

## PRCC Hatchery Subcommittee Meeting

Thursday, September 22, 2016

Via Conference Call

Meeting Summary

### PRCC HSC Members

Bill Gale, USFWS

Peter Graf, GPUD (alt)

Keely Murdoch, Yakama Nation

Todd Pearsons, GPUD

Mike Tonseth, WDFW

Justin Yeager, NOAA

### Other Participants

Deanne Pavlik-Kunkel, GPUD

Pat Wyena, GPUD

Elizabeth McManus, Facilitator

Andy Chinn, Facilitator

### Decisions

- A. HSC members approved the August meeting summary, pending WDFW approval.

### Actions

1. Ross Strategic will send an e-mail on 10/10 to HSC members as a reminder that comments are due on the draft 2015-2016 Priest Rapids Hatchery Annual M&E Report on 10/14.
2. Ross Strategic will continue to work with the HC facilitators on logistics and planning to accommodate back-to-back HSC/HC meetings where feasible.
3. Ross Strategic will follow up with HSC member registration for GPUD's SharePoint site and troubleshoot SharePoint issues as needed (carried over from previous meeting).

### **I. Updates and Meeting Summary Review**

- A. PRCC Update (provided by Kirk Truscott via e-mail)** – The PRCC is still considering decisions regarding the out-year schedule for survival studies, decoupling sub-yearling Chinook from steelhead (and instead coupling with yearling Chinook as a surrogate), and determining NNI funding contribution for the WDFW proposal to assess factors influencing the survival of juvenile spring Chinook salmon in Lake Wenatchee.
- B. Draft 2015-2016 Priest Rapids Hatchery Annual M&E Report** – The draft report was circulated with HSC members on 9/14 for 30-day review. Comments on the draft report are due on Friday, October 14.
- C. September Conference Call Summary** – HSC members approved the September conference call summary.
- D. HC Updates** – Please refer to the 9/21 HCP-HC meeting summary for joint HCP-HC and PRCC-HSC discussions (Appendix A).
- E. Next Steps**
  - Ross Strategic will send an e-mail on 10/10 to HSC members as a reminder that comments are due on the draft 2015-2016 Priest Rapids Hatchery Annual M&E Report on 10/14.

## II. Permit Updates

### A. NOAA – Permit update summary is below.

- NMFS is reviewing the USFWS biop on Wenatchee steelhead and will provide comments.
- NMFS circulated the Methow Spring Chinook NEPA EA with committee members for comment.
- Okanogan Steelhead Conservation and Chief Joseph spring/summer Chinook:
  - The biological opinion is being drafted with goal of completion by end of 2016.

### B. USFWS – Karl Halupka circulated the draft Wenatchee biop to all applicants for review. The memo regarding Methow consultation is still under internal NMFS review (see August conference call summary for details on this memo).

## III. Priest Rapids Hatchery

### A. Draft 2015-2016 Priest Rapids Hatchery Annual M&E Report – 2015 saw a third consecutive record escapement (over 266,000 fish as compared with a mean and median of 73,000 and 55,000 from 1991-2015). 62,000 fall Chinook returned to the hatchery at the trap – the second highest return on record. This is the second year that the Reach-wide PNI estimate of over .67 has been met; in 2015 PNI was .762 (including the entire Hanford Reach). The latest brood year of 2009 had the highest HRR on record (26.92). NRR in the Hanford Reach was 3.97. In summary changes to PRH operations over the years seem to be working: PNI is significantly higher than historic numbers and PRH is contributing to harvest.

## IV. Yakama Coho Mitigation

### A. Mitigation Update – The current YN-GPUD 10-year Coho mitigation agreement will expire at the end of 2017. YN and GPUD are meeting to discuss Coho mitigation beyond 2017 and expect that the HSC will be involved in future discussions/decision-making.

## V. Nason Acclimation Facility

### A. Intake Screen Replacement – The intake project continues to go well. There was a glitch in the manufacture of one of the parts but it will not impact facility start-up and operation. A facility test is upcoming and the facility is scheduled to be fully completed by the end of October. Fish transfer is planned for October 24<sup>th</sup>.

## VI. Meeting Coordination with HC

### A. Back-to-Back Meetings – HSC members discussed options and logistics for holding back-to-back meetings with the HC, including in-person meetings and conference calls.

### B. Next Steps

- Ross Strategic will continue to work with the HC facilitators on logistics and planning to accommodate back-to-back HSC/HC meetings where feasible.

## **VII. Wrap Up and Next Steps**

**A. Next Meeting:** Thursday, October 20, 2016

**B. Potential October Meeting Agenda Items**

- PRH M&E Report
- 2016 NCAF spring Chinook acclimation facility status
- Coho mitigation

**C. WDFW Genetics M&E** –WDFW has been compiling known historical samples from hatchery programs and analyzing changes over time. The WDFW genetics lab will have recommendations. For the time being this is a joint committee topic; at some point GPUD programs may be parsed out (e.g., Nason Creek, Carlton summer Chinook).

