

FINAL MEMORANDUM

To: Wells, Rocky Reach, and Rock Island HCPs Hatchery Committees **Date:** November 19, 2015

From: Tracy Hillman, HCP Hatchery Committees Chairman

Cc: Sarah Montgomery

Re: Final Minutes of the October 21, 2015, HCP Hatchery Committees Meeting

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees meeting was held at Chelan PUD headquarters in Wenatchee, Washington, on Wednesday, September 21, 2015, from 9:30 a.m. to 1:00 p.m. Attendees are listed in Attachment A to these meeting minutes.

ACTION ITEM SUMMARY

- The Hatchery Evaluation Technical Team (HETT) will develop a method for calculating hatchery replacement rate (HRR) targets before the next Hatchery Committees meeting on November 18, 2015 (Item III-A).
 - The Hatchery Committees will discuss Objective 4 (HRR) and Objective 5 (stray rates) of the prioritized 5-Year Hatchery Monitoring and Evaluation (M&E) Report objectives flagged for Methow spring Chinook salmon during the next Hatchery Committees meeting on November 18, 2015 (Item III-A).
 - Keely Murdoch will provide Craig Busack with Goat Wall Acclimated Release documents for review (Item III-B).
 - Craig Busack will discuss with Keely Murdoch any further documentation needed for National Marine Fisheries Service (NMFS) consultation on Goat Wall Acclimated Releases (Item III-B).
 - The Hatchery Committees representatives will discuss internally the Washington Department of Fish and Wildlife (WDFW) proposal that Douglas PUD authorize the Yakama Nation (YN) to perform Goat Wall Acclimated Release activities as an extension under WDFW activities (Item III-B).
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- Keely Murdoch will discuss with Tom Scribner the proposal by WDFW to release excess hatchery-by-hatchery origin steelhead into lakes (non-anadromous waters) in the Methow and Okanogan basins (Item III-C).
- Mike Tonseth will add contingencies for overages to the Broodstock Collection Protocols (Item III-C).
- Sarah Montgomery and Matt Cooper will send a Doodle poll to the Hatchery Committees in order to convene a conference call to discuss gene flow standards for Methow spring Chinook salmon (Item VI-A).
- Sarah Montgomery will put the NMFS consultation update first on the agenda for the Hatchery Committees meeting on November 18, 2015 (Item VII-A).
- Craig Busack will request that Amilee Wilson (NMFS) and Karl Halupka (U.S. Fish and Wildlife Service [USFWS]) attend the next Hatchery Committees meeting on November 18, 2015 (Item VII-A).

DECISION SUMMARY

- There were no decisions approved during today's meeting.

AGREEMENTS

- The Hatchery Committees representatives present, except YN, agreed to WDFW's proposal to release excess hatchery-by-hatchery origin steelhead into lakes (non-anadromous waters) in the Methow and Okanogan basins. YN provided agreement to the proposal via email on October 22, 2015 (Item III-C).

REVIEW ITEMS

- There are no items currently out for review.

FINALIZED DOCUMENTS

- There are no documents that have been recently finalized.
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I. Welcome

A. *Review Agenda, Review Last Meeting Action Items, Approve the September 16, 2015, Meeting Minutes (Tracy Hillman)*

Tracy Hillman welcomed the Hatchery Committees and asked for any additions or changes to the agenda. The following revisions were requested:

- Mike Tonseth added excess hatchery-by-hatchery origin steelhead as a joint Priest Rapids Coordinating Committee Hatchery Subcommittee (PRCC HSC)/HCP Hatchery Committees item.
- Alene Underwood added a Rock Island Dam refurbishment update.

The Hatchery Committees reviewed the revised draft September 16, 2015, meeting minutes. Sarah Montgomery said there are several outstanding comments to be discussed. The Hatchery Committees discussed the outstanding comments and made revisions.

Hatchery Committees members present approved the draft September 16, 2015, meeting minutes, as revised.

Action items from the Hatchery Committees meeting on September 16, 2015, and follow-up discussions, were as follows (*italicized* text below correspond to action items from the meeting on September 16, 2015):

- *Andrew Murdoch (WDFW) will provide the presentation titled “Wenatchee River Relative Reproductive Success Studies” (Attachment B) presented during today’s meeting to Sarah Montgomery for distribution to the Hatchery Committees (Item II-B).*

Murdoch sent the presentation to Sarah Montgomery on September 22, 2015, and she distributed it to the Hatchery Committees the same day.

- *Matt Cooper will calculate HRR for Winthrop National Fish Hatchery (NFH) for discussion during the next Hatchery Committees meeting on October 21, 2015 (Item III-A).*

Bill Gale sent the HRR spreadsheet to Sarah Montgomery on October 19, 2015, and she distributed it to the Hatchery Committees the same day.

