonstate.edu</a>
Traylor	Andrew	NWP-OD-TF	<a href="mailto:Andrew.W.Traylor@usace.army.mil">Andrew.W.Traylor@usace.army.mil</a>

Garletts, Graham-Hudson, Grenbemer, Helms, Kovalchuk, Kruzic and Kremers called in.

1. Final results from this meeting
  - 1.1. October minutes were approved.
2. The following documents were provided or discussed. Documents may be found at: [http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/Willamette\\_Coordination/](http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/Willamette_Coordination/)
  - 2.1. 161019 Agenda (Traylor)
  - 2.2. HRME Draft Preliminary Data Summary (Sharpe)
  - 2.3. SSNT New Foster Trap Efficiency (Sharpe)
3. Action Items.
  - 3.1. [Oct 16] Marion Forks/Minto – ACTION: Grenbemer will send out a summary of the power outage. STATUS: Walker sent out an MFR with input from Grenbemer.
  - 3.2. [Oct 16] Marion Forks/Minto – ACTION: Traylor will look into a remedy for hoist breaker. Status: It might be possible to move the breaker but it would require redoing the wiring. An electrician is looking into it from the project. It is a big project and it could be contracted out. Traylor will follow up next month and examine if the situation is the same at Foster.
  - 3.3. [Oct 16] Detroit – ACTION: Traylor will follow up on any further actions for the Detroit project to take on the power problems. Status: The power analyzer has not indicated any anomalies despite the crazy weather. The power analyzer will be removed shortly and the engineer suggests not changing any settings and has no further recommendations at this point.
  - 3.4. [Oct 16] Biosecurity for Marion Forks - ACTION: Grenbemer/Couture will get a cost estimate for biosecurity enhancements to Marion Forks. Status: A meeting at Marion Forks was held the week of 11 November to assess Marion and Horn Creek. Horn Creek is much smaller and easier to deal with. The weir that was installed earlier this year could stay year round if needed. Screens would have to be looked at. A rough cost estimate is \$1.5 million for the UV filtration system for a 34cfs system on Marion Creek. The plan for upgrading the biosecurity is on hold while waiting for a fish health assessment from Sarah that will provide more options/information. This will be an update next month. One immediate issue is an asbestos

lined intake pipe that needs to be replaced. The work window would be from late November to April. Traylor needs two years for an item to get into the budget. This means at the earliest - FY 18. Two water sources come into the facility and it might be beneficial to filter both water system. Horn Creek usually runs about 20 cfs but have water rights up to 32cfs. Traylor asked about how the lack of biosecurity upgrades affects the fish release study adult returns. Sharpe answered that fish will be returning this year but next year and the year after will see larger numbers. ODFW won't be outplanting steelhead above the dam yet. In 2017, the steelhead from the paired release study will be returning. Four years ago when the study started, this issue was considered but not resolved. Now steelhead will be returning to Marion Forks. The fish are on site from late July-Nov (marked in July/August and released in November). The fish were released at the Dry Creek site and Packsaddle. The Packsaddle release was supposed to occur at Minto but couldn't because of the hydraulic wave near the ladder entrance. There are about ~28,000 fish for a study above the dam that did not get PIT tagged. The BiOp calls for a reintroduction of wild winter run steelhead above Detroit. Allowing the returning fish to spawn would create a run of winter steelhead that are 2<sup>nd</sup> generation hatchery fish. There needs to be a plan in place for the steelhead that return this year and in bigger numbers next year. There is a question if they should spawn below the dam or become brood stock for outplanting above the dam. Ten pair would be a low founding population and it needs to be considered if there is any benefit to keeping that lineage. Kruzic suggested letting them spawn and in 2020 start full blown reintroduction. Many years ago, steelhead were put fish into the Big Cliff reservoir. Sharpe will check on how much habitat is available. ODFW estimated a couple of hundred will return but there is still uncertainty in the estimate. At Minto, now that PIT detection in the flume works, any PIT-tagged steelhead would be discovered and diverted. RME and steering committee advised against putting steelhead above the dam until the biosecurity enhancements are in place. [AWT1] The new tool for making artificial redds would work in the Breitenbush to put the correct species above the correct dam reducing the pathogen problem. The project would need to get green eggs then eye them up, ideally out of the basin.. The artificial redds would then be made with these eggs. Kruzic was okay with this idea. ACTION: Traylor will raise the artificial red issue at WFPOM and the Steering team. Sharpe will calculate the expected adult run size from Tom's releases. Grenbemer will investigate putting a couple of stacks down the IPS. [RC2]

