

FINAL MEMORANDUM

To: Wells, Rocky Reach, and Rock Island HCPs Hatchery Committees
Date: June 18, 2015

From: Tracy Hillman, HCP Hatchery Committees Chairman

Cc: Kristi Geris

Re: Final Minutes of the May 20, 2015 HCP Hatchery Committees Meeting

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Hatchery Committees meeting was held at Douglas PUD headquarters in East Wenatchee, Washington, on Wednesday, May 20, 2015, from 9:30 a.m. to 12:00 p.m. Attendees are listed in Attachment A to these meeting minutes.

ACTION ITEM SUMMARY

- Greg Mackey will provide Douglas PUD's responses to Kirk Truscott's comments on the draft 2015 Methow Basin Spring Chinook Adult Management Plan to Kristi Geris for distribution to the Hatchery Committees following the meeting on May 20, 2015 (Item II-A). *(Note: Mackey provided Douglas PUD's responses to Geris on May 20, 2015, which Geris distributed to the Hatchery Committees that same day.)*
 - Charlie Snow (Washington Department of Fish and Wildlife [WDFW]) will provide data that compare Methow spring Chinook salmon spawning escapements with Wells Dam fish counts for years available, to Kristi Geris for distribution to the Hatchery Committees (Item II-A).
 - Keely Murdoch and Mike Tonseth will discuss internally the feasibility of installing passive integrated transponder (PIT)-tag detection in the Methow Fish Hatchery (FH) volunteer channel (Item II-A).
 - Greg Mackey and Mike Tonseth will update escapement numbers in the draft 2015 Methow Basin Spring Chinook Adult Management Plan, and will provide a revised draft plan to Kristi Geris for distribution to the Hatchery Committees (Item II-A).
 - Greg Mackey, Catherine Willard, Keely Murdoch, Todd Pearsons (Grant PUD), Charlie Snow, Andrew Murdoch (WDFW), and Tracy Hillman will coordinate to
-

prepare information on Hatchery Monitoring and Evaluation (M&E) Plan Objectives 1, 4, and 7, for discussion during the next Hatchery Committees meeting on June 17, 2015 (Item V-A).

- Keely Murdoch will coordinate with Matt Abrahamse (Yakama Nation [YN]) on possibly presenting recent data on the YN Kelt Reconditioning Program during a future Hatchery Committees meeting (Item VIII-A).
- Kristi Geris will distribute an electronic copy of the draft HCP Hatchery Committees Meeting Protocols Summary to the Hatchery Committees for review, along with Geris' additional edits, as discussed during the Hatchery Committees meeting on May 20, 2015 (Item IX-A). (*Note: Geris distributed the summary and additional edits to the Hatchery Committees on May 21, 2015.*)
- Hatchery Committees representatives will provide edits and comments on the draft HCP Hatchery Committees Meeting Protocols Summary to Tracy Hillman (with a copy to Kristi Geris) by Thursday, June 4, 2015 (Item IX-A).

DECISION SUMMARY

- The Hatchery Committees representatives present approved the 2015 Methow Basin Spring Chinook Adult Management Plan, as revised (Item II-A).

AGREEMENTS

- The Hatchery Committees representatives present agreed to consider developing a monitoring plan for the Methow FH volunteer channel (Item II-A).
- The Hatchery Committees representatives present supported the proposed Methow Spring Chinook Review of Five-Year Annual Report Plan Outline (Item V-A).

REVIEW ITEMS

- Kristi Geris sent an email to the Hatchery Committees on April 1, 2015, notifying them that the draft 2014 Chelan PUD and Grant PUD Hatchery M&E Annual Report is available for a 60-day review, with edits and comments due to Tracy Hillman by Monday, June 1, 2015 (Item IV-A).
-

- Kristi Geris sent an email to the Hatchery Committees on May 21, 2015, notifying them that the draft HCP Hatchery Committees Meeting Protocols Summary is available for review, with edits and comments due to Tracy Hillman (with a copy to Geris) by Thursday, June 4, 2015 (Item IX-A).

