FINAL

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ANCHOR QEA

Memorandum

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

Date: June 22, 2021

From: John Ferguson, HCP Coordinating Committees Chairman

cc: Kristi Geris, HCP Coordinating Committees Support

Re: **Final Minutes of the May 25, 2021, HCP Coordinating Committees Conference Call**

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plan (HCP) Coordinating Committees met by conference call on Tuesday, May 25, 2021, from 9:00 a.m. to 10:30 a.m. Attendees are listed in Attachment A to these conference call minutes.

Action Item Summary

- Chelan PUD will continue providing Rocky Reach Dam and Rock Island Dam turbine unit maintenance updates as information becomes available (Item I-C).
- BioAnalysts will distribute the final *Enloe Dam Removal Concept Plan*, that includes results from the sediment analysis by U.S. Geological Survey (USGS), once it becomes available (expected June 1, 2021), as discussed during today's HCP Tributary Committees May 13, 2021, conference call update (Item II-A). *(Note: Tracy Hillman provided download information for the final plan on May 28, 2021, which Kristi Geris distributed to the HCP Coordinating Committees that same day. The results from the sediment analysis are found on pages 17 to 19 of the final plan.)*
- Chelan PUD will distribute the Rocky Reach Dam Summer Spill and Shape Adjustment graphs that were discussed during today's conference call (Item IV-D). *(Note: Lance Keller provided these graphs to Kristi Geris on June 11, 2021, which Geris distributed to the HCP Coordinating Committees that same day.)*
- The HCP Coordinating Committees meeting on June 22, 2021, will be held at 9:00 a.m., by conference call (Item VI-B).

Decision Summary

- There were no HCP Decisions approved during today's conference call.

Agreements

- There were no HCP Agreements discussed during today's conference call.

Review Items

- The Fish Passage Center memorandum, *Eliminating Rock Island from the Regional Smolt Monitoring Program*, was distributed to the HCP Coordinating Committees by Kristi Geris on

February 23, 2021. Chelan PUD will further discuss this memorandum during the HCP Coordinating Committees conference call on June 22, 2021.

- The Fish Passage Center memorandum, *Monitoring Avian Predation for the Upper Columbia River – An alternative to marking fish at Rock Island Dam*, was distributed to the HCP Coordinating Committees by Kristi Geris on April 5, 2021. Chelan PUD will further discuss this memorandum during the HCP Coordinating Committees conference call on June 22, 2021.
- The draft *2020 Public Utility District No. 1 of Douglas County Northern Pikeminnow Removal and Research Program* (Douglas PUD 2020 Northern Pikeminnow Annual Report) was distributed to the Wells HCP Coordinating Committee by Kristi Geris on June 8, 2021, and is available for a 30-day review with edits and comments due to Tom Kahler by July 8, 2021.

Finalized Documents

- The final *2018 Public Utility District No. 1 of Douglas County Northern Pikeminnow Removal and Research Program* (Douglas PUD 2018 Northern Pikeminnow Annual Report) and final *2019 Public Utility District No. 1 of Douglas County Northern Pikeminnow Removal and Research Program* (Douglas PUD 2019 Northern Pikeminnow Annual Report), as approved by the Wells HCP Coordinating Committee on March 23, 2021, were distributed to the Wells HCP Coordinating Committee by Kristi Geris on June 10, 2021.

I. Welcome

A. Review Agenda (John Ferguson)

John Ferguson welcomed the HCP Coordinating Committees and reviewed the agenda. Ferguson asked for any additions or changes to the agenda. Lance Keller added: 1) Rocky Reach Dam Summer Spill and Shape Adjustment; and 2) Rock Island Dam subyearling Chinook salmon behavior study.

B. Meeting Minutes Approval (John Ferguson)

The HCP Coordinating Committees reviewed the revised draft April 27, 2021, conference call minutes. Kristi Geris said all comments and revisions received from members of the Committees were incorporated into the revised minutes. She also updated distribution of weekly updates on the progress of the 2021 Rock Island Dam Survival Confirmation Study, per Chelan PUD's action item. HCP Coordinating Committees members present approved the April 27, 2021, conference call minutes, as revised. The Colville Confederated Tribes (CCT) abstained via email prior to the HCP Coordinating Committees conference call on May 25, 2021, because a representative was not present during the April 27, 2021, conference call.