- *Greg Mackey will develop a HRR calculation spreadsheet for discussion during the next Hatchery Committees meeting on October 21, 2015 (Item III-A).*

Mackey sent the spreadsheet to Montgomery on October 13, 2015, and she distributed it to the Hatchery Committees the same day.

- *The Hatchery Committees will discuss Objective 4 (HRR) of the prioritized 5-Year Hatchery Monitoring and Evaluation (M&E) Report objectives flagged for Methow spring Chinook salmon during the next Hatchery Committees meeting on October 21, 2015 (Item III-A).*
- *Sarah Montgomery will update the 5-Year Hatchery M&E Report objectives flagged for Methow spring Chinook salmon and distribute the updated list to the Hatchery Committees for review (Item III-A).*

Montgomery updated the flagged objectives document on October 14, 2015, and distributed it to the Hatchery Committees the same day.

- *Keely Murdoch will discuss with Cory Kamphaus (YN) the timing of passive integrated transponder (PIT)-tagging fish for the Goat Wall acclimated release (Item III-B).*

Murdoch said YN is performing the PIT-tagging for the acclimated release, so there is flexibility in the schedule. She said January to February would be a good time for tagging the fish.

- *The Hatchery Committees will discuss Goat Wall Acclimated Release during the next Hatchery Committees meeting on October 21, 2015 (Item III-B).*
- *Tracy Hillman will request Craig Busack's attendance at the next Hatchery Committees meeting on October 21, 2015, for discussion of Goat Wall Acclimated Release (Item III-B).*

On October 9, 2015 Hillman requested Busack's attendance and received confirmation on the same day that Busack would attend.

II. Chelan PUD

A. Rock Island Dam Refurbishment Update (Alene Underwood)

Alene Underwood said this update was requested by Jeff Korth (WDFW). Underwood said Chelan PUD will rehabilitate units B5 through B8 in Powerhouse 1 at Rock Island Dam with higher efficiency turbine runners. She said Chelan PUD has been planning to rehabilitate

units B5 through B10 (either new higher efficiency turbine runners and/or new turbine blades) for over 10 years, but as of yet only turbine runner replacements, changing from five blades to four blades, have occurred in B9 and B10. She said, now, the turbine runners in B5 through B8 will be replaced by the year 2020, resulting in a more efficient unit both in terms of power generation efficiency and assumed fish passage efficiency. Keely Murdoch asked whether survival studies are affected by the rehabilitation. Underwood replied that because efficiency curves will be increased by 2 to 8% with the new units which also presume higher fish survival efficiency, Chelan PUD doesn't believe additional survival studies will be warranted. Underwood said most fish prefer to use Powerhouse 2, and the rehabilitation completion will coincide with the 10-year study check in 2020-21. Mike Tonseth said survival studies are the nexus to the Hatchery Committees for this topic, as dam passage survival is used to calculate the hatchery component of NNI. Kirk Truscott said he had asked Keith Truscott, Chelan PUD Natural Resources Director, whether turbine replacement would affect spill configuration at Rock Island Dam, and Truscott had replied that it would not.

III. Joint HCP Hatchery Committees/PRCC HSC

A. Five-Year Hatchery M&E Review Planning – Objective 4 (Greg Mackey)

Greg Mackey shared a spreadsheet titled “HRR Target Calculation” (Attachment C), which Sarah Montgomery distributed to the Hatchery Committees on October 13, 2015. Mackey said the calculation is based on spawning escapement, and the sliding scale in the spreadsheet shows a minimum spawning escapement of 500 hatchery fish. He said the proportionate natural influence (PNI) target constantly changes depending on how many wild fish return, but 500 is used as a target escapement because more than 500 hatchery fish are rarely needed. Mackey said HRR is calculated as escapement divided by broodstock (3.85 in the example shown). Todd Pearsons said that the old target was 4.5 (from the latest Snow et al. report¹), which is similar to Mackey's calculated target. Pearsons said the goal of this

¹ Snow, C., C. Frady, D. Grundby, B. Goodman, and A. Murdoch. 2015. Monitoring and evaluation of the Wells Hatchery and Methow Hatchery programs: 2014 annual report. Report to Douglas PUD, Grant PUD, and the Wells HCP Hatchery Committee, East Wenatchee, WA.

discussion is to relate HRR to management objectives that the Hatchery Committees are trying to meet, and an unachievable target would not meet that goal. Mackey said the target of 3.85 represents the minimum. Bill Gale said Charlie Snow (WDFW) usually uses total adult return, including harvest, to calculate HRR, and Mackey's calculation does not factor in prespawm mortality or harvest. Mike Tonseth said HRR is calculated with and without harvest, so more refinement may be needed if prespawm mortality should be accounted for. Gale asked whether the target is for a subbasin HRR, or if it is an HRR from total adult return. Mackey said the 500 represents spawners, not returns, and the topics are mixed here because HRR measures return. Mackey presented another way for calculating HRR targets using the Hatchery and Genetic Management Plan (HGMP) for Methow spring Chinook salmon. Mackey said the minimum escapement is 500 spawners, and with the pHOS-based sliding scale, 500 is also approximately the greatest number of hatchery spawners that would ever be needed. So, a HRR calculated on 500 spawners serves as the minimum necessary HRR value. Tracy Hillman said the M&E Plan consists of two targets or goals: 1) HRR being greater than the set target; and 2) HRR being greater than the natural replacement rate (NRR). He said hatchery returns to the entire subbasin are included in the calculation, and HRR is estimated with and without freshwater harvest. Hillman said surplus fish are included in the HRR calculation.

