MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 18 February 2015 Willamette HMT meeting.

The meeting was held at ODFW Headquarters, Steelhead Room. Salem Oregon. In attendance:

Last	First	Agency	Email
Garletts	Doug	NWP- WVP	Douglas.f.garletts@usace.army.mil
Grenbemer	Greg	ODFW- Marion Forks/	Greg.A.Grenbemer@state.or.us
		Minto	
Helms	Chad	NWP-WVP	Chad.k.helms@usace.army.mil
Kremers	Kurt	McKenzie	Kurt.kremers@state.or.us
Kruzic	Lance	NOAA Fisheries	Lance.Kruzic@noaa.gov
Leonhardt	David	NWP-PM-E	David.S.Leonhardt@usace.army.mil
Mackey	Tammy	NWP-OD-TF	Tammy.m.mackey@usace.army.mil
Reis	Kelly	ODFW	kelly.e.reis@state.or.us
Sharpe	Cameron	ODFW	cameron.sharpe@oregonstate.edu
Thorpe	John	ODFW	john.thorpe@state.or.us
Traylor	Andy	NWP-OD-TF	Andrew.Traylor@usace.army.mil
Walker	Chris	NWP-OD-TF	Christopher.E.Walker@usace.army.mil
Ziller	Jeff	ODFW	jeffrey.s.ziller@state.or.us

Grenbemer, Kremers, Leonhardt, Reis, and Ziller called in.

2. Finalized results from this meeting.

- **2.1.** January minutes approved.
- **2.2.** August 2015 is the deadline for the 90% draft for 2012-2014 hatchery data.
- 2.3. ODFW would like to suggest EWEB operate the left roll gate for the season. This should attract fish to the left bank, to the ladder with the trap. Sharpe said if the left roll gate could be operated, there is the potential to remove several hundred hatchery fish but if the right roll gate is operated, it may be difficult to remove even 100 hatchery fish. [CW1]
- **3.** The following documents were provided or discussed. All documents may be found at https://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/Willamette Coordination/Willamette HMT.html
 - **3.1.** 150218 HMT agenda (Walker).
 - **3.2.** 140121 HMT draft meeting minutes (NWP).

4. Action Items.

- **4.1.** [Feb 15] McKenzie HGMP. ACTION: Leonhardt has no action. Joyce Casey will follow up on McKenzie HGMP with Rob Jones.
- **4.2.** [Feb 15] Release strategies for *O. mykiss*. ACTION: Thorpe, Boyd, and Sharpe will brainstorm some ideas for how to reduce residualization. Sharpe will develop a study and provide a rough budget for the study to Walker and Traylor. If funding is available and deemed important, this study would be need to be O&M funded but is not currently in the budget. The Corps would need to solicit a proposal from ODFW or others for this work.

- **4.3.** [Feb 15] Leaburg trapping. ACTION: Sharpe will write up the operation and submit to the Region for review by the end of February.
- **4.4.** [Feb 15] Leaburg trapping. ACTION: Kremers will talk with EWEB to see if they can operate in a way that is conducive to trapping fish
- **4.5.** [Feb 15] McKenzie unsanctioned fish releases. ACTION: Walker and Traylor will figure out the Action Agencies' position on the Lower Columbia River releases. ODFW will scope a plan for mainstem releases. This action needs to be completed prior to 2 March.
- **4.6.** [Feb 15Dexter releases of unclipped CHS into Little Fall Creek. ACTION: Thorpe said he will remind Steve Marx that a decision is needed.
- **4.7.** [Jan 15] **ACTION:** Sharpe will develop a straw man for the February HMT meeting. *STATUS: to be discussed later in the agenda.*
- **4.8.** [Jan 15] PNNL wild/hatchery *O. mykiss* interactions. **ACTION:** Leonhardt will send Harnish's final report on 21 January. *STATUS: completed.*
- **4.9.** [Jan 15] Adult release sites. **ACTION:** Traylor will report back to HMT about improvements to the adult release sites. *STATUS: Traylor will report on this next month.*
- **4.10.** [Dec 14] Monthly reporting. **ACTION:** Sharpe and Traylor will look at the proposed database information and see if it meets NWP's needs. *STATUS: completed. Will be used beginning in April.*
- **4.11.** [Jul 14] Steelhead Work group. **ACTION:** Leonhardt will put BPA in contact with Johnson to discuss the summer steelhead HMGP. *STATUS*: **complete. ACTION:** HMT will form a steelhead work group. *STATUS:* pending until a draft HGMP is available for review.