FINALIZED DOCUMENTS

- Kristi Geris sent an email to the Hatchery Committees on June 2, 2015, notifying them that the Final 2014 Chelan PUD and Grant PUD Hatchery M&E Annual Report is now available for download from the Hatchery Committees Extranet Site.

I. Welcome

A. Review Agenda, Review Last Meeting Action Items, Approve the March 27, 2015 Conference Call Minutes and April 15, 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:

- Greg Mackey added a Wells Dam spring Chinook salmon broodstock collection update.
- Catherine Willard added a Chiwawa River instream flow update.
- Bill Gale removed the U.S. Fish and Wildlife Service (USFWS) Bull Trout Consultation update.
- Keely Murdoch added a YN Kelt Reconditioning Program update.

The Hatchery Committees reviewed the revised draft March 27, 2015, conference call minutes. Hillman recalled that this meeting was convened to discuss approval of the Statement of Agreement (SOA) titled, “Regarding Timeline for Review of ‘Evaluation of Hatchery Programs Funded by Douglas County PUD 5-Year Report 2006-2010’.” He also recalled that Hatchery Committees approval of this SOA resulted in approval of Chelan PUD’s Methow Spring Chinook Hatchery Production Obligation SOA authorizing the establishment of an Interlocal Agreement with Douglas PUD. Kristi Geris added that all comments and revisions received from members of the Committees were incorporated in the revised minutes, except for a minor edit Mike Tonseth submitted prior to today’s meeting, which clarified that Willard operated the WebEx during this meeting, and not him.

Hatchery Committees members present approved the draft March 27, 2015, conference call minutes, as revised.

The Hatchery Committees reviewed the revised draft April 15, 2015, meeting minutes. Hillman said there were two outstanding comments to be discussed regarding Douglas PUD's discussion of Methow spring Chinook salmon adult management for implementation in 2015. He said Mackey had requested confirmation on the details of a discussion among Tonseth, Craig Busack, and Matt Cooper. Tonseth clarified that he had asked, in terms of a safety net, to what degree should Methow FH fish be removed *for broodstock for safety net at Winthrop National Fish Hatchery (NFH)*. He also clarified that Busack had asked what percentage of returning adults *to Winthrop NFH* are Methow spring Chinook salmon, and Cooper said it is about 15% on average. Willard also clarified that under the same discussion on Table 2 on slide 2 of Attachment B, percent hatchery-origin spawners (pHOS) defaults to 0.25 once more than 900 *natural-origin* spawners return. Lastly, also under the same discussion, Hillman clarified that PNI means "proportionate natural influence," not "proportion of natural influence." Geris said she will incorporate revisions, as discussed. Hatchery Committees members present approved the draft April 15, 2015, meeting minutes, as revised. (*Note: Gale provided USFWS approval of the revised draft April 15, 2015, meeting minutes via email on May 19, 2015, which Geris distributed to the Hatchery Committees that same day.*)

Action items from the Hatchery Committees meeting on April 15, 2015, and follow-up discussions, were as follows (italicized item numbers below correspond to agenda items from the meeting on April 15, 2015):

- *Mackey and Tonseth will provide proposed targets for Methow spring Chinook salmon adult management for potential implementation in 2015 to Geris for distribution to the Hatchery Committees by Wednesday, April 29, 2015 (Item II-A).* Mackey provided a draft 2015 Methow Basin Spring Chinook Adult Management Plan for review to Geris on May 7, 2015, which Geris distributed to the Hatchery Committees on May 8, 2015. This will be further discussed during today's meeting.
 - *Mackey, Willard, and Murdoch will develop a draft plan and schedule for reviewing the Methow Basin Five-Year Hatchery M&E results and new information for*
-

consideration by the Hatchery Committees at least 10 days prior to the next Hatchery Committees meeting on May 20, 2015 (Item II-B).

Mackey provided a Methow Spring Chinook Review of Five-Year Annual Report Plan Outline to Geris on May 14, 2015, which Geris distributed to the Hatchery Committees that same day. This will be further discussed during today's meeting.

