

Memorandum

To: Wells, Rocky Reach, and Rock Island
HCP Hatchery Committees

Date: July 18, 2018

From: Tracy Hillman, HCP Hatchery Committees Chairman

cc: Sarah Montgomery, Anchor QEA, LLC

Re: Final Minutes of the June 20, 2018 HCP Hatchery Committees Conference Call

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plan (HCP) Hatchery Committees meeting was held via conference call on Wednesday, June 20, 2018, from 9:00 to 11:00 a.m. Attendees are listed in Attachment A to these meeting minutes.

Action Item Summary

- Mike Tonseth will coordinate with Todd Seamons (Washington Department of Fish and Wildlife [WDFW]) to produce an outline or recommended approach for genetic monitoring (Item I-A). *(Note: this item is ongoing.)*
- Mike Tonseth will coordinate with Todd Seamons (WDFW) regarding reviewing the memorandum, "Alternatives for Methow Basin Conservation Steelhead Programs" (Item I-A). *(Note: this item is ongoing.)*
- Kirk Truscott will work with Casey Baldwin (Colville Confederated Tribes [CCT]) to summarize the CCT's current protocols for genetic sampling (Item I-A). *(Note: this item is ongoing.)*
- Tom Kahler and Greg Mackey will provide historical information to Tracy Hillman for incorporation in the Draft Hatchery Program Timelines (Item I-A). *(Note: this item is ongoing.)*
- Tracy Hillman will review aspects of the Independent Scientific Advisory Board's *Review of Spring Chinook Salmon in the Upper Columbia River* under Hatchery Committees' purview (Item I-A). *(Note: this item is ongoing.)*
- Greg Mackey will continue researching whether to include age-3 males in broodstock and discuss it with Craig Busack (National Marine Fisheries Service [NMFS]; Item I-A). *(Note: this item is ongoing.)*
- Betsy Bamberger (Douglas PUD) will coordinate with the Washington Animal Disease Diagnostic Lab (WADDL) to obtain optical density values to inform culling for bacterial kidney disease (Item I-A). *(Note: this item is ongoing.)*
- Keely Murdoch and Mike Tonseth will provide an update on their evaluation of the size of conservation programs in October 2018 (Item I-A). *(Note: this item is ongoing.)*

- Keely Murdoch will provide coho salmon broodstock collection protocols to Mike Tonseth by late February or early March 2019 for inclusion in the 2019 Broodstock Collection Protocols (Item I-A). *(Note: this item is ongoing.)*
- Sarah Montgomery will schedule a longer Hatchery Committees meeting on July 18, 2018, with times in the agenda, and coordinate with the Priest Rapids Coordinating Committee Hatchery Sub-Committee (PRCC HSC) facilitator (Item I-A). *(Note: This item is complete and Larissa Rohrbach distributed the revised agenda for this meeting on July 12, 2018.)*
- Betsy Bamberger will research the practicality of assessing bacterial kidney disease by culturing (Item I-A). *(Note: this item is ongoing.)*
- Tom Scribner will discuss internally the potential to release surplus Winthrop National Fish Hatchery (NFH) brood year (BY) 2018 wild-by-wild steelhead parr at Yakama Nation (YN) restoration sites in the Methow Basin in October (Item II-A).
- The Hatchery Committees representatives will nominate geneticists to participate on a panel that will help identify appropriate genetics monitoring and evaluation protocols for the upper Columbia River hatchery programs (Item III-A). *(Note: Bill Gale provided a nomination for the USFWS on July 6, 2018.)*
- Hatchery Committees representatives will review Todd Pearson's list of questions regarding genetics monitoring, which Sarah Montgomery distributed to the Hatchery Committees on June 19, 2018 (Item IV-A).
- Hatchery Committees representatives will review WDFW's 2018-2020 Brood-Year Adult Prophylactic Disease Management Plan for Eastbank Fish Hatchery Complex Spring and Summer Chinook Hatchery Programs, which was distributed on June 20, 2018, and provide comments to Mike Tonseth (Item III-D).
- Hatchery Committees representatives will review Mike Tonseth's email regarding the Nason spring Chinook overage (distributed on June 20, 2018) and provide feedback to him by July 5, 2018 (Item IV-C).

Decision Summary

- There were no decision items approved during today's meeting.

Agreements

- The Wells Hatchery Committee agreed that Methow Hatchery has the capacity to rear the approximately 50,000 surplus Winthrop NFH BY 2018 wild-by-wild steelhead to 200 to 250 fish per pound for release in October 2018., and rearing these fish would not affect the Methow Hatchery spring Chinook production. (Item II-A).