5. Updates.

- **5.1. Marion Forks/Minto.** Grenbemer reported that everything is going well at Marion Forks. All spring Chinook have been ponded. Minto fish are larger than normal due to the warmer weather. Trap is still in operation but no winter steelhead seen yet. There have been 40 winter steelhead over Bennett.
- **5.2. South Santiam/Foster.** Thorpe said everything is functioning as designed. An occasional fish has come in. Fish health is good.
- **5.3. McKenzie.** Kremers released 179,000 fish. Fish health is good; minor internal fungus. All fry are ponded. Water situation is normal now. Cogswell Creek maintained flows due to the frequent rains and that allowed the hatchery to operate as normal. Recent outreach activities- Career Day with high school students occurred this last month; University of Oregon students came to talk to hatchery workers; two more tours scheduled.
- **5.4.** Cougar andand Fall Creek Trapping. Garletts said around mid-August, 2014, the USACE began releasing adult spring Chinook at the newly improved release site in upper Fall Creek adjacent to the Fall Creek confluence with Gold Creek. He said the temperatures are better and the site seems to be good. Sharpe said it may be time to look at a release site in Fall Creek since temperatures are expected to get high. [dfg2] Garletts and Helms said there are predation issues with otters and poaching issues. Garletts said the area between Gold Creek and the bridge below provides decent holding area during the warmer months.
- **5.5.** Willamette/Dexter. Thorpe reported that the Willamette is even quieter than South Santiam/Foster. There was a meeting on 17 February to discuss how to combine Leaburg and Willamette operations. Thorpe said the improvements needed to raise the Leaburg trout would cost around \$5 million. This would include the intake and building out to accommodate the trout. Dexter is anticipating water temperature increases when the gate work at Lookout Point starts. The work is scheduled to begin in April May. This timeframe is not ideal for temperature management but is the best for flow control. Garletts said there may be the potential to move the fish to Little Fall Creek. [dfg3]Sharpe said that decision has not yet been made. He said the policy

- people are working on that decision now. Steve Marx is likely the one who needs to make the decision. **ACTION:** Thorpe said he will remind him a decision is needed.
- **5.6. Leaburg.** Thorpe said Leaburg operated on less than 2cfs during the low flow period. Lost growth is being regained by putting the fish on increased feed.
- **5.7. Fish counts at Bennett and Leaburg** (Sharpe/Friesen) No update.
- 6. WFOP discussion regarding ladder/trap shutdowns to facilitate planned RM&E. Leonhardt started the conversation by asking for a better description of when ODFW does maintenance on the ladders. Walker clarified that the WFOP has a maintenance period but there may be times when outages need to occur outside those periods. The WVP is tasked with doing maintenance, ODFW operates facilities and does minor maintenance. Those outages need to be coordinated with the Region. Traylor displayed the website so HMT could see where they may find the WFOP, as well as the coordination forms and WFOP change forms. Walker talked about how the WFOP is organized. HMT has not spent much time reviewing the document up to now so there were a number of questions about what is or isn't included in the document and how updating it would happen throughout the year.
- 7. McKenzie Fish Releases ("unsanctioned" fish). Kruzic liked "unsanctioned" better than "surplus". Thorpe suggested they should be called homeless fish. Walker said the two main options are Coast Fork or euthanized. Sharpe said there is still the option of Lower Columbia net pens. Walker said that may be a problem since there may not be authority for NWP to release fish in the Lower Columbia. Sharpe said if the Lower Columbia isn't an option, then the Coast Fork is the only option. He said the Lower Columbia would provide an opportunity for anglers to catch fish. Sharpe said this decision is somewhat dependent on the decision made by the Court. Walker asked if NOAA is comfortable with the release of unsanctioned fish into the Coast Fork. Kruzic said it depends on the court. NOAA is not supportive of the lower release numbers (less than the ~605,000 smolt release level) because they feel it jeopardizes the conservation and recovery objectives for the McKenzie population. ODFW will look for additional sites within the Willamette Basin. ODFW and NOAA said euthanizing isn't a good option. This will be carried over to the March HMT meeting. Kruzic asked if there were other potential release locations in the upper Willamette mainstem between Corvallis and Eugene? Reis said there are pros and cons with mainstem releases. She suggested that would need more internal (ODFW) discussion of mainstem releases areas a serious option. Sharpe said a decision may come as soon as 2 March or he may require the case go to trial and a decision would be delayed for awhile. Sharpe believes ODFW has provided a compelling case for the judge to rule in their favor. Traylor asked if a more concrete decision needs to be made since our next HMT is after the 2 March date. ACTION: Walker and Traylor will figure out the Action Agencies' position on the Lower Columbia River releases. Kruzic would rather see releases in the upper mainstem Willamette or Coast Fork as first options. NOAA doesn't support Clackamette Cove releases of McKenzie fish. All fish have been CWTed. ACTION: Kruzic would like to see a fleshed out plan from ODFW regarding upper Willamette mainstem releases (upstream of Corvallis). This action needs to be completed by 2 March. Marshall Island has been named as a potential release site. Helms asked if there would be a benefit to releasing them in the reservoir. The releases in the Coast Fork have not been successful in [CW4] the past[CSS5].
- **8. Updated Fish Counts spreadsheet.** The spreadsheet has been developed. Traylor will send out to the HMT for review. Sharpe said he needs to get fish counts from Bennett. The counts will be compiled monthly, not daily. Thorpe said the hatcheries send status updates every Friday. The only change is to add a column to get the clipped/unclipped numbers. Sharpe said his concern is getting Leaburg up to date for counting.