II. Douglas PUD/WDFW

A. DECISION: Draft 2015 Methow Basin Spring Chinook Adult Management Plan (Greg Mackey)

Greg Mackey said a draft 2015 Methow Basin Spring Chinook Adult Management Plan was distributed to the Hatchery Committees by Kristi Geris on May 8, 2015. Comments on the draft plan were received from the Colville Confederated Tribes (CCT) and the National Marine Fisheries Service (NMFS) on May 15 and May 18, 2015, respectively, which Geris distributed to the Hatchery Committees those same days. These and additional comments were discussed, as follows:

CCT Comments

Mackey said CCT comments on the draft plan were largely minor clarifications; however, there were three more substantive comments that he told Kirk Truscott he would discuss with the Hatchery Committees on Truscott's behalf. Mackey said he will provide Douglas PUD responses to Truscott's full set of comments to Geris for distribution to the Hatchery Committees following the meeting on May 20, 2015. Mackey added that Truscott was satisfied with Douglas PUD's responses to CCT comments on the draft plan. *(Note: Mackey provided Douglas PUD's responses to CCT comments on the draft 2015 Methow Basin Spring Chinook Adult Management Plan [Attachment B] to Geris on May 20, 2015, which Geris distributed to the Hatchery Committees that same day.)*

Detailed Plan (page 1, 1.a.)

As noted in a comment bubble, Truscott asked if adipose (ad)-clipped fish encountered at the Twisp Weir will be transported to Winthrop NFH for broodstock (Winthrop NFH and Okanogan Reintroduction Program) and/or surplus. Mackey clarified that these fish will be transported to Winthrop NFH for surplus, which includes broodstock supporting the

Section 10J Program (i.e., Chief Joseph Hatchery Okanogan Reintroduction Program). He said Winthrop NFH staff will determine how many fish to use for each.

Detailed Plan (page 2, 2.d.ii.)

Mackey recalled the sliding scale presented during the last Hatchery Committees meeting on April 15, 2015, which indicated a breakpoint at 300 or fewer natural-origin recruit (NOR) spawning escapement when the target total spawning escapement would be 500. As noted in a comment bubble, Truscott indicated that a 500 total spawning escapement for the Methow mainstem and Chewuch seems low. Mackey agreed that this draft scale needs further review. He also noted that this plan applies only to 2015, and he believes there will be more than 300 wild spawners, so this should not be a factor this year.

Detailed Plan (page 4, 4.d.)

Mackey said a statement was included to possibly transport MetComp hatchery returns to a specific reach of the Methow River in order to experimentally augment spawner numbers. He said this statement was included to keep the possibility open, and Truscott wanted to stress that such an action would need to be permissible under existing permits and approved by the HCP Hatchery Committees and Priest Rapids Coordinating Committee Hatchery Sub-Committee (PRCC HSC).

NMFS Comments

Detailed Plan (page 2, 2.d.)

Craig Busack noted that if expressed as a ratio, pHOS is hatchery:total, not hatchery:wild. Mackey said this typo will be corrected.

YN Comments

Detailed Plan (page 1, 1.c.)

Keely Murdoch said it is not clear how a pHOS of 0.50 was derived for the Twisp River or how it fits with the sliding scale for the basin. Mackey said a maximum pHOS of 0.50 (i.e., ≤ 0.50) is specified for the Twisp Program in the Hatchery and Genetic Management Plan (HGMP). Murdoch asked if the Twisp Program is viewed independently from the rest of the basin. Tom Kahler recalled that when the HGMP was developed, there were rules unique to the Twisp Program, and this plan is consistent with the HGMP. Murdoch

suggested in moving forward, the Hatchery Committees need to discuss how PNI is calculated and how the Twisp Program fits into the basin-wide calculation.

Busack asked if maintaining a pHOS of ≤ 0.50 in 1.c. is consistent with 1.e. He added, if the Twisp Weir is only operating for broodstock collection, can a pHOS of ≤ 0.50 be met?

