

FINAL MEMORANDUM

To: Wells, Rocky Reach, and Rock Island HCPs Hatchery Committees
Date: December 19, 2013

From: Mike Schiewe, Chair

Cc: Kristi Geris

Re: Final Minutes of the November 6, 2013 HCP Hatchery Committees Conference Call

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees' meeting was held by conference call on Wednesday, November 6, 2013, from 10:00 am to 11:30 am. Attendees are listed in Attachment A to these meeting minutes.

ACTION ITEM SUMMARY

- The Hatchery Committees will review the draft Juvenile Carrying Capacity Statement of Agreement (SOA) prior to the Hatchery Committees meeting on November 20, 2013, when Chelan PUD will be requesting approval of the SOA (Item II-A).

The following action items relate to revisions discussed for the draft Chelan PUD 2014 Monitoring and Evaluation (M&E) Implementation Plan (Item II-B): *(Note: references to comments following each action item [e.g., "kdt2" or "GW3"] correlate to comments received from the U.S. Fish and Wildlife Service [USFWS] and the Colville Confederated Tribes [CCT] on Chelan PUD's draft plan, as distributed to the Hatchery Committees by Kristi Geris on October 31, 2013.)*

- Chelan PUD will revise a section to include more explicit details regarding how each objective will be achieved for each species; the revised section will be provided to Kristi Geris for distribution to the Hatchery Committees for further discussion and decisions regarding the organization and level of detail to include throughout the entire document (Yakama Nation [YN] general comment).
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- Chelan PUD will revise Section 2.1 Stock Assessment and Broodstock Collection to clarify that stock assessment and broodstock collection are not always concurrent activities (CCT comment [kdt2]).
- Chelan PUD will incorporate language regarding plans to address precocity, residualism, and early maturation where appropriate (CCT comment [kdt3]; USFWS comment [GW3]).
- Chelan PUD will reference specific permit terms and conditions as they relate to hatchery M&E where appropriate (USFWS comment [GW3]).
- The YN will internally discuss marking strategy language (CCT comment [kdt4]).
- Chelan PUD will follow-up with Andrew Murdoch regarding how he estimated winter mortality (USFWS comment [GW4]).
- Chelan PUD will revise the draft Chelan PUD 2014 M&E Implementation Plan, as discussed, and will provide the revised draft to Kristi Geris for distribution to the Hatchery Committees by Friday, November 8, 2013.

STATEMENT OF AGREEMENT DECISION SUMMARY

- No SOAs were approved at this meeting.

AGREEMENTS

- Hatchery Committees representatives present agreed to continue discussions about fish marking at the Hatchery Committees meeting on November 20, 2013, including developing a timeline and outlining what needs to be done in terms of developing a marking strategy (Item II-B).

REVIEW ITEMS

- There are no items that are currently out for review.

FINALIZED REPORTS

- The final 2013 Broodstock Collection Protocols were distributed to the Hatchery Committees by Kristi Geris on November 4, 2013.
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I. Welcome, Agenda Review

Mike Schiewe welcomed the Hatchery Committees and said that the purpose of today's conference call, as agreed to at the last Hatchery Committees' meeting on October 16, 2013, is to continue discussions and address comments received on the Chelan PUD 2014 Hatchery M&E Implementation Plan. Schiewe said that a draft Juvenile Carrying Capacity SOA (Attachment B) was also distributed for discussion purposes only. Schiewe said that the Priest Rapids Coordinating Committees Hatchery Sub Committee (PRCC HSC) has also been discussing Hatchery M&E implementation and because of the similarity between certain issues, there was a request to combine the Hatchery Committees' call and the PRCC HSC's call. Schiewe reminded everyone that while it is efficient to work through selected issues together, decisions and agreements will ultimately be made in the respective committees. *(Note: Due to the limited time and in the interest of continuity in Grant PUD's discussion, Grant PUD chose to postpone their participation in discussions until the PRCC HSC call scheduled for later in the day.)*

II. Chelan PUD

A. Draft Juvenile Carrying Capacity Statement of Agreement (Alene Underwood)

Alene Underwood said that a draft Juvenile Carrying Capacity SOA (Attachment B) was distributed to the Hatchery Committees by Kristi Geris on November 5, 2013. She said that she would like to introduce the concepts of the SOA today, and then hold discussions about the SOA until the Hatchery Committees' meeting on November 20, 2013. She added that Grant PUD has also developed a similar SOA (for discussion purposes only).