C. Last Meeting Action Items (John Ferguson)

Action items from the HCP Coordinating Committees meeting on April 27, 2021, and follow-up discussions, were as follows. *(Note: Italicized text corresponds to agenda items from the meeting on April 27, 2021):*

- *Chelan PUD will continue providing Rocky Reach Dam and Rock Island Dam turbine unit maintenance updates as information becomes available (Item I-C).*
  This will be discussed during today's conference call and will also be carried forward.
- *Chelan PUD will provide the repair schedule for the crack at spillway pier 1 at Rock Island Dam when the schedule is available (Item I-C).*
  Lance Keller said the bulk of this work is complete. There is some work remaining to complete the installation of the new conduit; however, this work is on hold until after summer fish spill in August 2021. John Ferguson asked if the work remaining concerns the HCP Coordinating Committees. Keller said no, there are just miscellaneous tasks remaining that should have no impacts to fish passage. Once work resumes in August 2021, should this change, he will report back to the HCP Coordinating Committees, as needed.
- *Chelan PUD will provide, via email, weekly status updates on the progress of the 2021 Rock Island Dam Survival Confirmation Study (Item IV-A).*
  Lance Keller has provided these weekly updates since May 5, 2021 (three total to date), which Kristi Geris has distributed to the HCP Coordinating Committees, as discussed.
- *Anchor QEA, LLC, will follow up with National Marine Fisheries Service (NMFS), the CCT, and Denny Rohr (Priest Rapids Coordinating Committee Chairman) regarding the rescheduled HCP Coordinating Committees conference call on July 22, 2021, from 1:00 p.m. to 4:00 p.m. (Item V-C).*
  NMFS and the CCT are unavailable to attend the rescheduled meeting, but Anchor QEA plans to coordinate with NMFS and the CCT before and after the July meeting, as needed.

II. HCP Hatchery and Tributary Committees Update

A. HCP Hatchery and Tributary Committees Update (Tracy Hillman)

Tracy Hillman updated the HCP Coordinating Committees on the following actions and discussions that occurred during the HCP Tributary Committees conference call on May 13, 2021:

- *Icicle Creek Fish Passage – Wild Fish to Wilderness Project*: The Rock Island HCP Tributary Committee received a budget amendment request from Trout Unlimited on the *Icicle Creek Fish Passage – Wild Fish to Wilderness Project*. The sponsor asked to shift funds among budget line items. The total cost of the project will not change; only the amount within the designated line items will change. The Rock Island HCP Tributary Committee approved the budget amendment.
- *City of Leavenworth Fish Screen Project*: The Rock Island HCP Tributary Committee received a budget amendment request from Trout Unlimited on the *City of Leavenworth Fish Screen Project*.

The sponsor asked to shift funds among budget line items. The total cost of the project will not change; only the amount within the designated line items will change. The Rock Island HCP Tributary Committee approved the budget amendment. Andrew Gingerich asked if this project and the *Icicle Creek Fish Passage – Wild Fish to Wilderness Project* are passage improvements at the presumable impassable boulder field on Icicle Creek. Hillman said yes and suggested that HCP Coordinating Committees representatives look into these improvements because they are quite impressive. Gingerich asked about how many river miles (RMs) of habitat are expected to open up with these modifications. Tom Kahler said approximately 26 RMs. John Ferguson asked if this is primarily steelhead habitat, and Hillman said this is correct.

- *Wenatchee River – Monitor Side Channel Construction Project*: The Rock Island HCP Tributary Committee received a budget amendment request from Chelan County Natural Resources Department (CCNRD) on the *Wenatchee River – Monitor Side Channel Construction Project*. The sponsor asked for an additional $68,589 from the Rock Island HCP Tributary Committee (they also asked for an additional $68,588 from the Salmon Recovery Funding Board). In the request, the sponsor noted the cost to construct the project increased because of several factors including changes in design elements and increased cost of materials. After review, the Rock Island HCP Tributary Committee approved the budget amendment. Thus, the contribution from the Rock Island Plan Species Account increased from $148,265 to $216,854. Hillman noted that construction is expected to commence this year.
- *Mission Project Wood Amendment Project*: The HCP Tributary Committees received a Small Projects Program application from Cascade Fisheries titled, *Mission Project Wood Amendment Project*. The purpose of the project is to use streamside tree felling to increase cover and instream complexity and encourage pool formation in 8 miles of Libby and Buttermilk creeks in the Methow River Basin. The project will place 128 trees directly into the streams to increase rearing and spawning habitat for steelhead. The total cost of the project was $56,525.36. The sponsor requested $41,525.36 from HCP Plan Species Account Funds. The Wells HCP Tributary Committee elected to contribute $41,525.36 to the project. Ferguson said it seems like felling trees would take away shading, and he asked why not drop in logs instead of dropping trees? Hillman said he does not think temperature is a big issue in these streams; rather, what was discussed is whether felling trees in the riparian zone will minimize recruitment of large wood to the channels in the future. The proposed 128 trees over 8 RMs is not a high density, and the Committee also stipulated that only trees beyond 15 meters from the edge of the stream can be used. The Committee also recommended to add freshly downed trees to the channel, which might improve clustering and habitat conditions. Kahler said Hillman covered this topic well, and he noted that Ferguson's comments were exactly the questions the Wells HCP Tributary Committee discussed, and the Committee determined the project will not reduce shade.
- *Entiat River Fish Monitoring Project*: The HCP Tributary Committees received a monitoring project application from CCNRD titled *Entiat River Fish Monitoring Project*. The purpose of the project is to