Review Items

- Sarah Montgomery sent an email to the Rocky Reach and Rock Island Hatchery Committees on June 16, 2018, notifying them that the Draft 2017 Chelan PUD and Grant PUD Monitoring and Evaluation (M&E) Annual Report and its appendices are available for a 30-day review, with edits and comments due to Tracy Hillman by July 16, 2018.

Finalized Documents

- No items have been recently finalized.

I. Welcome

A. Review Agenda, Review Last Meeting Action Items, and Approve the May 16, 2018 Meeting Minutes (Tracy Hillman)

Tracy Hillman welcomed the Hatchery Committees and asked for any additions or changes to the agenda. Todd Pearsons added an additional item, genetic monitoring. Greg Mackey added an update on Columbia safety-net steelhead. Todd Pearsons also added an item for an overage in the Nason program.

The Hatchery Committees representatives reviewed the revised draft May 16, 2018 meeting minutes. Sarah Montgomery said there are some outstanding comments, which the Hatchery Committees reviewed and addressed. Hatchery Committees representatives present approved the draft May 16, 2018 meeting minutes as revised.

Action items from the Hatchery Committees meeting on May 16, 2018, and follow-up discussions were addressed (*note: italicized text below corresponds to agenda items from the meeting on May 16, 2018*):

- *Mike Tonseth will coordinate with Todd Seamons (Washington Department of Fish and Wildlife [WDFW]) to produce an outline or recommended approach for genetic monitoring (Item I-A).*
Tonseth said this is still ongoing.
- *Mike Tonseth will coordinate with Todd Seamons regarding reviewing the memorandum, "Alternatives for Methow Basin Conservation Steelhead Programs" (Item I-A).*
Tonseth said this is still ongoing.
- *Kirk Truscott will work with Casey Baldwin (Colville Confederated Tribes [CCT]) to summarize the CCT's current protocols for genetic sampling (Item I-A).*
This item is ongoing.

- *Tom Kahler and Greg Mackey will provide historical information to Tracy Hillman for incorporation in the Draft Hatchery Program Timelines (Item I-A).*
This item is ongoing.
- *Tracy Hillman will review aspects of the Independent Scientific Advisory Board's Review of Spring Chinook Salmon in the Upper Columbia River under Hatchery Committees' purview (Item I-A).*
This item is ongoing.
- *Charlene Hurst will send a Word version of the steelhead Biological Opinion (BiOp) to Greg Mackey and Matt Cooper (Item I-A).*
This item is complete.
- *Greg Mackey will continue researching whether to include age-3 males in broodstock and discuss it with Craig Busack (National Marine Fisheries Service [NMFS]; Item III-B).*
Mackey said Busack has been busy, but he will discuss this with him soon.
- *Betsy Bamberger (Douglas PUD) will coordinate with the Washington Animal Disease Diagnostic Lab (WADDL) to obtain optical density values to inform culling for bacterial kidney disease (BKD; Item III-C).*
Greg Mackey said this item is ongoing.
- *Keely Murdoch and Mike Tonseth will provide an update on their evaluation of the size of conservation programs in October 2018 (Item I-A).*
This item is ongoing.
- *Keely Murdoch will provide coho salmon broodstock collection protocols to Mike Tonseth by late February or early March 2019 for inclusion in the 2019 Broodstock Collection Protocols (Item I-A).*
This item is ongoing.
- *The Hatchery Committees will discuss genetic monitoring in June and July 2018 (Item I-A).*
This item will be discussed today.
- *Sarah Montgomery will schedule a longer meeting on July 18, 2018, with times in the agenda, and coordinate with the Priest Rapids Coordinating Committee Hatchery Sub-Committee (PRCC-HSC) facilitator (Item I-A).*
This item is ongoing.
- *Betsy Bamberger will research the practicality of assessing BKD by culturing (Item III-C).*
Greg Mackey said this item is ongoing.
- *Permit applicants will send public comment distribution lists to Charlene Hurst (Item III-D).*
This item is complete.

II. USFWS

A. Brood Year 2018 Winthrop National Fish Hatchery Steelhead Egg Overage (Matt Cooper)

Matt Cooper said the cooperative broodstock collection effort between U.S. Fish and Wildlife Service (USFWS), Douglas PUD, WDFW, YN, and volunteers was successful in collecting 61 wild steelhead pairs. With no prespawn mortality and higher fecundity than anticipated, Cooper said the Winthrop NFH steelhead program now has an overage in wild-by-wild progeny. He said the Joint Fisheries Parties (JFP) discussed options for the overage, which exceeds the Methow conservation program production target by 50,000 eggs. Cooper said holding the eggs at Winthrop NFH is not an option due to space. Other programs are also at or above capacity. Wells FH, for example, has similar space-water constraints, and it would be difficult to combine the progeny at Wells FH due to large developmental differences. Cooper said the JFP made a request to Douglas PUD to consider transferring the approximately 50,000 fry to Methow FH for short-term rearing until they are sufficient size (for marking) for a fall parr release.