#### 4. Updates.

- 4.1. **Marion Forks/Minto** (Grenbemer) – All North Santiam smolts have been brought down. There are 8 ponds in use. So far, low mortality and low BKD. There was a scheduled BPA outage that created a huge spike in gas levels but the project did not get the message in time. There is no cell service at the project so the app on Grenbemer's phone did not work. The communication between Detroit and Minto needs to be better. There were no mortalities associated with the event. In retrospect, Minto would not have fed the fish and would have added more boards to reduce stress. All pumps are working with the new CT cards. One ground fault fixed by electricians. Traylor would still like to change the direction of the JFR release pipe especially at high flows. A local shop could fabricate a removable part but it needs to fit perfectly to the release structure. The fix should be made from an engineer approved drawing because staff will be out in high flows trying to get the parts to work together.
- 4.2. **South Santiam/Foster** (Boyd) – Ladder attraction analysis will be discussed later.
- 4.3. **McKenzie** (Kremers) – Juveniles are doing well. Low mortality and small pathogen problem but going away with the cooler water temps. The compressor of the new chiller went OOS due to low oil but now works great. Egg and fry worked has started. New egg injector tool was tried but the gravel recruitment is low in the McKenzie area at Trail Bridge. The tool would have

worked better with more gravel. Crews distributed many eggs which should translate to a lot of smolts. After the spawning surveys, crews also completed the carcass tossing into the river.

- 4.4. Cougar Trap** (Helms) – Shut down on 13 October.
- 4.5. Fall Creek** (Garletts) – Shut down operations and have broken ground on the new facility. The drawdown spilling started on 14 NOV. Taylor will be giving an update but not a lot of fish have been reported from the screw trap crew.
- 4.6. Willamette/Dexter** (Peck) – No update
- 4.7. Leaburg** (Withalm) – No update
- 4.8. Fish counts at Bennett and Leaburg** (Sharpe) – Presented later among preliminary results discussion.

- 5.** Preliminary results from 2016 spawning surveys (Sharpe) [**Handout/presentation**] This presentation is the draft version. The final results will be posted to the website. All the data from spawning surveys have been compiled for 2016.

- 5.1.** HRME Preliminary Data

- 5.1.1.** Spawner abundance: For the North Santiam the spawner abundance vs outplanted survivor matches closely but why it did not hold true for the South Santiam is unknown. There could have been an error from the spawning surveyors. McKenzie had a big push of hatchery fish above the dam with some fallback but the pHOS was higher than anticipated. Above Cougar, the outplant estimate and the outplant survivorship is very close. Fish appeared to spawn more successfully possibly because they were outplanted further up the river and later in the season. The pre-spawn mortality was low this year but Sharpe said that in the past this data has been biased. The data was based on carcasses in the river but some radio telemetry studies have found many more carcasses that were last detected in the reservoir or along the stream above the high water mark, which resulted in higher pre-spawn mortality estimates than those obtained strictly from carcass recoveries. There is no data for above Elk Creek but surveyors observed spawners in the river between the outplant location at Frissell Crossing and the confluence of the South Fork with Elk Creek. Middle Fork Willamette – started raining and could not do the surveys. Fall Creek surveys, expanded to include reaches below Fall Creek Dam, were intended to ultimately allow a determination of if the new construction influences fish distribution in the future.. The data includes the 15% pre-spawn mortality and still having issues with fish being removed from predators and poachers. Sharpe feels confident that the estimate is accurate.

- 5.1.2.** pHOS - All pHOS will change when the real otolith correction data comes in. There were no surprises in this data. For Fall Creek, two fish were recorded as clipped. A surveyor could have made a mistake or two clipped fish could have gotten into the truck.