monitor populations of subyearling Chinook salmon and steelhead in the Entiat River, with a focus on evaluating the effects of habitat restoration on fish abundance, movement, habitat use, and distribution. Methods will include snorkel surveys at both the habitat and reach scales, and mark-recapture techniques to assess movement relative to the size and spacing of habitat created with engineered log jams. The total cost of the project was $173,993.14. The sponsor requested $75,000 from HCP Plan Species Account Funds. The Committees declined the opportunity to fund this study; however, they will review a revised application if the sponsor addresses the Committees' comments and questions. Hillman said there were a number of questions about methodology and spatial scales. Jim Craig asked if this project is similar to the Integrated Status and Effectiveness Monitoring Program (ISEMP) work that was conducted many years ago. Hillman said yes; however, Bonneville Power Administration cut funding for ISEMP, so that program ended. This project will use monitoring results from ISEMP but is also piggybacking on Salmon Recovery Funding Board-funded remote sensing work, which will be conducted by Cramer Fish Sciences. The remote sensing work collected pre-treatment and during-treatment data and will now collect post-treatment data. Remote sensing work will capture changes in habitat conditions over time. The proposal from the CCNRD will assess whether fish respond to the changing habitat conditions.

- *Peshastin Creek River Mile 4.3 Project Design Review*: CCNRD gave a presentation on the 30% designs for the *Peshastin Creek River Mile 4.3 Project*. The purpose of the presentation was to seek feedback from the Rock Island HCP Tributary Committee on the proposed restoration design. The Committee provided both verbal and written comments on the design. The sponsor will further develop the design and seek additional feedback from the Committee.
- *Draft Enloe Dam Removal Concept Plan*: The Wells HCP Tributary Committee received the draft Enloe Dam Removal Concept Plan from Inter-Fluve. The draft plan describes current conditions and effects of dam removal on resources. The plan also identifies drawdown and demolition alternatives, infrastructure removal alternatives, and permitting requirements. Lastly, the plan offers recommendations regarding impoundment contaminants, sediment transport during dam removal, removal feasibility, and costs. Members will review the draft plan and send comments to the project sponsor. Hillman said comments were just sent to the sponsor yesterday, and a final concept plan is expected by the end of this week or early next week. Craig asked if the sediment analysis report has been distributed. Hillman said the sediment report was discussed a little bit in the concept plan, but he thinks the results and report are not yet published or out for review. He explained that in the concept plan, Inter-Fluve reported on detection of certain contaminants. He thinks sediments were only analyzed for heavy metals, and he thinks arsenic and chromium were detected above the threshold, and copper, cadmium, and lead were detected below the threshold. Kahler said arsenic was the main concern, and there were two other metals of lesser concern. Hillman said looking at the concept plan, he thinks the two of lesser concern are chromium and copper. Ferguson asked who authored the sediment report. Hillman clarified that USGS

performed the sediment work and Inter-Fluve conducted the other work. Inter-Fluve briefly discussed the results of the USGS work in the concept plan; however, the final USGS sediment report is not yet available. All of this work was delayed due to coronavirus disease 2019 (COVID-19), including collecting and processing samples, which might be why the sediment results are still not published. Kirk Truscott asked if sampling included organic compounds or if there was any discussion of this. Hillman said he thinks the contaminant section of the report was mostly about heavy metals. Kahler agreed and said USGS did not analyze samples for polycyclic aromatic hydrocarbons, pesticides and herbicides, or anything of that nature. Hillman said he expects to receive the final *Enloe Dam Removal Concept Plan*, which includes results from the sediment analysis by USGS, by June 1, 2021, and he can forward the final plan to the HCP Coordinating Committees. *(Note: Hillman provided download information for the final plan on May 28, 2021, which Kristi Geris distributed to the HCP Coordinating Committees that same day. The results from the sediment analysis are found on pages 17 to 19 of the final plan.)*

- *Next Meeting*: The next meeting of the HCP Tributary Committees will be on June 10, 2021.