### **Meeting Materials**

The following documents were provided to HSC members in advance of this meeting:

- September meeting agenda
- August White River rotary trap summary
- August Nason Creek rotary trap summary

## **Appendix A: Joint Item Discussion Summary from September 2016 HCP Hatchery Committee Meeting**

### *A. USFWS Bull Trout Consultation Update (Bill Gale)*

Bill Gale said Karl Halupka (USFWS) distributed a draft of the BiOp covering hatchery programs in the Wenatchee basin to the applicants for a 3-week review, with comments due on September 29, 2016. Gale said the draft memorandum regarding the Methow spring Chinook salmon consultation is in internal review.

Todd Pearsons said he has not reviewed the entire 300-page Wenatchee basin BiOp, but has at least one item to discuss. He said there are some situations or measures that would have a positive effect for one listed species, and a potential negative effect for another listed species. He gave an example related to the Wenatchee basin Adult Management Plan specifically related to Wenatchee spring Chinook salmon. He said there is an element of the plan that allows for carcass outplanting in nutrient-poor areas, with the intent to place carcasses during periods in which they would be naturally occurring. In contrast, an element of the draft BiOp is not performing nutrient-restoration activities during periods when bull trout are holding or spawning, which corresponds with the same period (approximately September 1 to November 1) during which Chinook salmon carcasses would be outplanted based on the Adult Management Plan. Pearsons said concurrence from USFWS is necessary to determine where, when, and with which carcasses, nutrient-restoration activities could occur. He said, if USFWS included the measure in response to concerns about disease, perhaps carcass analogs could be used. Mike Tonseth said disease concerns from carcasses are already mitigated for from the perspective of WDFW, because when WDFW distributes carcasses they remove the point sources for pathogens (head and all internal organs) in accordance with fish-health protocols.

Pearsons summarized that more clarification is necessary regarding the risks of carcass analog or whole-carcass distribution related to any potential nutrient enhancement activity identified in the Wenatchee basin Adult Management Plan and in the draft Wenatchee basin BiOp currently under review. Bill Gale said he supports the idea of carcass enhancement and it is a viable use of excess fish. He said fisheries enhancement groups perform most carcass enhancement activities and their permits and consultation for enhancement activities are a separate responsibility from the draft BiOp being discussed. Pearsons asked why the BiOp would restrict nutrient-restoration activities by the hatchery programs. Gale replied that the location, area, and handling of fish are not addressed in the Wenatchee basin Adult Management Plan; therefore, the restoration action cannot be consulted on by USFWS. Pearsons asked which details about nutrient-restoration activities are included in the Adult Management Plan. Keely Murdoch said nutrient-enhancement activities are identified as a viable use of surplus fish in the Adult Management Plan; however, she thinks the details about location, area, and handling of fish are not addressed. Murdoch agreed with Pearsons that there may be items in the draft BiOp that contrast with the intent of some programs, specifically in regards to Endangered Species Act-listed species, and it might help to have more time to review the draft BiOp than is currently provided. Gale

suggested that those who would like a longer review period contact Karl Halupka and said the purpose of this agenda item is to provide an update on the status of consultation, and not necessarily to discuss details of the draft BiOp, which he said would be beneficial to do in another forum. Alene Underwood said there is a meeting on October 11, 2016, which may be a good forum to discuss some of these topics.

#### B. NMFS Consultation Update (Justin Yeager)

Justin Yeager said, regarding the Methow spring Chinook salmon consultation, a draft Environmental Assessment will be distributed to the applicants today by Emi Kondo. Kirk Truscott asked that it also be sent to him, because the Okanogan and Methow programs are related; Yeager said he would make sure it is sent to CCT. Yeager clarified that the Environmental Assessment is part of the National Environmental Policy Act process. Yeager said, regarding the draft Methow Steelhead Adult Management Plan, NMFS and WDFW are working to develop gene flow guidelines, and most recently met on September 15, 2016.

Yeager said NMFS expects to complete the Okanogan steelhead Tribal Resource Management Plan (TRMP) by the end of 2016.

Tracy Hillman summarized that the Wenatchee steelhead and Wenatchee spring Chinook BiOps have been issued, the Methow spring Chinook EA will be distributed today for review, the Methow Steelhead Adult Management Plan is being worked on, and the Okanogan steelhead TRMP can be expected by the end of 2016. Mike Tonseth clarified that the Wenatchee steelhead BiOp has been issued to applicants, but the Section 10 permit has not been issued and is pending the completion of Section 7 consultation with USFWS.

#### C. Review Draft Hatchery M&E Plan Appendix 5 (All)

##### Appendix 5 – Stray Rate Objectives

Sarah Montgomery displayed the document, “Revised Hatchery M&E Plan Appendix 5 (Hillman and WDFW edits),” which Montgomery distributed to the Hatchery Committees on August 22, 2016. Montgomery also displayed an email from Craig Busack, sent on August 23, 2016, providing feedback on the revised appendix. Questions and comments were discussed, and edits were made to the document.