Bill Gale asked how the SOA links to finalizing the M&E Plan, and added that he was concerned that the SOA was not relevant to the purpose of this call. Underwood said that it is not her intention to have a robust discussion about the SOA during today's call; rather, she felt it was prudent to introduce the SOA as it pertains to a portion of the juvenile component of the M&E Plan. She added that the SOA is intended to clarify how some of the M&E data are used. Underwood noted that Chelan PUD has extended the timeline for approving a new contract; therefore, instead of requesting approval of their 2014 Hatchery M&E Implementation Plan during today's conference call, as discussed at the Hatchery Committees' meeting on October 16, 2013, they now have more time and will be requesting

approval of their plan at the Hatchery Committees' meeting on November 20, 2013. Gale asked if the M&E Plan is contingent on the SOA, and Underwood replied that it is not. She noted that in terms of process, the SOA needs to be presented to the Hatchery Committees at least 10 days prior to the next Hatchery Committees meeting in order to request a vote.

Underwood briefly reviewed the draft Juvenile Carrying Capacity SOA (Attachment B). She said the SOA sets guidelines for estimating carrying capacity and outlines its uses as described in the first three bullets in Attachment B. She noted the four conditions that need to be met for estimating carrying capacity, as described in the second set of bullets in Attachment B. Underwood said that Chelan PUD is open to discuss additional or alternate conditions at the Hatchery Committees' meeting on November 20, 2013. She said that, currently, the Hatchery Committees do not have an agreed-upon estimate of carrying capacity, and that carrying capacity is an important metric that can be used to inform important management issues.

Underwood reiterated that Chelan PUD will be requesting approval of the SOA at the Hatchery Committees' meeting on November 20, 2013. Gale suggested including information in the background section of the SOA so that the linkage between the SOA and the M&E Plan is clear. Keely Murdoch agreed, and said that since the M&E Plan has not yet been discussed, it is unclear how the two documents relate.

The Hatchery Committees agreed to review the draft Juvenile Carrying Capacity SOA prior to the Hatchery Committees meeting on November 20, 2013, when Chelan PUD will be requesting approval of the SOA.

B. Chelan PUD 2014 Hatchery M&E Implementation Plan (Alene Underwood)

Alene Underwood displayed a revised draft Chelan PUD 2014 M&E Implementation Plan via WebEx, which included comments received from the USFWS and the CCT (USFWS and CCT comments on the draft M&E Plan were distributed to the Hatchery Committees by Kristi Geris on October 31, 2013). Underwood said that the draft being displayed on WebEx had not yet been distributed because she planned on addressing pending comments and making further revisions based on today's discussions. Discussions were as follows:

Section 1 Introduction

> *USFWS comment [GW1]: Will sockeye monitoring be done under a separate contract or as a change order to the existing contract with Washington Department of Fish and Wildlife (WDFW)? How might this affect current contracting deadlines/activities?*

Underwood said that she cannot answer these questions at this time. She said the plan is to have a draft addendum for sockeye ready for discussion at the Hatchery Committees meeting on November 20, 2013 (as discussed at the Hatchery Committees meeting on October 16, 2013). Bill Gale asked if sockeye monitoring will be a separate Request for Proposal, and Underwood replied that it would not. She added that at this time, it is unknown who will do the work—first agreement needs to be reached on what the work will be. Mike Tonseth asked if development of the M&E Plan is a requirement of Chelan PUD's Federal Energy Regulatory Commission license, and Underwood replied that it is not.

Section 1 Introduction

> *CCT comment [kdt1]: Based on our recent experience during 2013 of unsuccessful genotyping adults to stream of origin, I do not think this is a viable option. Even if it were, genotyping will not provide production estimates for sub-watersheds, as strays spawning in those watersheds (e.g. Chiwawa fish in Nason Creek) will be typed as Chiwawa production when they were actually produced in Nason Creek.*

> *USFWS comment [GW2]: If this is the main mechanism for determining juvenile abundance by major spawning area it needs further discussion in committee, I am not convinced that the genetic approach will work, nor that it is appropriate.*

Underwood said that this topic is tied to the Grant PUD M&E Plan, and recommended deferring this discussion until after Chelan PUD has addressed comments specific to their plan.

YN General Comment

Keely Murdoch said that organizing the plan by components makes sense; however, compared to previous approved M&E implementation plans, the plan seems vague regarding what is being done for each objective for each species. She suggested indicating how each objective will be addressed for each species; for example, in Section 2 Aquaculture Monitoring, there are a list of tasks and a list of objectives. She said, however, there is no indication of how each task will address, or achieve, each objective. She added that as

currently written, the reader needs to make assumptions that may, or may not, be correct. Underwood said that Chelan PUD will revise a section to include more explicit details regarding how each objective will be achieved for each species; the revised section will be provided to Geris for distribution to the Hatchery Committees for further discussion and decisions regarding the organization and level of detail to include throughout the entire document.

Section 2.1 Stock Assessment and Broodstock Collection

> CCT comment [kdt2]: This section is titled "Stock Assessment and Broodstock Collection" yet the text does not reference any tasks associated with "Stock Assessment." This section infers, but does not state, that stock assessment and broodstock collection are concurrent activities with concurrent data collection. Please revise to clarify if brood collection and stock assessment are concurrent activities.