- 9. Willamette Fisheries Science Review Discussion/Debrief. Sharpe said he had a hallway conversation with a couple of people to make sure the metrics he reports are the metrics that are needed. Leonhardt asked if there is a metric Sharpe feels should be included that isn't currently. Walker said any metrics in the HGMPs should be included. Leonhardt said there is a lot of data collected but not all of it is collected by Sharpe; some of it is collected by other offices and may be found in different reports. Kruzic said the hatchery comprehensive RM&E plan would be a good place to start. Walker added that there was a three year plan as well. Leonhardt said we are getting to the point where we should be able to roll up several years of data and present it somewhere. Leonhardt pointed out that the reported is delayed. The last full data report sent to NWP was for 2012. Sharpe said August 2015 is the deadline for the 90% draft for 2012-2014 data.
 - **9.1. Dexter early outplanting.** Kruzic asked what the survival rate was for these fish. Sharpe said that the overall survival rate was high so the effect of early vs. late outplanting cannot be determined. Pre-spawn survival was high due to low loading and density stressors. The North Fork Middle Fork was successful. Fish were handled well by WVP staff. [dfg6]
 - **9.2.** Fall Creek was different. Fall Creek had low redd counts and higher mortality. The late rains in 2013 may have contributed to the low carcass recovery rate but may not be the reason for the low redd counts given that redd counts in 2014 were low even though survey conditions were excellent. Garletts asked about the small number of tagged Fall Creek fish released in the reservoir. Sharpe said he didn't see those fish in the report.
 - 9.3. Sharpe said there was a 20% fall back rate for Foster fish if they were released in the reservoir. River releases did not have as high a fall back rate. Traylor asked if the fallback concerns are the same for Foster and Fall Creek. Garletts said they are two very different systems and concerns datg7. Kruzic asked about the unmarked fish above and below Foster. Sharpe said about 400 fish were outplanted above Foster. The theory is that fish are rejecting the ladder and spawning below. ODFW has samples from the fish and can pedigree upstream outplants and analyze DNA samples of the carcasses below to see if they were produced upstream. Sharpe said the capture efficiency of unclipped fish was 70% for the old trap but the new trap is about 40% efficient. It is believed the drop is due to the cold water in the ladder. Coldwater from Green Peter may not attract fish as much as South Santiam water would. Plumbing changes would be needed to add surface water to the ladder. Right now it isn't clear if the issue is related to temperature or water chemistry. ODFW has professors visiting from Japan, they will take a look at the water chemistry and see if they are significantly different. Kruzic asked what NWP is doing or talking about with this issue. Walker said he hasn't heard much other than trying to figure out what the problem is.
 - **9.4.** North Santiam had low mortality and high numbers of redds. The Hotsprings Resort on the Breitenbush has shown to be a good release location.
- 10. Leaburg Trapping Operations. Sharpe provided a spreadsheet (to be provided on the website). He talked about 2010 data, which was a great year for removing a large portion of the hatchery fish. 2013 was nearly opposite and 2014 was somewhere in the middle. In the HGMP, and in arguments to the Plaintiffs, ODFW said they would be able to operate the trap as early as July. Leaburg counts will be tracked in real time. If the trend is downward for unclipped fish moving upstream, then the trap will be operated. If unclipped fish counts increase, then the trap gets pulled and the cycle will repeat. ODFW will be ready to start in early July but the trap will not operate until the numbers show it should. Sharpe believes five days a week should be sufficient for fish collection. The target is to remove about 100 hatchery chs from Leaburg Dam. The benefits of removing hatchery chs need to be weighed against the risks to co-occurring wild chs. The trapping needs to minimize risks on wild chs.