Gale shared a spreadsheet titled, "Winthrop NFH Spring Chinook Yearling Release Metrics" (Attachment D), which Montgomery distributed to the Hatchery Committees on October 19, 2015. Gale said when USFWS prepared the Winthrop NFH HRR data, it discussed comparing HRR to other programs. Gale asked whether it is appropriate to do subbasin-level HRR calculations, because one set of data includes adipose (ad)-clipped fish and might compromise future comparisons. Kirk Truscott said in the HGMP there is 24% prespawm mortality, so if no wild fish return, the amount of hatchery fish that would have to return in order to meet the HRR target, including the prespawm mortality component, would equal 666, which differs from 525 based on the proportion of hatchery origin spawners (pHOS). Truscott said Methow spring Chinook salmon contribute to harvest (tribal, especially) in the lower Columbia River, so identifying an HRR target that would not provide the opportunity for harvest benefits of surplus would not be advantageous. Mackey said the current HRR target (4.5) and the one calculated using his spreadsheet (3.85) do not

differ greatly, but it would be better to have a rational method for calculating HRR so that it can be easily adjusted in the future. Mackey asked what the 10-year HRR average is. Pearsons listed data from the most recent Snow et al. report¹: from 2001 to 2008, Methow River HRR was 5.1, Twisp River HRR was 4.39, and Chewuch River HRR was 4.15. He said the Winthrop NFH HRR was 3.27 from 2001 to 2008, as presented in Gale's spreadsheet. Mackey said the aggregate average HRR for the Methow River with all three programs combined was 4.6. Gale said the HRR for the MetComp Methow River program was 4.17.

Hillman asked what happens if the HRR target is not met. Hillman said for the Chiwawa River spring Chinook salmon program, the HRR target was only met in 8 out of 18 years. He said a target can be set, but what does it mean or what happens if the target is not met? Tonseth said one issue is that there is not much to do to change HRR, as it depends primarily on ocean survival. He said producing more smolts would increase abundance, but it would not change the HRR, so maintaining at or near the 5-year average should be considered achieving the objective. Catherine Willard said if the HRR is low due to hatchery effects, it can be controlled. Gale said the factors predominantly driving HRR are mostly outside of the hatchery.

Craig Busack said it appears that the Winthrop NFH HRR is one-third lower than the Methow Basin hatchery programs. Gale said that care should be taken in comparing HRRs from certain programs, because many factors are program-specific. Tonseth added that transition years, such as from 2002 to 2006, should be accounted for, because they are not reflective of expected future performance. Tonseth said HRR is driven by broodstocking, and because hatchery fish can be over-collected and culled, wild-driven broodstocking programs are stricter, thus the number of broodstock used is important. He said comparing programs becomes difficult when the broodstocking policies are different. Gale said Winthrop NFH collects extra fish, which is reflected in the HRR. Truscott said the point of HRR is to calculate the parent brood that contributes to production. Gale said the point of HRR is to determine how many fish were collected and subsequently produced. Tonseth said the calculation is based on what is collected and retained. Gale said culling is included in the calculation of HRR. Tom Kahler said HRR takes into account the number of fish from which gametes were collected. Tonseth said using that number is not an accurate

representation of the adults collected in order to collect gametes. Hillman said the denominator of the HRR calculation is total broodstock collected, which includes pre-spawn loss, surplus fish, and those spawned.

Pearsons shared data from 2006 to 2008 from the Snow et al. report, showing that Winthrop NFH would still have a lower HRR (5.7) than the Methow programs (average HRR of 7.9). Gale said the difference could be a result of performance or a result of difference in broodstock collection. Truscott said it also depends on how the fish perform; because Methow Fish Hatchery (FH) is supported by natural-origin recruits, equal performance would not be expected. Tonseth added that different disease-management strategies at Winthrop NFH would also result in a lower HRR. Pearsons said the point is to compare HRRs to other hatcheries and see if Methow FH is anomalous. Tonseth said recalculating HRR using the number of adults contributing to juveniles (by removing culled fish and prespawn mortalities) would eliminate bias.

