

MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 16 September 2015 Willamette HMT meeting.

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

Last	First	Agency	Email
Gibbons	Karrie	NWP-OD-TFF	
Graham-Hudson	Bernadette	ODFW	Bernadette.n.graham-hudson@state.or.us
Grenbemer	Greg	ODFW- Marion Forks/ Minto	Greg.A.Grenbemer@state.or.us
Johnson	Marc	ODFW	marc.johnson@oregonstate.edu
Kremers	Kurt	ODFW - McKenzie	Kurt.kremers@state.or.us
Kruzic	Lance	NOAA Fisheries	Lance.Kruzic@noaa.gov
Peck	Dan	ODFW - Willamette	dan.peck@state.or.us
Sharpe	Cameron	ODFW	cameron.sharpe@oregonstate.edu
Taylor	Greg	NWP-OD-V	Gregory.a.taylor@usace.army.mil
Thorpe	John	ODFW	john.thorpe@state.or.us
Traylor	Andy	NWP-OD-TF	Andrew.Traylor@usace.army.mil
Ziller	Jeff	ODFW	Jeffrey.s.ziller@state.or.us

Grenbemer, Johnson, Kremers, Kruzic, Peck and Ziller called in.

Documents may be found at: http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/Willamette_Coordination/Willamette%20HMT/

1. Approved July HMT minutes with edits.

2. Action Items.

Outstanding Action Items.

- 2.1. **[May 15] Leaburg Dam repairs. STATUS: Completed. Comments are due by 24 July.**
[ACTION from 15 July]: McLaughlin will check on possibility of locking the left bank roll gate at a small opening for some additional attraction to the ladder and trap. Traylor put together memo suggesting that while the gate is OOS to set spill at a minimal level, Traylor will confirm.
- 2.2. **[Mar 15] Alternate out-plant strategies based on temp/flow. ACTION:** Sharpe requested the Rogue plan. **ACTION:** Taylor will send HMT the Rogue plan. Taylor, Kruzic, Traylor, and Sharpe will draft a proposal to send to Flow Management. **STATUS:** *Implementing a similar plan in the Willamette would require a multi-disciplinary team. Traylor asked if there was a monitoring program associated with the Rogue plan. Taylor said there was a 25 year Corps funded monitoring plan. Ongoing, multidisciplinary team with flow management, need to take time and set up a separate meeting to begin outline. Modification that was developed by Tom Friesen and Steve Mamoyac Main-Stem Flow Targets. Focus more on conservation/recovery within the tributaries at the expense of the goals within the mainstem. Mainstem flow targets juvenile, need to implement for adults, similar to what was done on the Rogue. (Taylor suggests-Tom Friesen has expertise to lead discussions). Taylor will be engaged based on*

Commented [RMP1]: A research concept paper was ranked this year by the RM&E Team to evaluate mainstem flow and temperatures in FY16. The Corps ranked this study low stating that further discussion was needed among key agencies to define clear management goals, expectations, and information needs before seeking a proposal for funding consideration.

Suggest WATER agencies:

- 1) Define goals/objectives relating to flow and temperature management.
- 2) Generate hypotheses (for any life stages of concern) relating to flow and temperature management

Then WATER can further discuss priority study/evaluation needs and approaches. Dan Turner is available to help evaluate if reservoir management can help meet mainstem temperature objectives, using existing temperature models.

expertise on the Rogue. Pre-spawn mortality has been able to stay in check in the Rogue; may be more of an issue with the evolution of the fish. Taylor is saying the need to adapt the targets to suit Willamette, it is worth exploring. Would earlier release timing have made a difference? Build the right set of targets. Water quality monitoring. Possible task group participants: Sharpe will talk with Friesen about availability, Scullion, Turner (water quality monitor), Walker. Check in with Burchfield (or one of her staff). Traylor can set up meeting, Walker to take the lead.