- 10.1. ODFW would like to suggest EWEB operate the left roll gate for the season. This should attract fish to the left bank, to the ladder with the trap. Sharpe said if the left roll gate could be operated, there is the potential to remove several hundred hatchery fish but if the right roll gate is operated, it may be difficult to remove even 100 hatchery fish. Traylor said if EWEB needs to operate gates other than the left gate, perhaps we need to look at putting a trap in the right ladder. ACTION: Kremers will talk with EWEB to see if they can operate in a way that is conducive to trapping fish.
- 10.2. Kruzic offered some history. In 2002 2003 there were huge runs so removing hatchery fish was stopped because it was believed the impacts to wild fish outweighed the benefits of removing the hatchery fish. Now we are in a different situation with much lower numbers of chs crossing Leaburg Dam. Kruzic cautioned that we need to watch wild fish run size and adapt accordingly. ACTION: Sharpe will write up the operation and submit to the Region for review by the end of February. Kruzic said NOAA would prefer a later start time. He would like to better understand the trigger. Sharpe said he hasn't come up with the definition of the trigger. Kruzic and Sharpe continued to discuss the trade-offs regarding start dates and triggers. The general agreement is to wait until the bulk of the wild run has passed and then pull out as many hatchery fish as possible, with a target goal of removing 100 hatchery chsChS. Kruzic asked about reading fish counts for the right ladder. Sharpe said he hasn't thought about adding the ladder yet, but he will think about it and how that might work with the two personnel assigned to this task. Reading video counts from both ladders in near real-time would provide further insight on how many wild chs are being affected by the trapping operation on left bank ladder (versus total passage through both ladders).
- 11. Cougar Adult Trap Operations. This topic will be carried over to March for further discussion. Walker said this topic is to discuss protocols. Do we want to release fish below Cougar Dam earlier than Sep 1? If so, how much earlier? At the January HMT meeting, ODFW had thoughts about moving the 1 September date. Leonhardt said there had been talk about doing more genetic work on the fish. ODFW said the 2014 genetic samples have not been analyzed. Sharpe said the results could be back in three weeks or three months; depends on the funding available. Current cost is about \$43/sample for processing plus additional for analysis CSSS. Kruzic said the genetics information is critical at Cougar. It gets used every year to inform management decisions. This work is paid for by CRFM. Kruzic asked if collections would continue in 2015. No one had an answer to that but Garletts said collecting is relatively cheap so we should at least continue collection.
 - 11.1. Kruzic wanted to discuss the 400 minimum females going above Cougar. He said the 400 is a minimum but NOAA doesn't want significantly more hatchery chsChS outplanted over the 400. The range needs an upper limit for hatchery fish outplanted from the hatchery to above Cougar Dam. Wild fish should out-number hatchery fish but some years that doesn't work due to poor returns of wild fish. Sharpe said ODFW is going to go with a target of 400 females and 200 males until downstream passage is improved. The intent is to supplement with hatchery chs up to 400 females and 200 males, without exceeding those numbers significantly. Sharpe is perfectly happy with the majority of the fish out-planted up high.
 - 11.2. Ziller joined the conversation. He would like to see the change in the 1 September date. He would like to see it moved to 1 July. The wild fish population at that time is still strong and Ziller doesn't want to put wild fish above Cougar dam. Walker pointed to the break later in the season. Ziller agreed there is a break but waiting doesn't address the problem. Leonhardt asked about the procedures for moving fish. Ziller said fish come in to Cougar, get tagged and then released downstream. If that fish shows up at Cougar a second time, they get moved upstream. Traylor asked about the proportion of fish coming back to Cougar that are unassigned. Sharpe said off the top of his head, only about 20% are unassigned. Traylor said we would be stealing about 20% from the lower river. Kruzic said that post 1 September, Cougar fish are left below so there is some balancing.