Hillman asked why the Hatchery Committees think a target is necessary. He said the programs currently calculate internal hatchery performance metrics and smolt-to-adult returns (SARs), which are all components of HRR. These are evaluated by the Hatchery Committees in concert with HRRs. He said given that the Hatchery Committees have not reacted to the lack of HRRs meeting program targets in the past, HRR targets may have little bearing on adaptive management. Mackey said there are three components to HRR: 1) fecundity varies, 2) in-hatchery survival is generally maximized; and 3) SARs are uncontrollable due to ocean conditions. Hillman agreed and said the Hatchery M&E Plan calls for comparing HRRs to the derived targets and NRRs. He said HRRs are nearly always greater than the NRRs, but HRRs rarely meet HRR targets. Willard said the HRR target exercise was part of the HETT assignment for appendices, but the values in the appendices come from the Biological Assessment and Management Plan. Keely Murdoch said the Hatchery Committees should use the established values, or task HETT to come up with new values. Tonseth said this relates back to the purpose of the programs; if the natural population catastrophically failed, the hatchery programs can help in recovery. He said the HRR target is a check-in so the program is performing at the right level in case of a natural population failure. Mackey said the PUD programs for No Net Impact (NNI) are set by

survival studies and are not directly related to the number of hatchery fish that need to return to meet spawning escapement. He said the programs can change size, but if the spawning escapement number is static, HRR would change. He said holding the program to a target is an objective but a difficult one, and more importantly, HRR should be higher than the NRR. Hillman said the productivity standards for the supplementation programs are well above the levels needed to avoid extinction based on quasi-extinction risk modeling. He said the question is how to calculate the target and determine the information needed to include in the calculation of the target. Truscott said HRR targets for summer Chinook salmon need to include harvest objectives, and pre-spawn mortality also needs to be accounted for in summer Chinook salmon. Tonseth said distinct calculations should be maintained, because looking at just HRR with harvest included might hide other impacts. He said different harvest components should be included in order to discover which harvest component has the largest impact. Truscott said if HRR is calculated for a brood year, the benefit of the doubt is afforded to the hatchery program. Mackey said interceptions of fish en route to their final destination should be accounted for. Busack said HRR should be calculated before and after harvest, and conservation fisheries should be excluded from the harvest calculation. Truscott said conservation fisheries should be included in HRR calculations because they are fish that return to the subbasin. Hillman said harvest varies greatly by year and location, and the average from 1989 to 2008 for Chiwawa spring Chinook salmon has been about 25 fish per year.

Gale asked whether an annual target or a 10-year running average target should be calculated. Gale said an HRR target would be meaningful in the 5-year reports, but should also be included in the annual reports. Hillman indicated that HRRs are presented in the annual and 5-year reports. Tonseth said HRR is like PNI or SARs, so the 5-year average is more valuable. Hillman said a running average has not previously been calculated. Busack recommended calculating a running average. Hillman suggested using the geometric mean given that replacement rates represent a multiplicative process. He also recommended assigning this task to the HETT, which will be meeting soon. Truscott said one method could be to pick a long-term average and try to improve on it. As a side note, Hillman said the Wenatchee River steelhead HRR target is 19.2, which has only been met once.

The Committees agreed the HETT will develop a method for calculating HRR targets before the next Hatchery Committees meeting on November 18, 2015.

Hillman suggested discussing Objective 5, in addition to continuing the discussion of Objective 4, at the next Hatchery Committees meeting. Hillman said the Hatchery Committees will discuss Objective 4 (HRR) and Objective 5 (stray rates) of the prioritized 5-Year Hatchery M&E Report objectives flagged for Methow spring Chinook salmon during the next Hatchery Committees meeting on November 18, 2015.

B. Goat Wall Acclimated Release (Keely Murdoch)

Keely Murdoch said, based on the agreed-upon Goat Wall Acclimation Plan and Statement of Agreement (SOA), the first Goat Wall acclimated release is supposed to occur in the spring of 2016. Murdoch said the YN is in the process of acquiring its own permits instead of being an authorized agent on the Grant and Douglas PUD permits, but contingency plans should be put in place in case permits are not ready by the fish-transfer date. She asked whether YN could be covered under an 1196 extension letter, because the Goat Wall Acclimation Plan and SOA have been agreed to, and said that permit coverage will affect PIT-tagging plans. Craig Busack said because this falls under 1196 coverage, it can move forward with the approval of the Hatchery Committees. Murdoch said the Goat Wall Acclimation Plan may not have been included as an appendix or addendum to the HGMP or sent to NMFS directly, but it is an approved Hatchery Committees document. Mike Tonseth suggested submitting the Goat Wall Acclimation Plan to Busack as an addendum to the HGMP, along with the SOA. Busack said he would need to know enough about the facility to assess whether it is within the scope of the permit. Murdoch replied that facility information is included in the coho salmon Biological Opinion (BiOp) and in the Goat Wall Acclimation Plan. Busack said NMFS may need additional documentation.