Tracy Hillman summarized Busack’s comments. Busack questioned whether the Hatchery Committees should set a general standard for management strays, and recommended the title of the appendix be changed. Greg Mackey said management strays pose a different level of risk, and applying a strict standard to management strays does not make sense, especially one as strict as 5%. Hillman said the concern is about how much (as a target, say, 90% or more) of the spawning escapement spawned in the stream in which they were released as juveniles, and suggested

adding a similar explanation in the appendix, with the caveat that each program can be addressed on a case-by-case basis depending on percent hatchery-origin spawners (pHOS) and proportionate natural influence (PNI) targets. Mackey said stating and comparing to a general guideline could be beneficial, but overall, it is more important to discuss qualitatively what the stray rate represents from a risks and benefits standpoint. Keely Murdoch agreed that setting a guideline is a good idea, especially because pHOS changes frequently for some programs (that are managed under pHOS or PNI sliding scales). Murdoch said she is confused about the purpose of Appendix 5, because its initial purpose was to provide definitions of strays, and it currently is setting targets for evaluation, which perhaps should be in the body of the Monitoring Plan itself. Hillman said the standards for genetic strays are already set, and choosing management stray rate targets for each program is necessary to help guide data analysis. Murdoch said she prefers to agree on a standard and say that it can be adjusted. She said the YN wants fish to return to the location where they are released. Mike Tonseth said 90% could be the minimum acceptable level. Mackey said it is important to take a more integrated approach to management decisions; so, for example, in any report, the authors should explain why a program is not meeting the 90% threshold within the context of straying and not exacerbating other management problems. Tonseth agreed and said, for some programs, 85% or 95% may be an optimal target. Hillman suggested adding “and can be adjusted up or down” to the target definition. Mackey said that will work, but he is apprehensive about setting a target and focusing a lot of effort on stray rates because stray rates may not be very important for recovering the populations.

Todd Pearsons said one of the reasons the Hatchery Committees may be having trouble setting a management stray target is that there is not a generally acceptable target across other hatchery programs as there is for genetic strays (5 or 10%). He asked if anyone has a region-wide understanding of standards for management strays, or knows of targets other programs have used. He said management strays are a newer concept, and asked if setting a management stray “percentage” target is even the appropriate metric for achieving program goals. He said the goal is that a certain number of fish return to specific locations and asked if this is better measured as a percent of the release or as numbers of fish. Hillman said the target stated in the draft Appendix 5 is based on a percentage of spawning escapement and not a percent of the numbers of fish released. Murdoch said setting the number of returning fish as a target is a difficult metric to measure and would change from year to year based on the sliding scale of natural-origin fish returning. She said a 90% target is a simpler metric that provides a guideline and can illustrate how reliably hatchery releases home to their release site. She said homing fidelity is a key metric and understanding it will help programs to adjust the number of fish that should be release from each site. Bill Gale said, if the 10% stray rate criterion becomes the accepted standard, the metric applies to integrated and segregated programs. He said, within the Leavenworth National Fish Hatchery permit, for example, stray rate criteria are set stricter than 5%. He said he thinks setting a 10% guideline for management stray rates and adjusting it up or down for program-specific factors is consistent with how NMFS sets stray rate levels in permits. Hillman said it would be helpful for reporting purposes to set a guideline for comparison. He said it seems representatives present are in concurrence with setting a minimum acceptable level of 90% of

the spawning escapement will spawn in the stream in which they were released as juveniles, unless the Hatchery Committees adjust it up or down based on stock-specific PHOS and PNI. He said edits made to Appendix 5 today will be sent to the Hatchery Committees for a 2-week review.

Sarah Montgomery said she will distribute the revised Appendix 5, as edited during the September 21, 2016, conference call, to the Hatchery Committees for review. The Hatchery Committees will review the revised Appendix 5 and provide approval or further edits to Montgomery by Wednesday, October 5, 2016.

#### D. Embryonic Imprinting (Keely Murdoch)

Keely Murdoch said she added the embryonic imprinting discussion to the agenda because Hatchery Committees members visited the Issaquah Salmon Hatchery in May, 2016, and should begin revisiting discussions about embryonic imprinting. She said the Hatchery Committees can discuss whether to test embryonic imprinting or sequential imprinting, and next steps.

Todd Pearsons said he has been trying to find data related to the Issaquah Hatchery embryonic imprinting study. He said Roger Tabor is the technical lead, and from his understanding, there are only 2 reliable years of data. He said, in the first year of the Issaquah Hatchery study, 85% of fish returned to their natal stream. In the second year of the study, 42% of fish returned, and in the third year, there was an issue with the otolith thermal marking. Pearsons said he will follow up with Jeff Grimm regarding the third year of data. Bill Gale asked if Pearsons thinks Tabor would be willing to discuss embryonic imprinting with the Hatchery Committees, and said he could reach out to Tabor and ask him to come to a meeting. Pearsons said it would be useful to have Tabor attend a meeting so the Hatchery Committees can ask him questions. Gale said he will invite Tabor to the Hatchery Committees October 19, 2016, meeting to discuss embryonic imprinting.