3. Updates.

- 3.1. Marion Forks/Minto** (Grenbemer) going well, experiencing loss with smolts, using medicated feed, trying to work through and hoping for cooler water. Fish are getting above weir at Marion Creek and causing disease concerns for the hatchery. The highest priority is getting the weir fixed and keeping fish from getting above. Concern about location of weir, permanent structure is needed. Minto: first spawn 125 females, 0 BKD, jump in loss of adults due to columnaris in June-August. 16 August outbreak of columnaris spiked, pathology is concerned, and holding broodstock for another week. 1 Lamprey.
- 3.2. South Santiam/Foster** (Boyd) There was a conference call concerning the safety violation but have not received letter yet. Safety personnel will counter the violation; Thorpe doesn't think it will happen. May have to go to Skamania to get eggs for summer Steelhead program. Outplanting of unmarked fish has resumed. Moved all fish that they were holding around Labor Day. No carcasses from outplanting (no immediate pre-spawning mortality on group that was outplanted.)
- 3.3. McKenzie** (Kremers) approximately 5800 total fish. Broodstock doing great, apparent change in timing of trap capture based on 14 year September average: males: 25% Females 19%; this year 6.3% males, 2.1%: fish are not moving into hatchery late in run; combination of reasons, but thought to be mostly due to the drought. Fish hold in holes below hatchery, possibly have more fish early, this is the first year with the modification of the fish ladder. Drought affecting many things. Coded wire tag recoveries in the Clackamas were primarily McKenzie fish (likely looking for cooler water). Only 5 years in recent history have they broken 6000 fish record, overall large run. Outplanting above Cougar is completed with 400 females and 200 males. Outplanting above Trail Bridge, 20 pair (hope to take more females up; goal is 60 pair). Overall good fish health, some columnaris, a little more fungus with juveniles (temperature related) overall good health with juveniles.
- 3.4. Cougar Trap** (Taylor/Traylor) Fish are coming back strong within the last week. Total for the year: 219 unmarked, 27 marked, 118 recaptured unmarked fish. Huge strides in the last week and a half. Recycled fish are coming back (54% on recapture rate) and still getting fish from June. 400 females 200 males because of late returning in NOR. 50 fish at Cougar on Monday. Any change of release at dam? Maintaining. Kruzic asked what was the sex ratio. Unmarked 133 males/84 females/2 jacks - about 60/40. Is it the same for recaptures? 41 females out of 118. Kremers suggested if fish are outplanted higher than 430 bridge to try to get more separation. Some hatchery fish outplants occurred at Hard Rock.
- 3.5. Fall Creek** 256 fish, 24 marked fish, 280 total including marked; have seen 7 fish since 1 July. Fish are evolving radically. Chinook genetics, could we determine Carson stock (early returning spring stock used in the 70's)? Johnson: yes you can look for signal; collaborate with Kathleen for allele frequency could be done simultaneously; genetic samples have been taken since 2011. Are they spawning earlier? Unsure. Are they spawning at all, if so, when is their spawn timing (Sharpe)? 4 Pacific Lamprey.
- 3.6. Willamette/Dexter** (Peck) 50 fish/day mortality, *C.shasta* is prevalent. Fish are entering the Middle Fork and transported to McKenzie, as they enter the Middle-Fork Willamette something is happening upstream of McKenzie. *C. shasta* is not transmitted horizontally; it is something

the fish have picked up as they are migrating into fresh water. Is it prevalent in middle fork reservoirs? The Willamette Valley watershed has not had a good flush or snow pack to flush out diseases. 215 females spawned, because of *C.shasta*, spawning is being done as soon as they can. Unsure if they will make production, about 9800 fish collected so far and another 100 in the trap as of today. Still clipping rainbow from around the state to make up for loss earlier in the season. Dexter is treating for columnaris, water temperature is going down (everything has been treated twice). Some columnaris has been noted in spring Chinook (drought related).

- 3.7. Leaburg** (Thorpe/Sharpe) more than 100 fish removed from the ladder trap, low numbers of wild, high number of hatchery. Video counts show 30% of all fish are marked. Sharpe suggested 30 % is likely biased high because they are seeing fallback of hatchery fish over Leaburg. Tryalor asked if there is a spike of when hatchery fish pick up. 111 unmarked fish (Sharpe checking on number). How do you account for fallback (Taylor)? Estimate of pHOS based on passage of fish past Leaburg, the difference in survival is the same, there is no indication of high pre-spawn mortality is >50%. The difference in pHOS estimates between counts at Leaburg and spawning ground surveys are approximately 10%.
- 3.8. Fish counts at Bennett and Leaburg** (Sharpe/Friesen) Bennett counts show a few thousand fish that are unaccounted for, have not seen a high number of pre-spawning mortality. Harvest estimate is 2 years out; Sharpe has been hearing (6611 marked Chinook; 44% fishing) 500-600 fish are holding below the facility. Currently, not seeing many carcasses. Non-marked fish 926.
- 3.9. Green Peter Outplanting in 2016** ((Sharpe) In 2010 a scour event wiped out redds above Foster in the South Santiam. Sharpe would like to implement outplanting above Green Peter with concurrent pedigree studies. Sharpe briefly discussed with Fenton Khan the possibility of getting Chinook and Steelhead above Green Peter. Agreed to start a discussion with HMT/FPT and others. Outplanting sites-currently have trucks and personnel; issues when adults come back, if study begins next year, we won't see adults back until 2020/2021, the longer we wait to begin, the further out the date will be for returning adults. Downstream passage and real time genetics are already in place. Looking at it from the genetics perspective, a 5 year span is an eternity, because of technology changing. It makes sense to start now, ideally to get fish back to natal streams, begin next year because advances in downstream passage and 16 broodstock fish. Taylor said there will likely be social ramifications for doing this. Sharpe asked, what is the next step, district/steering team/who. Hatchery fish have low survival through Green Peter (GP), research is not intended for GP; it has been discussed in RM&E team, there is a possible concept paper to come. The potential for outplanting to time intake in planning, Corps is discussing passage at GP, and there are people interested in the project, it is a matter of when and priority. Sharpe wants to look at monitoring, distribution and survival of outplanting, peak outmigration timing, and indexing reaches. Does HMT support the project? Where would the outplanting site be located? Quartzville, Middle Santiam. Funding for monitoring would lie with RM&E, operations would be easy/minimal cost. Previously, Taylor thought it was absorbed into the operational cost. How many fish is the target? A few hundred fish, minimum. Focus on outplanting from hatchery. Taylor said the history from the public regarding juvenile Chinook impacts of Kokanee in the lake have been negative, because anglers did not want them. May be lower numbers of Kokanee due to drought this year. Fishermen will likely be concerned that Chinook are competing directly with Kokanee habitat and predation in the reservoir and will be a loss in the Kokanee population. Disease transmission concerns between Chinook and Kokanee. South Santiam is fragile, unstable gravel. Better habitat above GP would lessen the likelihood of brood failure. Getting fish back to natal habitat, risk of mining South Santiam populations should be factored in. Approval from district, find ways of minimal amount of monitoring. Education to public will be difficult. Taylor/Traylor do not see push back. There is general agreement within HMT group to pursue next steps/concurrence.