Alene Underwood said the concern in permit coverage is an attempt to be clear about roles, responsibilities, and allocation of take in the case that something happened to the fish. Tom Kahler said the PUDs relinquish Endangered Species Act (ESA) responsibility for the fish upon transfer to the YN. Busack asked if the PUDs would be uncomfortable letting YN release the fish unless explicit permits are written. Kahler replied that it would depend on

where ESA responsibility lies. Underwood agreed with Kahler and said she would prefer if NMFS could write a letter similar to letters in the past that have addressed program modifications. Busack said the tone of a letter transferring liability to YN could be scrutinized in a negative way, even though it seems straightforward to the PUDs from a liability standpoint. Murdoch said 25,000 fish are planned for release. Busack said 25,000 fish represents 10% of the program, and language in 1196 allows for this release. He said this has been allowed in the past, and with verbal support from Chris Peterson (NMFS). Murdoch said it has been done for Grant PUD. Kahler said that for those Grant PUD releases, Douglas PUD was not aware that the YN had no permits for acclimating the fish. Murdoch said that is not true. Kahler disagreed. Murdoch said Wolf Creek and Heath Pond have both been used for remote acclimation, but people think about the situation differently now. Tonseth said the discussion about remote site activities was precipitated by a lot of mortality at Heath Pond. He said it affected the PUDs' mitigation obligation, causing future discomfort and apprehension about liability associated with fish they do not have custody of. Murdoch disagreed and said the numbers of fish lost at Heath Pond were not different, but the proportion of fish lost was higher.

Tracy Hillman asked if Murdoch needs to provide Busack with further information about the facility at Goat Wall. Murdoch said the plan has already been approved by the Hatchery Committees, and YN waited until 2016 to begin releases because the permits were not in place for 2015. Busack asked what the PIT-tagging deadline is for fish at Goat Wall. Murdoch replied there is flexibility because YN is performing the PIT tagging, but it is looking at January to February, although a date has not yet been decided. Murdoch said the approved Goat Wall Acclimation Plan should contain all needed information for consultation, but she will need to know if that is not the case. Busack said the way for acclimated release activities to move forward if consultation is not complete is for the Hatchery Committees to agree to it, but that seems improbable. Kirk Truscott asked if it matters who does the acclimation if the point of the activity is to get fish acclimated higher in the basin. He asked whether WDFW could perform the acclimation and YN compensate them for the work. Murdoch said she would have to vet that idea internally.

Tonseth suggested that an approach similar to what WDFW did in the Okanogan Basin with the Colville Confederated Tribes (CCT) could be taken. He said the PUDs could issue YN authorization to conduct the activity as an extension under WDFW activity and liability. Kahler asked if that is possible under the current permit. Tonseth said WDFW submitted a letter to CCT and the National Oceanic and Atmospheric Administration (NOAA) for concurrence. Murdoch said she would have to vet the idea internally first, but she thinks that it would be okay. Tonseth said that it is not a long-term solution, but rather a one-time event that affords more time to acquire other permits. Truscott said his interpretation is that the permitting landscape has changed since this action was approved in January or February, 2015. He said he would take this idea back to CCT for discussion. Greg Mackey said when Douglas PUD approved the YN proposal, the ESA ties of the PUD to the fish would be cut upon transfer. He said distancing this link is a good idea but would need to be discussed further internally. Underwood said Chelan PUD's fish for this brood year are going to the Chewuch acclimation facility, so Chelan PUD does not need to provide input on this decision.

Murdoch will provide Busack with Goat Wall Acclimated Release documents for review. Busack will discuss with Murdoch any further documentation needed for NMFS consultation on Goat Wall Acclimated Releases.

The Hatchery Committees representatives will discuss internally the WDFW proposal that would give Grant and Douglas PUDs the ability to authorize YN to perform Goat Wall Acclimated Release activities as an extension under WDFW activities.

C. Excess Hatchery-by-Hatchery Origin Steelhead (Mike Tonseth)

Mike Tonseth said the 2014 Broodstock Collection Protocols include contingency broodstock collection for the safety net component. He said WDFW collected additional fish in the fall, and for the Okanogan program, CCT collected additional broodstock. At Wells Dam, fish collected in the fall have typically been spawned by February, prior to spring broodstock collections. Therefore, this collection strategy will produce surpluses until the fall collections are reduced to compensate for the spring collections. Tonseth said WDFW has a 24,000-fish overage in the Methow safety net program, and a 35,000-fish overage in the