Greg Mackey asked if the fish will reach a size at which they can be tagged or marked in October. Mike Tonseth said the fish could be reared to 200 to 250 fish per pound, so they could be ad-clipped or marked with a coded wire tag by October in preparation for a fall parr plant. Mackey asked if there are any other marking strategies for fish that size. Tonseth said due to the need for a marking strategy that allows for a selective fishery or identification in the field, ad-clipping and/or marking with a coded wire tag are the only suitable options.

Mackey asked what the approximate overage is. Michael Humling said it would be approximately 45,000 fish if the overage above 100% of the program target were to be transferred. He said fewer could be transferred if the 10% overage buffer allowed in permits was used. He said the preference is to release 100% of the program and to transfer the overage. He recommended against the release of 110% of the program.

Mackey said there are small circular tanks at Methow FH that were installed for the YN kelt program (now based out of Winthrop NFH). He asked if using those tanks for a few months to rear the excess steelhead would be acceptable to YN. Tom Scribner said yes. Scribner also asked if there are data showing that parr released in the fall survive better than fry. He asked if there is a logistically creative way to rear those excess fish until the spring, when they are larger and have a better chance of survival. He said the fall parr release strategy being discussed has the potential to result in very low survival. Humling said based on past work by WDFW, fry plants are not very successful and parr plants are slightly more successful, resulting in approximately half of the returning adults compared

to a smolt release. Scribner suggested combining various facilities and rearing vessels to try to rear the surplus fish until spring.

Mackey brought up the concern of proportion of hatchery origin spawner (pHOS) management. He said some steelhead from the Winthrop NFH already need to be removed as adults by angling and catching at the outfall trap. He said releasing this surplus at the smolt stage would result in even more fish needing to be removed as adults to meet pHOS targets. Mackey suggested stocking the surplus fish as fry at a feeding stage in vacant habitat where M&E assessments show that there is not much spawning. Scribner suggested performing selective removal at Wells Dam when fish return as adults. Mackey said while stocking fry is a different strategy, putting these fish in good habitat where they might return to may have a better effect on the overall population because they would behave more like wild fish and contribute intergenerationally. Mackey said steelhead do not spawn in every spawning location in the Methow River every year, so there is good habitat available where stocking these steelhead as fry could be beneficial.

Tracy Hillman asked for input from Brett Farman from a permitting perspective. Farman said rearing the fish to a parr stage and releasing them is preferable to rearing the fish to a larger size based on the effects considered in the BiOp. He said this overage is above what was considered in the BiOp, so adjustments should be made in the future to avoid it. He said NMFS can respond to this plan with a letter of concurrence as long as additional impacts do not occur.

Bill Gale said the JFP's first choice was to rear the fish to a smolt size and move program releases around so that the approximately 45,000 fish overage would be taken from the Columbia safety-net release and placed into nonanadromous waters. He said that was not viable due to rearing space. The second choice is to release the fish as parr. Tracy Hillman asked if the parr could be released into YN restoration sites. He said this might provide an additional survival boost, especially in the winter. Tom Scribner said he will check internally about the potential for releasing parr in these sites. The release in some sites may interfere with ongoing monitoring work.

Mackey stated that the programs should be planned to address such overages in advance. He said for 2018, the overage can probably be reared at Methow FH, but other options would be egg planting or fry stocking. He suggested conducting a follow-up assessment to determine the survival of these progeny and said he will coordinate with Methow FH staff regarding space limitations. Farman said the typical plan for these fish would be to not exceed the target by more than 10%. In this case, additional flexibility is required, but fish in excess of 110% of the program target should not be reared to the spring and released. Tonseth pointed out that Hatchery Committees do not have oversight for this program, so the consideration is about using available capacity at Methow FH for short-term rearing until they can be released.

The Wells Hatchery Committee agreed that Methow Hatchery has the capacity to rear the approximately 50,000 surplus Winthrop NFH BY 2018 wild-by-wild steelhead to 200 to 250 fish per pound for release in October 2018 and rearing these fish would not affect the Methow Hatchery spring Chinook production, as follows: USFWS, YN, WDFW, Douglas PUD, and NMFS agreed on June 20, 2018, and the CCT provided an email vote the prior day.

III. Douglas PUD

A. Surplus Columbia River Safety-Net Program Steelhead (Greg Mackey)

Greg Mackey said there is an overage of approximately 15,000 hatchery-by-hatchery steelhead in the Columbia River safety-net program. He said Douglas PUD will work with WDFW to identify a local lake to put these fish in, consistent with what is described in the Broodstock Collection Protocols. Mackey said Douglas PUD is also working on pond modifications where these fish are currently held.