- 5.1.3.** Otolith – waiting for the corrected data

- 5.1.4.** Pre-spawn mortality - good everywhere surveys were conducted except below Dexter

- 5.1.5.** Outplants – Sharpe needs breakdown of males/females. Helms and Garletts will send data and then the numbers will be adjusted.

- 5.1.6.** Bennett counts – those are the counts that will be used to construct the data requested between Bennett and Leaburg

- 5.1.7.** Leaburg - Still getting this data

- 5.2.** South Santiam New Foster trap effect: new trap vs. old trap

- 5.2.1.** The first tab is of wild fish and the new trap has a dramatic decline in trap efficiency compared to the old trap. In 2014 & 2015, it was thought that because the 2010 brood

above Foster failed, 4 and 5 YO adults might not have been attracted into the trap (they must have been born below Foster). That should not have been an issue with adults returning in 2016 fish. The source of the problem is unknown but work is ongoing.

**5.2.2.** Second tab of hatchery fish is much more complicated due to the need to incorporate estimates of harvest and influence of the recycling program. There are fewer assumptions in the natural born fish so the data is more reliable. It appears that the old trap was not very efficient and the new trap is a little worse. For 2016, Sharpe had to use averages for hatchery spawners and harvest. There are also a lot of unaccounted for fish in 2016 and Sharpe will double check the math on that one. It could be due to the estimates. Varying conditions of spill could affect the data.

- 5.3.** All scale samples, otoliths and coded wire tag information has been submitted for this year.
- 5.4.** Foster trap attraction issues -Chris Caudill's group has preliminary results and found no smoking guns. Water samples are being analyzed for potential olfactory cues that are different in the new water supply. There is evidence that fish were entering the ladder but not making it to the presort pool. It is possible that the fish entered during the day but left at night because they are not accounted for even with video surveillance. NOAA has some low cost suggestions to help the situation. For example, tunnel leading to the trap is too dark so light it up during the day. **NOAA will forward these recommendations.** There was a recommendation to use effluent water from juveniles but the time has passed to do this for Chinook. The old Foster trap did not have any olfactory clues so not sure why the new one needs it, however the entrance to the fish ladder was adjacent to the rearing pond outflow, possibly adding some attraction value. Lead for the winter steelhead work has been handed off to Caudill but on the ground winter steelhead surveys might come back to ODFW. There is no pre-new-trap steelhead spawning data to use in a before/after comparison. The final solution to the attraction problem may be a number of small fixes instead of one specific fix. It could be that the new structure has a new "smell" and after a couple of years it might work better. This has been the case in other new structures. The temperatures had small tenths of degree differences and that might be part of the puzzle. There is a degassing tower but maybe the dissolved gas levels might be different in the ladder than expected. Also discussed was the possible addition of raceways for juvenile holding/rearing. Rearing pond effluent could be directed to the ladder entrance.

-----Original Message-----

From: Piaskowski, Richard M CIV CENWP CENWD (US)  
Sent: Tuesday, January 17, 2017 12:05 PM  
To: Traylor, Andrew W CIV USARMY CENWP (US) <Andrew.W.Traylor@usace.army.mil>  
Subject: RE: HMT Meeting Minutes

You might also confirm with Ian that the Steering Team " advised against putting steelhead above the dam". I didn't hear they had discussed this.

-----Original Message-----

From: Piaskowski, Richard M CIV CENWP CENWD (US)  
Sent: Tuesday, January 17, 2017 9:43 AM  
To: Traylor, Andrew W CIV USARMY CENWP (US) <Andrew.W.Traylor@usace.army.mil>  
Subject: RE: HMT Meeting Minutes

Andy,

The NOV notes state "RME and steering committee advised against putting steelhead above the dam until the biosecurity enhancements are in place." I think it would be more accurate to state " ODFW stated at the RM&E Team meeting it did not support releasing steelhead above Detroit Dam until the biosecurity enhancements are in place." Other RM&E Team agencies did not weigh in on this concern, and didn't make any specific recommendations regarding release of steelhead, nor "advise against" putting steelhead above the Dam.