Okanogan program. He said Ringold FH has no capacity for these fish. He said Kirk Truscott had internal discussions, and CCT have no use for the fish and they cannot be culled, thus the option is to put them into resident fishery opportunities. He said WDFW proposes to take 12,000 of the Methow safety net fish to Alta Lake and 12,000 to Patterson Lake in the Methow Valley. He said WDFW also proposes to take 17,500 of the Okanogan program excess fish to Bonaparte Lake and 17,500 to Crawfish Lake, both of which are in the north half of the Okanogan Basin, providing a potential tribal benefit. Tonseth said the only caveat is that he needs to check with the district fish biologist to ensure stocking levels are not exceeded in those lakes. Tonseth said the fish are all ad-clipped. Keely Murdoch asked how the conservation program is doing. Tonseth said these fish cannot be part of the anadromous component because they are above 110% of the permit value. He said the program is set up for overages, because adults are over-collected if spring collection is successful. He said the broodstock collection protocol was still set up this way for the 2015 brood, but in the future, Okanogan fish in the Okanogan Basin can be acquired and pulled out of the collection goals. Todd Pearsons asked if these fish are above surpluses at Ringold FH. Tonseth replied yes; the permit identified Ringold FH as a back-up location for excess fish, but it also collected fish on site and has already accepted 100,000 fish, placing them at the 110% permit limit. Pearsons suggested cutting back on collection in the coming year, but that it depends on how comfortable everyone is on relying on spring collection. Bill Gale said, in 2014, the bulk of the fish were Wells FH volunteers, so with only 1 year of data, caution should be taken to not pull back too soon or too much. Greg Mackey asked if a number has been calculated for how many excess fish Ringold FH can accept in the coming year. Tonseth replied the program smolt release is 180,000, and the FH can collect some of its own brood. He said if he has an expectation of how many excess fish WDFW will have, he can tell Ringold FH so that it does not collect as many adults. Gale asked if there is a reason to preferentially collect broodstock at Ringold FH. Tonseth replied WDFW intends to make Ringold FH self-supporting, but if it has capacity and the Methow or Okanogan programs have excess, fish will be transferred.

Tracy Hillman asked the Hatchery Committees if it approves WDFW's proposal to distribute excess steelhead into the four lakes. Murdoch replied that she needs more time to decide and discuss internally. Craig Busack said NMFS cannot support releasing these fish into

anadromous waters, and the 110% overages are a problem because they are being treated like a baseline by programs. Tonseth said WDFW cannot support culling the fish. Gale said the 110% value is still much lower than what the programs were previously releasing. Tonseth said the programs have decreased releases by 40,000 after NNI, but under NOAA's 2015 extension letter, it must follow the program release goals, which provide limited options. Busack said releasing more than 110% would affect public perception of the agencies meeting their agreements. Truscott said in this instance, the overages are a result of purposeful over-collection. Murdoch said excess fish are a better problem than not meeting production goals. Tonseth said these fish were removed and did not contribute to natural production. Douglas PUD, Grant PUD, WDFW, USFWS, CCT, Chelan PUD, and NMFS all agreed to the WDFW's proposal. Murdoch said she will discuss with Tom Scribner the proposal by WDFW to release excess hatchery-by-hatchery origin steelhead into lakes (non-anadromous waters) in the Methow and Okanogan basins.

Gale said one of the management objectives at Winthrop NFH and Wells FH is that fish that are volitionally released do not residualize. Gale said he wants to make sure this agreement does not preclude the ability to perform other management actions. Mackey said it would be good to have a contingency plan for the excess fish every year until the programs are more predictable. Tonseth said he will add contingencies for overages to the Broodstock Collection Protocols.

IV. Douglas PUD

A. Wells Hatchery Modernization (Greg Mackey)

Greg Mackey shared a presentation titled, "Wells Hatchery Modernization" (Attachment E). The presentation included descriptions of ongoing construction at Wells FH to the spawning channel, dirt ponds, adult holding ponds, volunteer trap and channel, new adult handling facility, pollution abatement pond, and new hatchery building. Questions and comments were discussed as follows:

Alene Underwood asked if the spawning channel was dug out or filled in. Mackey replied that the old 5,000-foot-long channel was crushed and graded.

Tracy Hillman asked how much modernization costs. Mackey replied there is a \$37-million contract in place with Lydig Construction, Inc., from Spokane, Washington.

V. HETT

A. HETT Update (Greg Mackey/Catherine Willard)

Greg Mackey said the HETT will convene on October 29, 2015, to discuss the Hatchery M&E Plan appendices.

VI. NMFS

A. Consultation Update (Craig Busack)

Craig Busack said he has transitioned into a chief scientist role in his group, providing technical help, BiOp development, and National Environmental Policy Act document development. Busack said he is still working on the Methow spring Chinook salmon consultation, and he recognizes that calling into each Hatchery Committees meeting is not an ideal situation. He said NMFS is proceeding to hire someone to replace him on the Hatchery Committees.