- **11.2.1.** Research is starting to show that fish above Cougar are contributing to populations below Cougar. Walker asked if we are looking at the population above McKenzie contributing to the population below. ODFW confirmed that is happening.
- **11.2.2.** Sharpe would like to have a more thorough accounting of samples taken in other tributaries and the mainstem to see if they contribute to Cougar populations.
- 11.2.3. Kruzic suggested the proposed two month change is pretty big. He would like more discussion on this issue prior to making the change. Ziller said we can look at data but he thinks we should talk about going to that date now and then look at another year of sampling. Kruzic was hesitant to make a decision now. HMT agreed we need the data in hand so an informed decision can be made. Ziller didn't have confidence we would get downstream passage at Cougar in a timely manner.
- **11.2.4.** HMT would like to see the data on the contribution of fish produced above Cougar to populations below Cougar. Kruzic wants to build upon those fish since they have managed to survive selection pressures and made it back to Cougar to spawn.
- 11.2.5. Ziller said we shouldn't be moving any fish upstream if they belong downstream and there shouldn't be a date. He sees 1 July as a compromise. Kruzic said that is dependent on how well the recycling works at moving the Cougar fish upstream. Leonhardt asked if we are creating genetically isolated populations and if that is a good thing. Kruzic said that isn't a consideration since we aren't even getting replacement. Leonhardt asked if we are getting replacement below Cougar and above Leaburg. Ziller said we do not know the answer but the numbers havenot dropped below 600 700 fish over the past 20 years.
- **12. Foster PIT antenna.** Leonhardt said Khan is working on this. Sharpe needs to know if he is going to be PIT tagging fish or just putting floy tags in them.
- 13. Release Strategies. Sharpe said Harnish had presented interesting data. It appears condition factor relate to migration to Willamette Falls. This could be done as a designed study for 2016 or we could scramble and throw something together for 2015. Sharpe prefers waiting until 2016 because he would also like to think about how to get SARs data with the same fish. Kruzic said he was struck by the size at release. He asked about reducing growth so fish are smolt size when released. Sharpe said there is a conflict from a hatchery perspective. If you try to release a hatchery fish that resembles a wild fish but is younger, then they are less likely to smolt and migrate. Kruzic said we need to look at what can be tweaked to reduce residualization. Thorpe said we need to be cautious about recommending slowing growth because hatcheries will stop feeding them and then fish will die. Thorpe said there are options to improve feed and increase vitamins to keep fish healthy but not bulk them up. ACTION: Thorpe, Boyd, and Sharpe will brainstorm some ideas for how to reduce residualization. Sharpe will develop a study and provide a rough budget for the study to Walker and Traylor. It is believed this study would be O&M funded.
- 14. Summer Steelhead HGMP. Leonhardt reported that Chuck Peven has been hired to work on this HGMP. He is almost done but there are a lot of data holes. ODFW will need to provide information to fill those holes. Leonhardt would like to get this out to HMT with time to review prior to the March HMT meeting. That meeting would be a normal meeting in the morning and a review of the HGMP in the afternoon. After that meeting, we can begin the process of completing the draft and submitting it to NOAA. The Steelhead Work Group could be convened after the HGMP has been developed and submitted. Kruzic asked about any program changes proposed. Leonhardt said no. Peven was tasked with compiling the existing operations. Sharpe said he thought there was material looking at pHOS in the Chinook HGMPs and asked if that was included in the steelhead HGMPs. Leonhardt said he didn't know. He hasn't seen the HGMP yet.

15. Chinook HGMPs. Kruzic said NOAA would like to finalize the four Chinook HGMPs and move forward on those. [CSS9]. Leonhardt said he has been given direction that he is NOT to work on the HGMPs until further notice. It wasn't completely clear but it appears the Chief of Environmental would like to explore alternatives to how we currently develop and process HGMPs. ACTION: Leonhardt has no action at this time until remaining HGMP issues are discussed and resolved at a higher management level. NOAA will talk with NWP about how to proceed from here.