IV. Joint HCP-HC/PRCC HSC

A. Genetic Monitoring (Todd Pearsons)

Todd Pearsons shared the document, "Genetics Monitoring Associated with PUD Hatchery Programs," which Sarah Montgomery distributed to the Hatchery Committees on June 19, 2019 (Attachment B). Pearsons said the document is a draft list of questions for geneticists, addressing the best way or standard approaches for genetic monitoring. He asked that each representative nominate a geneticist from their respective organization (if possible) to participate on a panel about the appropriate genetics M&E strategies for the upper Columbia River PUD programs. Hatchery Committees representatives present said they would discuss this internally and review Pearsons' document. This will be further discussed during the July Hatchery Committees meeting.

B. Nason Creek Spring Chinook Salmon Overage (Todd Pearsons)

Todd Pearsons said he heard that there may be an overage of approximately 50,000 wild-by-wild fry in the Nason Creek spring Chinook salmon program. He said he would like more information on this from Mike Tonseth [who had to leave the meeting prior to this agenda item] and said the Broodstock Collection Protocols discuss how to handle overages such as this. Catherine Willard said the Broodstock Collection Protocols state that an overage of wild-by-wild Nason Creek spring Chinook salmon could be used to replace hatchery-by-hatchery fish in the Chiwawa conservation program.

C. NMFS Consultation Update (Brett Farman)

Brett Farman said the National Environmental Policy Act (NEPA) process for Methow steelhead and the unlisted programs (summer/fall Chinook salmon for Wells, Methow, Chelan Falls, Dryden, and

Priest Rapids) is nearly complete. He said the Environmental Assessment (EA) will be sent to applicants in August and then will be made available for public comment.

Greg Mackey said if Farman travels to the next meeting in person, the PUDs would be happy to give him a tour of facilities and rivers and opened the invitation to other interested parties.

D. Eastbank FH Disease Management (Tonseth)

Tonseth said he is also working on a disease management plan for Eastbank FH. He said he will send this plan out for review soon. He said WDFW's lead veterinarian is working on this approach. Todd Pearsons asked about how adult broodstock are prophylactically handled. He also asked what is the role of the Hatchery Committees and PRCC HSC in using best management practices to minimize disease in adult handling? Tonseth said WDFW's position is that the managers decide how to minimize disease and the committees do not have oversight. He said he will send the guidance to the committees, then continue the discussion over email and at future meetings. Pearsons said he is concerned that Tonseth's proposed prophylactic injection study may need a decision soon and if guidelines are not laid out in the Broodstock Collection Protocols for this specific instance, it will need to be discussed.

V. HCP Administration

A. HCP-HC Support: Larissa Rohrbach (Hillman)

Tracy Hillman welcomed Larissa Rohrbach (Anchor QEA) to the meeting and said she will be taking over the Hatchery Committees support role. Sarah Montgomery said the plan is for Rohrbach to shadow her in June, July, and August 2018. Rohrbach will then be on leave from September to December and will take over the role full time in January 2019.

B. Next Meetings

The next Hatchery Committees meetings are on July 18, 2018 (Grant PUD), August 15, 2018 (Grant PUD), and September 19, 2018 (Grant PUD).

VI. List of Attachments

Attachment A List of Attendees

Attachment B Genetics Monitoring Associated with PUD Hatchery Programs

Attachment A
List of Attendees

Name	Organization
Tracy Hillman	BioAnalysts, Inc.
Sarah Montgomery	Anchor QEA, LLC
Larissa Rohrbach	Anchor QEA, LLC
Catherine Willard*	Chelan PUD
Tom Kahler*	Douglas PUD
Greg Mackey*	Douglas PUD
Todd Pearsons‡	Grant PUD
Peter Graf‡	Grant PUD
Deanne Pavlik-Kunkel‡	Grant PUD
Mike Tonseth*	Washington Department of Fish and Wildlife
Alf Haukenest	Washington Department of Fish and Wildlife
Charlie Snow†	Washington Department of Fish and Wildlife
McLain Johnson	Washington Department of Fish and Wildlife
Matt Cooper*	U.S. Fish and Wildlife Service
Bill Gale*	U.S. Fish and Wildlife Service
Michael Humling	U.S. Fish and Wildlife Service
Chris Pasley	U.S. Fish and Wildlife Service
Brett Farman*	National Marine Fisheries Service
Tom Scribner*	Yakama Nation

Notes:

* Denotes Hatchery Committees member or alternate

‡ Joined for the joint HCP-HC/PRCC HSC discussion