Busack said administrative records for the Leavenworth FH lawsuit are due on November 20, 2015, and previous NOAA involvement in helping get the program permitted resulted in the plaintiffs amending their suit to include NMFS, along with USFWS and the U.S. Bureau of Reclamation (USBR). He said they are trying to get the Wenatchee steelhead consultation completed, and Amilee Wilson is continuing to work on the amended environmental assessment for the Methow and Okanogan FHs steelhead programs. Kirk Truscott said CCT have submitted comments on the draft Environmental Assessment. Busack said Sharlene Hurst (NMFS) will be working on the 1347 projects.

Busack said for the Methow spring Chinook salmon consultation, he has a new HGMP from Chelan PUD. He said there are two issues at hand before the consultation can be completed; the first includes research, monitoring, and evaluation (RME), which has been elevated up to the federal level with USBR and USFWS. He said the PUDs requested to meet with the regional director on November 13, 2015, which will help work through the RME problem. He said the second issue is gene flow standards. Busack said there was a sliding scale, which

people wanted to modify to a Ford model with basin-wide PNI. Busack suggested moving forward on creating the standards using this model, and that the spawning ground data will be available next week. Bill Gale said that would have to wait until USFWS counts fish heads with coded wire tags (CWTs) in the winter after summer Chinook salmon are done spawning. Busack said the plan for gene flow standards is to use a multi-population Ford model and specify a pHOS and proportion natural-origin broodstock for the separate PUD operations that, combined, provide standards that meet the Hatchery Committees' needs. Todd Pearsons said using general runs of PNI and weighted PNI in the PNI calculation spreadsheet for comparison, Busack's approach had a higher PNI than the other approaches. Busack said a workgroup should be set up to calculate the gene flow standards. Mike Tonseth said pHOS is needed to calculate PNI; therefore, WDFW needs snout counts and scales to confirm the origin of spawners for input to gene flow standards calculations. Gale said for the Methow-to-Winthrop program comparisons, if Winthrop NFH 4-year-old fish distribute the in the same manner as Winthrop NFH 5-year-old fish, the 4-year-old fish could be used as an estimate of distribution because they are ad-clipped. He said by using expansion, inferences could be made about the 5-year-old fish. He added coded wire tag data were also needed from hatchery recoveries this year.

Sarah Montgomery and Matt Cooper will send a Doodle poll to the Hatchery Committees in order to convene a conference call to discuss gene flow standards for Methow spring Chinook salmon.

VII. USFWS

A. USFWS Bull Trout Consultation Update (Bill Gale)

Craig Busack said NMFS has issued permits without completing bull trout consultation in the past. He said, for example, Amilee Wilson thought there was enough programmatic information for Wenatchee spring Chinook salmon to issue permits. He said if the Hatchery Committees have to wait for Karl Halupka to complete a Methow BiOp, it could take a few months. Bill Gale said the Wells BiOp and Federal Energy Regulatory Commission licensing effort provide bull trout coverage for these programs, and unlike the Wenatchee program, there are no new programs such as Nason Creek being added. Gale said he thinks the program is largely covered for bull trout, but Halupka should see if there is

anything that falls outside that umbrella of coverage. Greg Mackey said all hatchery operations and M&E activities are in the bull trout BiOp in the Wells program.

Mike Tonseth asked if the YN Goat Wall acclimation component has the necessary bull trout coverage. Keely Murdoch said the remote sites are being covered under coho salmon or multispecies BiOps.

Alene Underwood said Chelan PUD has a concern that if a coordination meeting were set up, conversations similar to those in previous meetings would occur. She said Chelan PUD would like to ensure the meeting is productive. Gale asked if the Hatchery Committees had responded to Halupka with comments on the Incidental Take Statement (ITS). Tonseth said WDFW has not responded. Gale said that Halupka was waiting for comments, and did not want to make changes that would be contradicted in later comments. Underwood said many comments had been provided on the ITS, and Chelan PUD was under the impression that he would continue to work on the ITS even though not all comments had been received, but a timeline was not made clear. Underwood said if there is substantive progress on the consultation, then Chelan PUD would like to have a coordination meeting. Tonseth said that with the tight timeline, maybe time would be better spent working on issues related to the consultations instead of having a coordination meeting. Kirk Truscott suggested Wilson send an email with the status update of things on the agenda, so meeting time is saved. Busack proposed that Wilson attend the next Hatchery Committees meeting on November 18, 2015, because there is a lot of overlap in material, and the NMFS consultation update could be one of the first topics. Underwood said it would be helpful if Halupka provided more regular updates.

Sarah Montgomery will put the NMFS consultation update first on the agenda for the Hatchery Committees meeting on November 18, 2015.

Busack will request that Amilee Wilson and Karl Halupka attend the next Hatchery Committees meeting on November 18, 2015.

Following the bull trout consultation discussion, Tracy Hillman reported that many adult bull trout were observed in the Chiwawa River this year during snorkel surveys (Figure 1).