Mackey said this depends on the year; and added that depending on the efficiency of collecting Twisp broodstock, adult management might be limited that year. He said it typically takes a while to target wild fish at the Twisp Weir, offering opportunity to perform adult management, and in the meantime, the desired ratio of wild to hatchery fish in the Twisp River can be implemented. He said in the past, this has been successfully accomplished for steelhead, but this will be the first attempt with spring Chinook salmon. Kahler added that the challenge is, during the spring Chinook salmon run, during the peak of the freshet, the weir often cannot be operated. He said that fortunately, the numbers of smolts released to the Twisp Basin should allow for hatchery spawner escapement appropriate for the pHOS target in general, without having to remove very many fish. Tracy Hillman asked over what percentage of the run distribution is the weir operated. Kahler said it varies by year, noting that in 2011, the weir was operational most of the year; however, on average across multiple years, the weir was non-operational about 27% of the time (based on a small multi-year analysis).

Mike Tonseth said a big part of this plan for 2015 was to pick a direction and move forward. He noted that this facility has never been operated for adult management, so a starting point needed to be chosen, and what was outlined in the HGMP seemed to be achievable. He said, in terms of long-term planning, he agrees with Murdoch that the Twisp Program needs to be evaluated regarding what role it plays in pHOS relative to other programs. Mackey noted that for PNI, he would prefer to track and manage the Twisp Program separately, because that is how it is laid out in the HGMP. He added, however, that this can be easily merged, as well.

Synopsis of the adult management plan for 2015 (page 1, 1.a.); Detailed Plan (page 1, 1.c.)

Murdoch noted a statement included twice in the draft plan that indicates, “percent natural-origin broodstock (pNOB) will be >0.50 and may be allowed to fluctuate between

0.50 and 1.0 in order to achieve pHOS ≤ 0.50 .” Murdoch said, considering how small the Twisp Program is, she questioned broodstocking being a key influence on pHOS when managing for a certain pHOS level. She asked if this was intended to be PNI. Kahler explained, considering there is not a large run to the Twisp River, if targeting a pNOB of 1.0, it would be difficult meeting pHOS because of the reduced total number of wild fish in the spawning population. He added that the number of brood collected is limited by wild fish available. Murdoch asked if this means there may not be a need for much adult management, and Kahler said that is correct.

Detailed Plan (general comment)

Murdoch asked about the predicted run size in the Methow Basin and how it fits into the sliding scale. Mackey said the predicted run size in the Methow Basin is 329 wild spawners, which is noted on page 3, 2.d.iv.1., located below Figure 1. He caveated that this number was developed based on the best-available data at that time (from the 2015 Broodstock Protocol), and added that fish are now passing Wells Dam in higher numbers than what were used in this calculation. He said, as of late last week, wild run escapement was 325; at that time, projections indicated that the run was about halfway through, so this number could possibly double. Charlie Snow said pre-spawn mortality can be fairly high, noting that the redd-based escapement alone could be about 60% of the Wells run estimate. He said this would not be due entirely to mortalities; some fish drop back or go to other basins. Busack asked if Snow could provide data that compare Methow spring Chinook salmon spawning escapements with Wells Dam fish counts for years available, and Snow said he will provide those data to Geris for distribution to the Hatchery Committees.

Detailed Plan (general comment)

Murdoch recalled discussing during the Hatchery Committees meeting on April 15, 2015, monitoring fish arriving and leaving the Methow FH trap and outfall areas, which she noted is not addressed in this plan. She suggested evaluating fish movement near Methow FH on a finer scale in order to trap more effectively and ensure the area around the trap does not become overcrowded. Mackey replied, historically, the Methow FH trap has been successful in collecting broodstock when hatchery releases in the basin were much larger without problems at the Methow volunteer trap. He said Methow FH staff are monitoring the trap

multiple times a day, and he does not think overcrowding will be an issue. Murdoch suggested, however, during a large-run year, it could become crowded, which may result in fish backing out of the trap area. She said if the trap is not monitored at certain hours of the day (e.g., late at night), the trap could become crowded during that time. She also asked about a Trap Operation Plan. Tonseth said the Methow FH trap is operated 24 hours a day. He said during the early- and tail-end of the run, it is not critical to monitor the trap all day; however, as the run starts to build, a cap has been established of how many fish should be at the trap at a given time. He explained, as this limit is approached, the trap will be checked more frequently. In summary, he said the fish will drive how frequently the trap is monitored. Mackey added, hatchery and M&E crews have discussed and are aware of these issues. He said in the future, Douglas PUD may draft a Trap Operation Protocol for the Methow FH trap, as they did for the Twisp Weir. He noted a protocol or plan gives trap operators a handbook to operate by.