Hillman updated the HCP Coordinating Committees on the following actions and discussions that occurred during the HCP Hatchery Committees conference call on May 19, 2021 (*Note: Joint HCP Hatchery Committees/PRCC Hatchery Subcommittee items are noted by "Joint," Wells HCP Hatchery Committee items are noted by "Wells," and Rock Island and Rocky Reach HCP Hatchery Committees items are noted by "Rock Island/Rocky Reach"*):

- *Adult Prophylactic Disease Management Plan for Spring and Summer Chinook Salmon (Joint)*: Washington Department of Fish and Wildlife (WDFW) Veterinarian, Megan Finley, proposed to discontinue inoculation for bacterial kidney disease (BKD) of adult natural-origin (NOR) spring and summer Chinook salmon for the Eastbank Fish Hatchery (FH) programs over the next 3 years. This recommendation is based on the results from evaluating BKD inoculation over the last 3 years. The results of the evaluation indicated that there was no significant difference in BKD detected by enzyme linked immunosorbent assay (or ELISA) between inoculated females and non-inoculated females. Additionally, inoculation had no effect on pre-spawn survival, inoculation may affect disease resistance, and the current culling program works well. The Committees agreed to discontinue inoculation of adult NOR spring and summer Chinook salmon for the Eastbank FH programs over the next 3 years. Inoculation will be re-evaluated after the 3-year period.
- *Marking Errors and Implications (Joint)*: Chelan PUD reported on the second incidence of bad adipose fin clips on hatchery fish that were marked at Eastbank FH in 2019 and released in 2021. For some stocks, up to 18% of the fish had bad fin clips. This occurred primarily with the fish that were fin clipped by hand. WDFW is aware of the problem and will use their staff (rather than non-WDFW staff) to clip fins by hand. Poor fin clipping is a state-wide issue, not just within the Upper Columbia River Basin.

- *Multi-Population Proportionate Natural Influence (PNI) Model (Joint)*: The Committees continued their discussion on the use of a multi-population, spring Chinook salmon, PNI model for the Wenatchee River Basin. They discussed the need to identify which populations would be included in the model and how to capture the flow of genes among populations. NMFS will discuss the need for a multi-population PNI model with Craig Busack (NMFS) and Mike Ford (NMFS). Busack and Ford were instrumental in developing the PNI model.
- *Hatchery Production Recalculation (Joint)*: The Committees discussed a general methodology for recalculating hatchery production needed to achieve No Net Impact for all Plan Species. All parties agreed that the general methodology used during the last calculation process was appropriate. The PUDs will develop a Statement of Agreement similar to the one approved by the Committees during the last recalculation effort, for review during the HCP Hatchery Committees meeting on June 16, 2021. In addition, the PUDs are in the process of developing the database that will be used during recalculation. They will share the database with the Committees before the next meeting. Over the next few months, the Committees will be evaluating what data will be included in the recalculation process. The Committees are on schedule to complete the 2024 to 2033 implementation plan by the end of the year.
- *Comprehensive Monitoring and Evaluation (M&E) Report Review Update (Joint)*: The PUDs reported they are on schedule to deliver the draft comprehensive M&E report to the Committees by July 2021. The Committees discussed the review process and identified a sequential method for reviewing the document. This will be needed because the Committees will be working on recalculation and reviewing the annual M&E report during the period when they are reviewing the comprehensive M&E report.
- *Spring Chinook Salmon Broodstock Collection at Wells Dam (Joint)*: The Methow FH program preferentially targets NOR broodstock at Wells Dam. Hatchery-origin (HOR) returns are collected in the Methow River Basin at the Methow FH and Winthrop National Fish Hatchery outfall traps to the extent the Methow FH program requires additional HOR broodstock. This year, spring Chinook salmon run projections for the Methow River Basin are very low, triggering concerns that the U.S. Fish and Wildlife Service (USFWS) programs, including the Okanogan 10(j) and the Methow FH programs, may have difficulty acquiring the needed broodstock using the traditional collection protocols. As a result, Douglas PUD and USFWS presented a proposal to the Committees to collect coded-wire-tag-only HOR spring Chinook salmon at Wells Dam in order to meet broodstock needs for the Methow programs and the Okanogan 10(j) program. Unfortunately, HOR spring Chinook salmon intercepted at Wells Dam could be destined for the Okanogan River, and those fish cannot be separated from Methow FH fish at Wells Dam. Nevertheless, members do not want a shortfall in broodstock collection. Therefore, they decided to target 100 coded-wire-tag-only HOR spring Chinook salmon at Wells Dam during the week of May 24, 2021, and reevaluate the need for additional collections at Wells Dam after the first week.