Commented [RMP2]: A concept paper was in the RM&E FY16 packet this year, and the Corps stated to the RM&E Team (per Ian Chane) that the Corps wouldn't fund studies above Green Peter since providing fish passage at Green Peter was not included in the 2008 BiOp RPA.

4. **AFS debrief. Discussion on studies relevant to HMT** Sharpe presented on Foster/Minto operations, the biggest concern at Foster the previous year did not appear enough for wild fish to entered Foster. (O'Malley/Evans) work showed in 2010 broodstock fish failed; Sharpe is still interested in studying water flow/chemistry. Clackamas north fork dam (PGE) fish are moving through plexi-glass room to direct hatchery and unclipped. Poster of coded wire tags size/time of release spring Chinook at McKenzie & South Santiam- Releasing fish at specific times in the fall, is correlated to the return as adults. Traylor-supplementation of Chinook populations; Idaho short term affects decrease in productivity and external factors; the main take away is good maintenance but supplementation is not the best recovery tool. Once you have sustainable populations, scale back. Taylor: private consultant of summer Steelhead influence on wild winter Steelhead (focus on Clackamas/Willamette data) have very low influence, interesting to follow up with Ian Courter; winter Steelhead above Foster found very interesting/compelling to look forward. Traylor said the University of Idaho summer Steelhead recycling study, saw strong relationship between sex and whether they return back to Foster and strong relationship with where they were released, for fish released below Waterloo only 10% were caught by anglers. Better returns of females back to Foster, males end up somewhere else (Waterloo doesn't have good fishing bank access). Wiley Creek harvest around 30%. Recycled Steelhead; on average 20% back in the creel, 40% went back to Foster and 40% somewhere else; doesn't seem worth it, political issue. Ocean conditions for 16-17 juvenile predation low, very poor conditions; projections for 2080 loss of 60% of spawning habitat due to water temperatures being around 13C in the Willamette Valley; Bull Trout spawning habitat needs 12C (complete loss), if there is any chance for these fish, downstream passage for juveniles and upstream passage for adults becoming the upmost importance. Bernadette: harbor seal predation of acoustic tagged fish in lab environments they can hear acoustic tag ping, but did not appear they were homing in on tagged fish in the wild. Johnson: presented on Steelhead in upper Willamette (sending copies to Traylor/Rich/Jeff)
5. **Update on 2015 outplanting/spawning surveys/hatchery spawning** Surveys are going well; will need a full sweep of North Santiam and will begin in two weeks. Low numbers of carcasses reported.
6. **Upcoming Fish Culture Conference (1-3 December)** for your awareness; Sharpe recommends attending to hear a different perspective from wild fish and fish culture. New technology; Johnson will be presenting Steelhead study.
7. **Kruzic has concerns about Summer Steelhead broodstock**-ODFW will collect from Skamania IHN cleared eggs to supplement broodstock. May need to collect from Skamania 50% of egg goals, less than 500 fish at Foster, 600 pairs are needed. Hatchery in WA is not as depressed and will be able to meet the requirement, Kruzic asked if we have done this before. What are the risks? Thorpe-it has been done with other anadromous fish, novel pathogen would be a significant risk, Craig Banner will be consulted regarding pathogen risk. (Sharpe) Potential risk if Skamania fish have higher reproductive success, used to be 10%. **ACTION:** How are they managing isolated broodstock? (Sharpe/Thorpe to check). Want to cover all bases (Kruzic) Sharpe/Thorpe will present information at the next HMT meeting, since spawning will not be for another 4 months.