Murdoch asked if there are plans to install PIT-tag detection in the outfall to the Methow FH. Mackey said there is one PIT-tag array located at the entrance of the trap. Murdoch asked about farther down the channel, noting she thinks it would help to inform the effectiveness of the trap. Mackey said that the YN has had PIT-tag antennas in the channel in the past for their Coho project and may have a PIT-tag antenna installed in the Methow FH channel now. Mackey said that the important metric is comparing how many fish were removed at the Methow FH trap to how many reached the spawning grounds. He asked Snow if WDFW conducts spawner surveys in the Methow FH channels, and Snow replied that they do. Snow added that for spring Chinook salmon, spawner surveys are conducted weekly during spawning season. Mackey said visual counts of fish are also collected during spawner surveys. Snow said for many years, Methow FH staff applied a hole-punch to hatchery jacks to avoid resampling, and some hole-punched fish returned to the trap several times. Bill Gale said at Spring Creek, fish pass an array before entering the pond, and if a fish is detected at the array but not in the pond, this alerts staff to investigate why this may be. Catherine Willard added with a double array, directionality can also be monitored.

Murdoch said it would be beneficial to have a monitoring component associated to this plan; however, she is unsure of the timeline to get the plan approved. Tonseth noted that the

question might be more if the equipment can be obtained and installed in time for monitoring this year. Murdoch said she was unsure if the YN's PIT-tag antenna is still in place. She also said she would like the Hatchery Committees to reach agreement on moving forward with a monitoring plan. Murdoch and Tonseth said they will both discuss internally the feasibility of installing PIT-tag detection in the Methow FH volunteer channel. Kahler also noted that Douglas PUD does not own the property where the YN's PIT-tag antenna was installed for monitoring coho salmon, and he indicated it would be helpful if the YN contacted the property owners, if needed, because they have an existing relationship with them.

The Hatchery Committees representatives present agreed to consider developing a monitoring plan for the Methow FH volunteer channel.

USFWS Comments

Synopsis of the adult management plan for 2015 (page 1, 3.a.); Detailed Plan (page 2, 2.c.)

Bill Gale requested changing both statements indicating that, "All adipose clipped adults encountered will be removed," to "All hatchery-origin adults encountered will be removed."

Detailed Plan (page 4, 4.a.ii.)

Matt Cooper suggested, via email, increasing the Winthrop NFH brood transfer goal by 10% (to approximately 450) to account for any pre-spawn mortality related to handling and trucking. Mackey said this change will be made, as suggested.

Detailed Plan (page 4, 4.)

Cooper suggested, via email, adding language specifying that when there is not enough conservation brood to meet both (Methow and Okanogan) objectives, Methow FH transfers for Methow releases at Winthrop NFH will be prioritized. Mackey said this language will be added, as suggested.

Mackey said he and Tonseth will update escapement numbers in the draft 2015 Methow Basin Spring Chinook Adult Management Plan, and will provide a revised draft plan to Geris for distribution to the Hatchery Committees. Mackey asked Snow if he had any

updates on run escapement. Snow said WDFW crews are conducting their third week of trapping at Wells Dam. He said, excluding this week, a total of 469 NORs have passed Wells Dam, and 110 NORs have been trapped. He said crews are awaiting DNA analyses on about 70 NORs, and so far, a total of 24 NORs have been typed to the Methow and Twisp rivers.

Tonseth said Douglas PUD and WDFW are seeking approval of the methods outlined in this plan; however, he noted that this is a living document that may be modified as more data become available. The Hatchery Committees representatives present approved the 2015 Methow Basin Spring Chinook Adult Management Plan, as revised.