This approach should ensure adequate broodstock collection and minimize interception of spring Chinook salmon destined for the Okanogan River. Douglas PUD, USFWS, and the CCT are collaborating to develop a collection plan to provide to NMFS and the Committees. Hillman said yesterday, Douglas PUD sent this plan to NMFS and the HCP Hatchery Committees. Kahler said ideally, enough broodstock will be collected without needing to hold a bunch of fish, and the run looks to be large enough that he is hopeful this will be accomplished. Ferguson asked when collection started, and Kahler said either yesterday or today.

- *COVID-19 and M&E Activities (Joint)*: Each member of the HCP Hatchery Committees discussed the effects of COVID-19 on their respective M&E activities. There were no significant changes since last month.
- *Next Meeting*: The next meeting of the HCP Hatchery Committees will be on June 16, 2021.

III. Douglas PUD

A. Timing of Review and Approval of HCP Documents (Tom Kahler)

Tom Kahler recalled the HCP Coordinating Committees agreeing to modify the timing of review and approval of HCP documents[1]. Historically, the Federal Energy Regulatory Commission (FERC) filing deadline for the Wells HCP annual report has been March 31. After doing some research, it turns out this deadline is not driven by FERC; rather, this is a NMFS deadline. Therefore, Douglas PUD deferred to NMFS regarding this request, and Andrew Gingerich submitted the transmittal, *Wells Hydroelectric Project – FERC Project No. 2149 Request to Change HCP Annual Reporting from March 31 Annually to May 31 Annually* (Attachment B), to NMFS on May 20, 2021, which Kristi Geris distributed to the HCP Coordinating Committees that same day. Kahler said he just received a response from NMFS approving this request (Attachment C), which Douglas PUD will provide to FERC. Douglas PUD will continue to provide the Wells HCP Coordinating Committee with the draft Wells HCP annual report for review each February; however, now there will be a longer review period.

John Ferguson thanked the PUDs for rearranging HCP document review deadlines and their responsiveness to address this request from the HCP Coordinating Committees. Kirk Truscott echoed these sentiments.

B. Wells Dam Bypass Operations Update (Tom Kahler)

Tom Kahler said the bypass system at Wells Dam has been operating per the *Wells Bypass Operating Plan*, as approved[2], with Spillway 7 out-of-service. The operators of the plant have been doing a good job and everything is operating smoothly.

[1] During the HCP Coordinating Committees conference call on March 23, 2021.
[2] The Wells HCP Coordinating Committee approved the *Wells Hydroelectric Project 2021 Total Dissolved Gas Abatement Plan* (and appended *Wells Bypass Operating Plan*), as revised, on February 23, 2021.

Kirk Truscott asked about detections at the passive integrated transponder (PIT)-tag array installed in Spillway 2. Kahler said this season there have been 358 juveniles detected on this array, which is a record. He thinks this might be because the turbine unit configuration is currently favoring the west side of the project where this detection array is located, which is drawing fish through this bypass bay. Of these fish, 77 fish are coding as orphans and are likely Methow Safety Net steelhead that were released in the lower river. There are also other releases that do not yet have release files in the PIT Tag Information System, so running a query will return a smaller number of fish. Additionally, of the 358 fish detected, there are a lot of Okanogan River fish.

John Ferguson asked about the general flow conditions this year. Kahler said there have been relatively low flows at Wells Dam, resulting in a pretty moderate year to date. Grand Coulee Dam has been holding the reservoir down and was releasing some water—at the request of the CCT to facilitate out-migrating hatchery fish—but has since backed off. Wells Dam operators have been able to keep total dissolved gas under control. The daily average river flow is currently approximately 100,000 cubic feet per second (100 kcfs). This is shaped, so there are periods of 150 kcfs and periods where flow is lower.