Underwood reviewed edits in redline strikeout (RLSO) that were incorporated to address this comment. Murdoch also noted that in the past, stock assessment and brood collection have not always been run concurrently. Underwood said that Chelan PUD will revise the text to clarify that stock assessment and broodstock collection are not always concurrent activities.

Section 2.2 In-Hatchery Monitoring

> CCT comment [kdt3]: Will precocity be evaluated? This could be useful in assessing optimal growth rates/size to reduce precocity and minimize mini-jack and jack rates.

> USFWS comment [GW3]: What about the residualism/early maturation work that has been funded in the past, how are we assessing this?

Underwood said there are components of ongoing studies for Dryden summer Chinook and Chelan Falls summer Chinook that may address these issues; however, she said that Chelan PUD is not supposing these types of activities as M&E objectives. Gale asked if components of the Biological Opinion (BiOp) require hatchery programs to assess when fish are ready to migrate, or what fish do not migrate, etc. Underwood said that some language about monitoring residualism is already included, but additional language can be incorporated where appropriate. Kirk Truscott added that it seems it would be important to correlate growth rates and size at release to precocity and some of the earlier investigations to indicate that growth rate and size have effects on jacking rates. He added that it seems to be a prudent hatchery component to monitor. Underwood said that Chelan PUD has not

proposed that level of work for all stocks; and added that this type of work would need to be considered in terms of M&E objectives. Gale said that the National Marine Fisheries Service (NMFS) BiOp for spring Chinook has certain requirements to implement an M&E Plan. He said he thinks it is important to link the BiOp to the M&E Plan to ensure that all requirements are being addressed. Underwood said that permits are already referenced in the M&E Plan and that requirements are also included in the document. She added that the language calls out the importance of each component as it relates to the permit. Gale said, however, that specific terms and conditions of the permit are not called out. He added that the language could be more explicit. Underwood said that she does not consider the M&E Plan the appropriate document for that, and added that there are other documents that track permit compliance. She said, although, that components in the M&E Plan can be called out more clearly that are related to permit compliance. Gale said that he feel like it is the Hatchery Committees' responsibility to provide oversight to the PUDs to make sure they are addressing the terms and conditions within their respective permits. He asked what other documents there are that track permit compliance where the Hatchery Committees have input; Underwood said, for example, the monthly M&E Reports and the annual reports. Gale said that he was looking to provide input on what is planned—not on what has already occurred. Mike Schiewe noted that it is the responsibility of the permittee and NMFS (as the issuer of the permit) to monitor compliance. He then suggested the possible use of a matrix to show the linkage between components of the permit and the M&E Plan. Underwood said that a matrix could be developed; however, based on the language in the permit, she was uncertain of the usefulness. She added that the permit is broad, and includes only a provision to implement an M&E Plan. She said that Chelan PUD will reference specific permit terms and conditions as they relate to hatchery M&E where appropriate.

Section 2.2 In-Hatchery Monitoring > Fish Marking

> CCT comment [kdt4]: As "Fish Marking" is included in this Implementation Plan, a table should be included that details the marking/tagging strategy by production program.

Although external marks may not be fully vetted in the Hatchery Committees, a table detailing the current mark/tag strategy would prompt the committee to decide on the mark/tag strategy for 2014.

Underwood said that Chelan PUD's permit requires that fish will be externally marked. She added that while this topic is important to discuss further, she suggested continuing this

discussion at another time, separate from the M&E Plan discussion. Truscott said that his comment was intended to tee up a process to reach concurrence on a marking strategy. He said, however, if this takes too much time and impedes the progress of the M&E Plan, he will withdraw his comment. Tonseth suggested developing a basic foundation to work with based on the current *U.S. v. Oregon* marking agreement. Underwood said this may be possible; however, the permit may not be consistent with the *U.S. v. Oregon* agreement. Schiewe agreed this information should be made available; however, the question is whether this information is needed in the M&E plan. He added that the point that marking has been continually put off is valid; and suggested planning a discussion for the next Hatchery Committees meeting. Hatchery Committees representatives present agreed to continue discussions about fish marking at the Hatchery Committees meeting on November 20, 2013, including developing a timeline and outlining what needs to be done in terms of developing a marking strategy. Truscott suggested addressing his comment by adding to the end of the first sentence of the *Fish Marking* section, "...and will be included as an addendum to this Plan." Underwood incorporated the revision, as requested. Gale endorsed the idea of an addendum, and added that when further discussion takes place, he requested that someone speak specifically to NMFS permit requirements as they relate to marking. He added that if the NMFS permit is advising something contrary, or conflicts, with the *U.S. v. Oregon* agreement, it needs to be highlighted now. Murdoch said that this also seems to be in conflict with the Hatchery and Genetic Management Plans, which indicate that conservation plan fish will be adipose fin (ad-) present and safety net fish will be ad-clipped. Underwood said that the HCP indicates that all fish will be externally marked. She said Chelan PUD's M&E Plan reflects this, and also states, "...or marked as otherwise agreed to by the HCP-HC." Murdoch said that she will internally discuss acceptable marking strategy language.