III. Douglas PUD

A. Wells Dam Spring Chinook Broodstock Collection Update (Greg Mackey and Charlie Snow)

Greg Mackey said he spoke with the Wells Hatchery Manager yesterday, who indicated a total of 24 Metcomp and about four Twisp fish have been identified through genetic testing. Mackey said additional fish are currently undergoing genetic testing; however, results are not yet available. He said it seems there are large amounts of ad-present, coded-wire-tag (CWT)-absent fish with scale samples indicating those fish are actually hatchery fish. He said, however, the CWT loss rate is typically very low. Charlie Snow explained that this year, there is a huge hatchery return and relatively small wild return, so even with a low CWT loss rate, there will still be a large amount of unmarked hatchery fish proportionate to wild returns. He said, for example, to date, staff have sampled more than 800 fish, and among the ad-present fish, about 17 fish have returned as unmarked hatchery fish (based on scale samples). He said this equates to only about 1.9% tag loss, which is expected. He said, during the first week of sampling, about 36 fish were retained that were thought to be wild and only 1 came back as a hatchery fish. He said, during week two, about 75 fish were retained that were thought to be wild, but scale samples indicated about 16 of those fish were hatchery fish. Mackey said he was under the impression the CWT loss rate was higher, in which case he was going to propose retaining more fish in case they were needed. He said, however, given Snow's explanation, no adjustments will be needed. Snow added that a quality check on tagging is conducted close to marking; however, tag loss can occur any time during a fish's life cycle.

IV. Chelan PUD

A. Draft 2014 Chelan PUD and Grant PUD Hatchery M&E Report (Catherine Willard)

Catherine Willard reminded the Hatchery Committees that Kristi Geris sent an email to the Hatchery Committees on April 1, 2015, notifying them the draft 2014 Chelan PUD and Grant PUD Hatchery M&E Annual Report was available for a 60-day review, with edits and comments due to Tracy Hillman by Monday, June 1, 2015. Hillman noted the comments are due the same day the report is due. Keely Murdoch suggested in future years, moving the comment deadline to an earlier date. Mike Tonseth agreed, and also suggested the Hatchery Committees should consider permitting deadlines as a starting point and work backward to identify when the M&E report is due. Hillman said he will try to produce the final report as quickly as possible once all comments are received, and he asked Hatchery Committees members to submit comments early, if possible, to help expedite this process.

B. Chiwawa River Instream Flow Update (Catherine Willard)

Catherine Willard said, in anticipation of a low flow year and potential drought, Chelan PUD is planning to fill the Chiwawa ponds earlier than usual, beginning on May 21, 2015. She said filling the ponds during higher river flow will avoid the need for filling the ponds during periods of river flow outside instream flow requirements and non-consumptive water use restrictions. She also noted that by this date, all fish will have been released. Mike Tonseth further explained that the State Legislature is currently considering bills for drought contingency funding, and the Chiwawa Facility made that list. He said the question came back to Alene Underwood about what kind of contingency plan is in place at Chiwawa should low flows occur. Keely Murdoch asked if some sort of flow will be maintained in the ponds, and Willard replied that there will be.

V. Chelan PUD/Douglas PUD/YN

A. Five-Year Hatchery M&E Review Planning (Catherine Willard/Greg Mackey/Keely Murdoch)

Catherine Willard said she, Keely Murdoch, and Greg Mackey developed a Methow Spring Chinook Review of Five-Year Annual Report Plan Outline (Attachment C), which was distributed to the Hatchery Committees by Kristi Geris on May 14, 2015. Willard reviewed Attachment C, noting that today, the plan is to review a summary of findings for the Twisp,

Methow, and Chewuch spring Chinook salmon programs. She said an excerpt from the Five-Year Hatchery M&E Plan Report (Attachment D) was distributed to the Hatchery Committees by Geris on May 18, 2015, which Mackey will review. Willard said, as outlined in Attachment C, Hatchery M&E Plan objectives have been divided into groups and will be reviewed during subsequent Hatchery Committees meetings. She said Hatchery Committees members will document which objectives are not meeting targets, flag items to revisit, and where applicable, develop recommendations or document reasons for not revisiting objectives. She said the goal is to complete a review of all objectives by August 2015, and start a process of addressing flagged objectives by February 2016. Murdoch noted that similar objectives were grouped together for discussion purposes. The Hatchery Committees representatives present supported the proposed Methow Spring Chinook Review of Five-Year Annual Report Plan Outline.