IV. Chelan PUD

A. 2021 Rock Island Dam Survival Confirmation Study Update (Lance Keller)

Lance Keller said Chelan PUD completed the last control release in the tailrace of Rock Island Dam last Saturday, May 22, 2021, and the last test release in the tailrace of Rocky Reach Dam the day before on Friday, May 21, 2021. This means crews are officially done with the in-field work, which consisted of collection, transportation, marking, and releasing of study fish. Chelan PUD met all collection and tagging targets for each replicate. This year, there were increased numbers of yearling Chinook salmon passing through the Rocky Reach Juvenile Sampling Facility compared to previous years, so the increase in sockeye and coho salmon numbers during collection did not impact the ability to collect yearling Chinook salmon for the study. Blue Leaf Environmental (Blue Leaf) has been checking detection equipment weekly, and everything is working properly and continuing to collect data. Downstream, at Sunland Estates and Crescent Bar, Blue Leaf retrieved and opened up the autonomous receivers, downloaded data, and redeployed the receivers. This was performed around the time of the release of Replicate 9, to make sure the equipment was working correctly and as a midseason data preservation practice. Based on travel time data, operators plan to hold operational test conditions of 10% spill at Rock Island Dam, hopefully through this Friday, May 28, 2021. Some of the earlier replicates, released during lower flows, showed travel times in excess of 200 hours. Since then, flows have increased, and the longer travel times are now in the 30- to 40-hour time range. By Friday, May 28, 2021, the majority of test fish should be through the Rock Island Project. Overall, everything went very smoothly compared to past studies.

Keller said regarding river flow, the Rock Island Project has experienced somewhat low flows during the study period. Chelan PUD has been tracking daily outflow and how this relates to the flow duration curves. It appears flows this year are within the bounds of the flow duration curve requirements, which validates the test conditions.

John Ferguson asked about the schedule for finalizing data retrieval and preliminary results. Keller estimated these data being available in the August to September time frame. The schedule is for Blue Leaf to have a finalized dataset to Dr. John Skalski (Columbia Basin Research, University of Washington) by August 1, 2021, and Skalski needs approximately 30 days to process and produce survival estimates. Keller also noted that gear deployed at Sunland Estates and Crescent Bar need to stay deployed longer than the gear in the forebay to match the timing of the ongoing tag-life study. Currently, there is a subset of tags at Rocky Reach Dam that are representative of each replicate deployed in a vessel supplied with a continuous flow of river water. There is a hydrophone installed that is monitoring this subset of tags to assess overall days of operation that will be compared to the time it takes tagged yearlings to move past the detection arrays deployed at Sunland Estates and Crescent Bar. Battery life is expected to last 45 days past the release of the last replicates, so detection equipment must remain deployed for this amount of time.

B. Rock Island Dam Powerhouse 1 Maintenance Update (Lance Keller)

Lance Keller said Turbine Unit B4 is currently in the dry commissioning phase; crews anticipate completing this phase this week and beginning the wet commissioning phase on June 1, 2021. Work is continuing on Turbine Unit B7, with an estimated return-to-service (RTS) date of July 2021. Work will then begin on Turbine Units B3 and B5. The estimated RTS date for Turbine Unit B5 is November 2021.

C. Rocky Reach Dam Turbine Units Maintenance Update (Lance Keller)

Lance Keller said work continues on Turbine Units C3 and C7. Turbine Unit C7 is in the commissioning phase, with a RTS date of June 4, 2021. Crews took Turbine Unit C6 out-of-service and started the disassembly process to address the trunnion seal and bushings in this unit. The current RTS date for Turbine Unit C6 is November 2021; however, once crews are inside the unit and have a clearer idea about the wear and tear in the unit, this date could be revised. Previously, the RTS date for Turbine Unit C3 was July 2021, but this is now looking like August 2021. Keller will keep the HCP Coordinating Committees updated as repairs progress.

D. Rocky Reach Dam Summer Spill and Shape Adjustment (Lance Keller)

Lance Keller recalled that Chelan PUD is required to spill 9% of the daily average river flow to facilitate passage of subyearling Chinook salmon at Rocky Reach Dam. Over the last few months, Four Peaks Environmental Science and Data Solutions (Four Peaks) has been analyzing subyearling PIT-tag detections at the Rocky Reach Dam surface collector structure. Keller projected on WebEx,

draft Rocky Reach Dam Summer Spill and Shape Adjustment graphs (Attachment D), which were distributed to the HCP Coordinating Committees by Kristi Geris on June 11, 2021. He said Four Peaks reviewed data for wild subyearlings that were tagged upstream of Rocky Reach Dam from 2011 to 2019. In the graph on page 1 of Attachment D, the blue line represents diel detections of PIT-tagged subyearlings at the surface collector structure for the months of June to August, from 2011 to 2019. These data show decent passage in the early hours of the day, a drop in passage during the day, and an increase during the twilight period. The orange line in this graph represents the current summer spill shape at Rocky Reach Dam, which is a spill shape based on old hydroacoustic data. Keller noted these lines are the inverse of each other.