He said the number of bull trout was surprisingly high, and most were found in deep pools. Hillman said Nason Creek and the Little Wenatchee River were also surveyed, but not many bull trout were observed in those areas. Busack said the observations could be a result of displacement, similar to the White River. Tonseth said lacustrine bull trout are spawning above Little Wenatchee Falls.

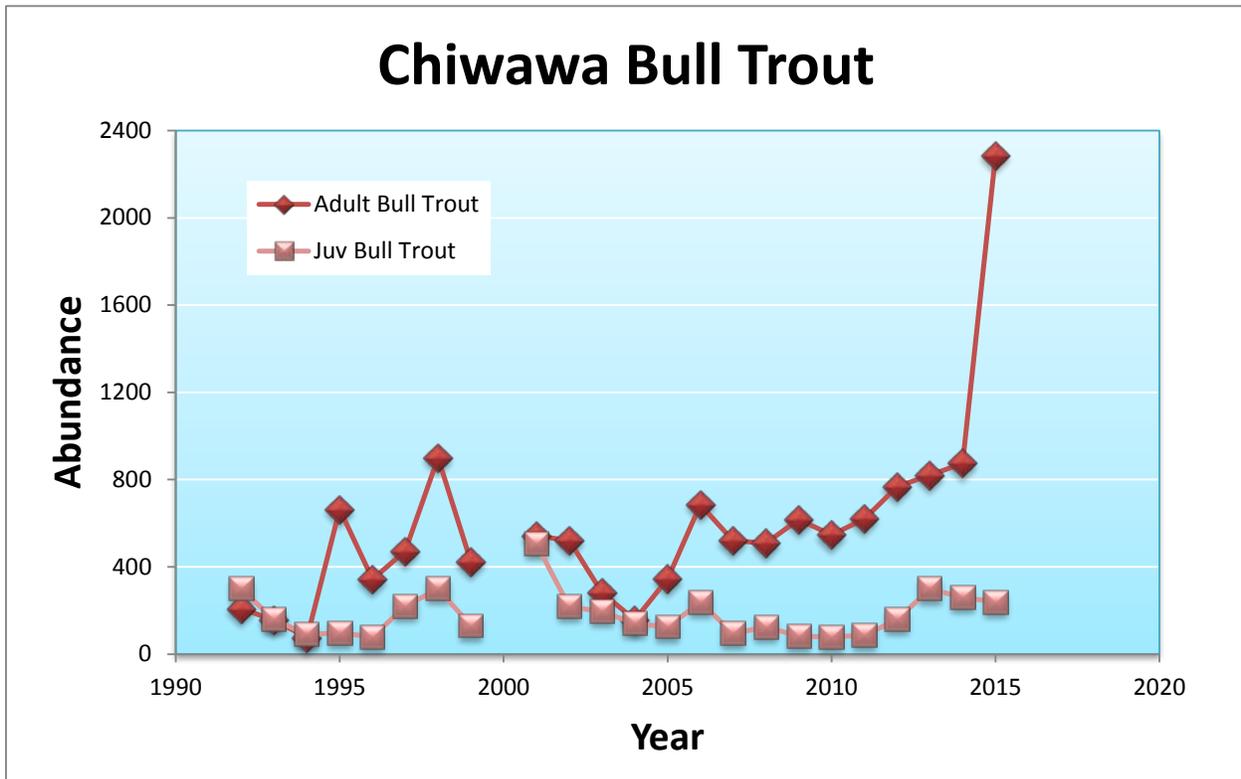


Figure 1
Bull Trout Abundance in Chiwawa River

VIII. HCP Administration

A. Next Meetings

The next scheduled Hatchery Committees meetings are on November 18, 2015 (Douglas PUD), December 16, 2015 (Chelan PUD), and January 20, 2016 (Douglas PUD).

List of Attachments

Attachment A List of Attendees

Attachment B	Wenatchee River Relative Reproductive Success Studies
Attachment C	HRR Target Calculation
Attachment D	Winthrop NFH Spring Chinook Yearling Release Metrics
Attachment E	Wells Hatchery Modernization

Attachment A
List of Attendees

Name	Organization
Tracy Hillman	BioAnalysts, Inc.
Sarah Montgomery	Anchor QEA, LLC
Catherine Willard*	Chelan PUD
Alene Underwood*	Chelan PUD
Greg Mackey*	Douglas PUD
Tom Kahler*	Douglas PUD
Todd Pearsons	Grant PUD
Bill Gale*	U.S. Fish and Wildlife Service
Craig Busack*†	National Marine Fisheries Service
Mike Tonseth*	Washington Department of Fish and Wildlife
Matt Cooper*	U.S. Fish and Wildlife Service
Kirk Truscott*	Colville Confederated Tribes
Keely Murdoch*	Yakama Nation

Notes:

* Denotes Hatchery Committees member or alternate

† Joined by phone