Mackey reviewed Attachment D, which compiles summary information contained at the end of each section of the Five-Year Hatchery M&E Plan Report for Twisp River, Chewuch River, and Methow River spring Chinook salmon. He said for each program, the following information is being provided: 1) goal and program descriptions; 2) summary; and 3) a table containing a summary assessment of M&E objectives. He noted that each program indicated a fish release number of about 183,000, which he said were not the actual release numbers. He recalled the reason for this was because the HCPs did not specify how many fish go in each river. The total release of 550,000 was divided equally among the Twisp, Methow, and Chewuch for HCP "goal" purposes, and recommended ignoring those numbers as they have changed dramatically. Mackey then reviewed the major findings of each Objective or each of the three programs: Methow, Twisp, and Chewuch. The review was a verbal narrative of the report findings summary tables that were supplied to the Committees and were taken for the 5-Year report.

Tracy Hillman asked what needs to be done to keep on schedule, as outlined in Attachment C. Mackey, Willard, Murdoch, Todd Pearsons, Charlie Snow, Andrew Murdoch, and Hillman will coordinate to prepare information on Hatchery M&E Plan Objectives 1, 4, and 7, for discussion during the next Hatchery Committees meeting on June 17, 2015. Murdoch said, considering the change in landscape, she is hopeful people will

keep an open mind while reviewing these objectives. Hillman also noted there are additional data available since the Five-Year Hatchery M&E Plan Report was completed. Pearsons asked what types of discussions and review will take place throughout the next few months. Mackey said there will first be a technical review of results, and then, starting in September 2015, a review from a management standpoint will begin as an adaptive management feedback loop. Hillman reiterated that these programs have changed significantly, and recommended the Hatchery Committees keep that in mind as they make projections about possible changes. Mackey agreed, noting that recalculation was well underway when the original report was being written and the authors were aware of this; however, the recalculated numbers were not yet finalized at that time.

VI. Hatchery Evaluation Technical Team (HETT)

A. HETT Update (Catherine Willard/Greg Mackey)

Hatchery M&E Plan Appendices

The HETT convened on April 29, 2015, at the WDFW Research Office in Wenatchee, Washington, to discuss finalizing the Hatchery M&E Plan Appendices. Catherine Willard noted that Greg Mackey provided background on developing the Hatchery M&E Plan Appendices, as well as an update on the last iteration of the appendices. Willard said the HETT discussed a plan for completing the appendices, noting the appendices are living documents, subject to change as more data become available. She said while the HETT discussed how much work is left, it became apparent that much of the work is already complete. She said Appendix 1, which addresses carrying capacity, is the most onerous in terms of work remaining to be done. She said appendices were split up among HETT members to complete by May 29, 2015 (Appendix 1, assigned to Tracy Hillman and Andrew Murdoch, is due June 30, 2015). Willard said Kristi Geris will then distribute a Doodle Poll to reconvene the HETT sometime in July 2015. Hillman also noted that Appendix 3, which addresses spatial distribution of wild and hatchery spawners, may need to be further discussed within the Hatchery Committees regarding which programs require complete spatial overlap and which require partial or complete segregation.

Predation, Competition, and Disease (PCD) Risk Modeling

Craig Busack asked if PCD risk modeling is complete. Mackey replied that it is, and added that a final report was completed in June 2014. Busack noted an error in the model, and said he has been considering reprogramming the model for use in future Biological Opinions (BiOps). Hillman suggested Busack notify the Hatchery Committees if he does reprogram the model. Busack said he may be able to obtain internal funding to work on this; however, he has not yet had time to do so. He added, despite the error in the model, he found a lot of value in the datasets the Hatchery Committees developed through the Non-Target Taxa of Concern modeling.

VII. NMFS

A. HGMP Update (Craig Busack)

Craig Busack said from now on, NMFS is no longer allowed to issue permits without first obtaining completed consultations by USFWS. He said he does not feel this will cause any problems, and added he believes this is actually good news because USFWS processes are now moving forward. Keely Murdoch asked how this will affect permitting for Wenatchee spring Chinook salmon. Busack said there should be no concern about this permit because it has already been issued. He added he is still working on the Incidental Take Statement for the Wenatchee Spring Chinook Re-initiation BiOp. He said this is progressing slower than usual because Amilee Wilson (NMFS) worked on this first before passing it onto Busack; so, he needs to read more than usual to get caught up. He said he hopes to complete this by next week. Todd Pearsons said he is concerned with the high number of fish passing Tumwater Dam already; however, he said this will be discussed further during tomorrow's PRCC HSC meeting.