Keller said ultimately, Chelan PUD wanted to notify the Rocky Reach HCP Coordinating Committee that internal discussions are occurring to determine whether the current summer spill shape can be adjusted to better align with these new subyearling passage data. To clarify, Chelan PUD is not requesting approval for this adjustment; rather, this is a notification that Chelan PUD is planning to make this change and is meeting with internal stakeholders about changing project operations. The graph on page 2 of Attachment D is a preliminary graph that redistributes the currently implemented spill blocks at 6%, 9%, and 12% of the daily average river flow to produce a shape that aligns better with subyearling passage at Rocky Reach Dam (blue line). Keller noted that discussions are occurring with Chelan PUD's Project Operations and Energy Planning and Trading groups, and the goal is to adjust the summer spill program during the 2021 season. That said, this being the end of May and with subyearling hatchery releases starting yesterday, an adjusted spill shape will likely not be finalized prior to the start of summer spill. Chelan PUD plans to start summer fish spill using the current shape, as outlined in the *2021 Fish Spill Plan, Rock Island and Rocky Reach Dams Public Utility District No. 1 of Chelan County*[3], but will provide the final adjusted spill shape to the Rocky Reach HCP Coordinating Committee prior to HCP Coordinating Committees meeting on June 22, 2021. Keller noted that while the Rocky Reach HCP includes a spill requirement, it does not provide bounds on how to provide this spill, which is why Chelan PUD believes this adjustment can be made without running through a formal approval process with the Rocky Reach HCP Coordinating Committee.

Keely Murdoch said this is interesting and thanked Chelan PUD for looking into it. She asked if this adjustment will be applied only at Rocky Reach Dam or will it also be applied at Rock Island Dam. Keller said as of now, Chelan PUD is only proposing this change at Rocky Reach Dam, given the fact that there are data in-hand specific to Rocky Reach Dam and not for Rock Island Dam. Murdoch said even without data, it is fairly normal behavior for juvenile salmonids to migrate at night, as supported by the graphs in Attachment D. She observed this same behavior during past migration monitoring and predation studies where she checked traps hourly. This behavior observed at

[3] Approved by the Rock Island and Rocky Reach HCP Coordinating Committees on March 23, 2021, with the final plan distributed on March 28, 2021.

Rocky Reach Dam is likely the same at Rock Island Dam. Keller said Chelan PUD might be able to infer fish behavior and look into making similar changes at Rock Island Dam.

Keller said he will distribute the Rocky Reach Dam Summer Spill and Shape Adjustment graphs (Attachment D) that were discussed during today's conference call. *(Note: Keller provided these graphs to Geris on June 11, 2021, which Geris distributed to the HCP Coordinating Committees that same day.)*

E. Rock Island Dam Subyearling Chinook Salmon Behavior Study (Lance Keller)

Lance Keller said, similar to the subyearling data shown for the Rocky Reach Project, Chelan PUD would also like to collect behavioral data on subyearling Chinook salmon passing the Rock Island Project, and given the current deployment of acoustic receivers, there is an opportunity to take advantage of those deployed at and downstream of Rock Island Dam for the survival confirmation study. Chelan PUD reached out to Advanced Telemetry Systems, who will be able to provide 600 tags of the same model that was used for the survival confirmation study. Chelan PUD is working rapidly with Four Peaks to develop a study plan to study subyearling Chinook salmon passage and behavior at the Rock Island Project in 2021. The goal is to mark and release wild-origin subyearling Chinook salmon above Rock Island Dam, from late-June to early August (6 weeks total) and monitor behavior and passage through the Rock Island Project. Depending on fish numbers, Chelan PUD hopes to mark and release two groups of 50 fish each week. The first group will be released at the same location as the test replicate release site for the survival confirmation study, which is immediately below the Rocky Reach Dam tailrace at the Rocky Reach Juvenile Sampling Facility outfall pipe. The second group will be released 24 hours later upstream of the Rock Island Dam forebay boat restriction zone. To be clear, this study is not an HCP requirement, and results of this study will not result in a phase designation; rather, Chelan PUD is taking advantage of equipment currently deployed for the Rock Island Dam survival confirmation study to collect additional behavioral data on subyearling Chinook salmon passing Rock Island Dam. Therefore, Chelan PUD is not requesting approval of this study, but is notifying the Rock Island HCP Coordinating Committee that this study is underway and a final study plan will be shared once it becomes available.