Section 3.1 In Freshwater productivity of Supplemented Stocks

> CCT comment [kdt5]: *How will passive integrated transponder (PIT) tag loss be accounted for?*

> USFWS comment [GW4]: *How is mortality during the winter to spring period accounted for to convert winter migrants to smolts?*

> USFWS comment [GW5]: *How many will be tagged?*

> USFWS comment [GW6]: *How is tag loss accounted for?*

> *USFWS comment [GW7]: Will genetics be utilized to validate the differentiation between summer and spring Chinook smolts...*

> *USFWS comment [GW8]: How many samples are we talking about?*

> *USFWS comment [GW9]: In the case of spring Chinook salmon (SCS) this is confounded by straying that occurs between the tributaries. I.e., a Chiwawa fish that spawns in Nason would produce progeny that will be typed to Chiwawa though the fish was produced elsewhere...*

Underwood said that Andrew Murdoch provided additional information to address these comments, and she reviewed the edits that were incorporated in RLSO. Gale asked how Murdoch estimated winter mortality. Underwood said that she did not know, but that she would follow-up with Murdoch to find out.

Section 4.1 Spawning Escapement Estimates > Chiwawa Spring Chinook

> *CCT comment [kdt7]: So, will carcass recovery bias be used to correct carcass recovery data where it is appropriate? Also, will observer efficiency be accounted for in the redd surveys? If so, will they be based on existing efficiency models or new models? It appears if Chelan PUD staff will be conducting the spring Chinook surveys, which is a departure from the past 10 years or so, making a strong case for a newly developed observer efficiency model.*

> *USFWS comment [GW10]: Who is responsible for reading coded wire tags (CWTs) from SCS carcasses, who reports this data to Regional Mark Information System, what is the timeframe under which this will be done?*

Underwood reviewed edits about total number of redds and clarification about who is responsible for data that were incorporated in RLSO. Keely Murdoch noted that the observer efficiency model was based on naïve surveys, and questioned how transferable these data would be. She asked if ground-truthing the model with a new crew might be worthwhile. Tonseth said that the model took into account a broad range of survey experience, from novice to experienced, and regular to seasonal, etc.; and he added, therefore, that the model was designed to account for survey biases. He suggested that it may be worth inviting Andrew Murdoch to present an overview and background about the model to the Hatchery Committees.

Section 4.1 Spawning Escapement Estimates > Wenatchee Summer Chinook

> *CCT comment [kdt8]: Based on the Introduction Section, this is a census based methodology and should be reiterated in this section.*

Underwood reviewed edits in RLSO that were incorporated to address this comment.

Section 5.1 Data Management

> *CCT comment [kdt10]: Who is responsible for data entry, data management and quality assurance/quality check (QA/QC)?*

Underwood reviewed edits in RLSO that were incorporated to address this comment.

Underwood said that Chelan PUD plans to revise the draft Chelan PUD 2014 M&E Implementation Plan, as discussed, and will provide the revised draft to Geris for distribution to the Hatchery Committees by Friday, November 8, 2013. She said that Chelan PUD will be requesting approval of the revised draft plan at the Hatchery Committees meeting on November 20, 2013.

III. HCP Administration

A. Next Meetings

The next scheduled Hatchery Committees' meetings are on November 20, 2013 (Douglas PUD); December 18, 2013 (Chelan PUD); and January 15, 2014 (Douglas PUD).

List of Attachments

Attachment A	List of Attendees
Attachment B	Draft Juvenile Carrying Capacity SOA
Attachment C	USFWS comments on the revised draft Chelan PUD 2014 M&E Implementation Plan
Attachment D	CCT comments on the revised draft Chelan PUD 2014 M&E Implementation Plan

**Attachment A
List of Attendees**

Name	Organization
Mike Schiewe	Anchor QEA, LLC
Kristi Geris	Anchor QEA, LLC
Alene Underwood*	Chelan PUD
Catherine Willard	Chelan PUD
Tom Kahler*	Douglas PUD
Todd Pearsons	Grant PUD
Peter Graf	Grant PUD
Shannon Lowry	Grant PUD
Keely Murdoch*	Yakama Nation
Kirk Truscott*	Colville Confederated Tribes
Bill Gale*	U.S. Fish and Wildlife Service
Mike Tonseth*	Washington Department of Fish and Wildlife

Notes:

- * Denotes Hatchery Committees member or alternate