Busack said the following items are currently consuming his time: 1) the necessity to complete the Leavenworth BiOp by the end of May 2015, by order from the Department of Justice (Wilson working on this); and 2) the ongoing Puget Sound litigation. Busack added NMFS is growing more concerned with litigation risk.

VIII. YN

A. YN Kelt Reconditioning Program Update (Keely Murdoch)

Keely Murdoch recalled the Hatchery Committees' approval of the YN's SOA to live-spawn Twisp River steelhead contingent on the YN providing monthly YN Kelt Reconditioning Program Reports when available, which Murdoch noted are being distributed now through October 2015 (Kristi Geris distributed the first report on the year yesterday, May 19, 2015). Murdoch also recalled a request or comment for Matt Abrahamse to present end-of-the-year results to the Hatchery Committees when available, and Murdoch asked the Hatchery Committees if there is interest in such a presentation. She said a report summarizing data collected through the end of the contract (January 31, 2015) is also available and can be distributed. She noted that spring 2015 data will be included in next year's report. The Hatchery Committees agreed a presentation would be interesting, and Murdoch said she will coordinate with Abrahamse on possibly presenting recent data on the YN Kelt Reconditioning Program during a future Hatchery Committees meeting.

IX. HCP Administration

A. Review of Meeting Protocols

Tracy Hillman said he reviewed the HCPs to identify HCP meeting protocols, and compiled what he found in a document. He distributed hard copies of a draft HCP Hatchery Committees Meeting Protocols Summary to Hatchery Committees representatives present. He noted that protocols with a footnote were copied directly out of the HCPs, and others are protocols that have been established and agreed on throughout the years. He asked the Hatchery Committees to review the document and note anything he missed. He also reviewed a few late additions received from Kristi Geris, which are not included in the handout. Hillman said this document is mostly for his benefit; it will help his transition into the HCP Hatchery Committees Chairman position and keep future proceedings like business as usual.

Hatchery Committees representatives will provide edits and comments on the draft HCP Hatchery Committees Meeting Protocols Summary to Hillman (with a copy to Geris) by Thursday, June 4, 2015. Geris said she will distribute an electronic copy of the draft HCP Hatchery Committees Meeting Protocols Summary to the Hatchery Committees for review, along with Geris' additional edits, as discussed during the Hatchery Committees meeting on May 20, 2015. *(Note: Geris distributed the summary and additional edits*

[Attachment E] to the Hatchery Committees on May 21, 2015.)

B. Next Meetings

The next scheduled Hatchery Committees meetings are on June 17, 2015 (Chelan PUD), July 15, 2015 (Douglas PUD), and August 19, 2015 (Chelan PUD).

List of Attachments

Attachment A	List of Attendees
Attachment B	Douglas PUD Responses to CCT Comments on the Draft 2015 Methow Basin Spring Chinook Adult Management Plan
Attachment C	Methow Spring Chinook Review of Five-Year Annual Report Plan Outline
Attachment D	Excerpt from the Five-Year Hatchery M&E Plan Report
Attachment E	Draft HCP Hatchery Committees Meeting Protocols Summary

Attachment A
List of Attendees

Name	Organization
Tracy Hillman	BioAnalysts, Inc.
Kristi Geris	Anchor QEA, LLC
Keith Truscott	Chelan PUD
Catherine Willard*	Chelan PUD
Greg Mackey*	Douglas PUD
Tom Kahler*	Douglas PUD
Todd Pearsons	Grant PUD
Craig Busack*†	National Marine Fisheries Service
Bill Gale*†	U.S. Fish and Wildlife Service
Mike Tonseth*	Washington Department of Fish and Wildlife
Charlie Snow†	Washington Department of Fish and Wildlife
Keely Murdoch*	Yakama Nation

Notes:

* Denotes Hatchery Committees member or alternate

† Joined by phone