Kirk Truscott asked if Chelan PUD expects to gain passage route information. Keller said yes, by way of the gear currently deployed on the face of the dam and the autonomous receivers in the Rock Island Dam forebay. John Ferguson asked about fish tagging. Keller said the process will be standardized, but taggers will be different than those used for the survival confirmation study. Four Peaks is providing this service and has selected competent taggers. Chelan PUD will collect and transport the study fish to the tag site at Rocky Reach Dam, and study fish will be released via a boat. He noted, with this smaller tag size, what he observed during tagging for the survival confirmation study is that the tagging process is streamlined, less labor intensive, and easily repeatable compared

to past acoustic tagging efforts. Ferguson said it is good that Chelan PUD is being proactive about this, and Keely Murdoch agreed.

V. Chelan PUD/Douglas PUD

A. Subyearling Chinook Salmon Studies – Quarterly Check-In (Lance Keller and Tom Kahler)

John Ferguson asked if Chelan PUD or Douglas PUD have updates on subyearling Chinook salmon studies. No updates were shared.

VI. HCP Administration

A. COVID-19 Updates (John Ferguson)

John Ferguson asked if there are any updates HCP Coordinating Committees members would like to share regarding impacts of COVID-19 on HCP activities. No updates were shared.

B. Next Meetings (John Ferguson)

The next scheduled HCP Coordinating Committees meeting is on June 22, 2021, at 9:00 a.m., to be held by conference call.

John Ferguson recalled that the July 27, 2021, conference call was rescheduled to Thursday, July 22, 2021, from 1:00 to 4:00 p.m. Scott Carlon and Kirk Truscott cannot make this call, but Anchor QEA will coordinate with NMFS and the CCT, as needed. Upon review of the June and July 2020 agendas, these meetings were light, and it may make sense to cancel the July 2021 meeting. Ferguson suggested considering covering as much as possible during the June 2021 meeting and possibly canceling the July 2021 meeting.

Andrew Gingerich noted that the HCP Policy Committees will convene by conference call on June 8, 2021. Ferguson said this call will be held from 9:00 a.m. to 12:00 pm. HCP Policy Committees members have this information. Chad Jackson was also copied on this information because he might attend. Keely Murdoch and Kirk Truscott were not copied, but the Yakama Nation and CCT HCP Policy Representatives can forward this information, if needed. The agenda includes an overview of the HCPs, updates from the HCP Committees Chairmen on HCP implementation, and then updates from each HCP Policy Committees Representative to hear their perspectives.

The August 24, 2021, meeting will be held by conference call or in person at the Grant PUD Wenatchee Office in Wenatchee, Washington, as is yet to be determined.

VII. List of Attachments

Attachment A List of Attendees

Attachment B Douglas PUD's transmittal to NMFS, *Wells Hydroelectric Project – FERC Project No. 2149 Request to Change HCP Annual Reporting from March 31 Annually to May 31 Annually*

Attachment C NMFS' response to Douglas PUD's transmittal, *Wells Hydroelectric Project – FERC Project No. 2149 Request to Change HCP Annual Reporting from March 31 Annually to May 31 Annually*

Attachment D Draft Rocky Reach Dam Summer Spill and Shape Adjustment graphs

Attachment A
List of Attendees

Name	Organization
John Ferguson	Anchor QEA, LLC
Kristi Geris	Anchor QEA, LLC
Tracy Hillman†	BioAnalysts
Lance Keller*	Chelan PUD
Tom Kahler*	Douglas PUD
Andrew Gingerich*	Douglas PUD
Jim Craig*	U.S. Fish and Wildlife Service
Chad Jackson*	Washington Department of Fish and Wildlife
Kirk Truscott*††	Colville Confederated Tribes
Keely Murdoch*	Yakama Nation

Notes:

* Denotes HCP Coordinating Committees member or alternate

† Joined for the HCP Hatchery and Tributary Committees update

†† Joined at approximately 9:30 a.m., after approval of the HCP Coordinating Committees April 27, 2021, conference call minutes