

Memorandum

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

Date: November 24, 2020

From: John Ferguson, HCP Coordinating Committees Chairman

cc: Kristi Geris

Re: **Final Minutes of the October 27, 2020, 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, October 27, 2020, from 9:00 a.m. to 11:00 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).
- Anchor QEA, LLC (Anchor QEA) will distribute to the HCP Coordinating Committees the presentation, *Wells Project Passage Survival Study, 2020*, that was presented by Drs. John Skalski and Richard Townsend (University of Washington, Columbia Basin Research) (Item II-A). (Note: Kristi Geris distributed this presentation following the HCP Coordinating Committees conference call on October 27, 2020.)
- Douglas PUD will distribute a draft Statement of Agreement (SOA) approving the results of the *Project Survival Estimates for Yearling Chinook Migrating Through the Wells Hydroelectric Project, 2020 (2020 Spring Migrant Survival Verification Study)*, for approval during the HCP Coordinating Committees conference call on November 24, 2020 (Item II-B). (Note: Tom Kahler provided a draft SOA to Kristi Geris on November 13, 2020, which Geris distributed to the HCP Coordinating Committees that same day.)
- Wells HCP Coordinating Committee representatives will review and provide edits and comments on the draft *Project Survival Estimates for Yearling Chinook Migrating Through the Wells Hydroelectric Project, 2020 (2020 Spring Migrant Survival Verification Study)* to Tom Kahler and Andrew Gingerich by November 23, 2020, and be prepared to vote to approve the report during the HCP Coordinating Committees conference call on November 24, 2020, or possibly the HCP Coordinating Committees conference call on December 15, 2020 (Item II-B).
- The Colville Confederated Tribes (CCT) will distribute to the HCP Coordinating Committees the presentation, *Reintroduction of Salmon Upstream of Chief Joseph and Grand Coulee Dams*, that the CCT presented during the HCP Hatchery Committees conference call on October 21, 2020 (Item III-A). (Note: Kirk Truscott provided this presentation to Kristi Geris following the HCP Coordinating Committees conference call on October 27, 2020, which Geris distributed to the HCP Coordinating Committees that same day.)

- Anchor QEA will coordinate with the CCT to arrange a presentation of, *Reintroduction of Salmon Upstream of Chief Joseph and Grand Coulee Dams*, during a future HCP Coordinating Committees conference call (Item III-A).
- Douglas PUD will inquire internally regarding the CCT's question on Wells Project Land-Use Permit Application No. LUP 730-01, about whether the proposed activities are subject to cultural resource requirements (Item IV-A). (Note: Tom Kahler provided a response to Kirk Truscott's question to Kristi Geris following the HCP Coordinating Committees conference call on October 27, 2020, which Geris distributed to the HCP Coordinating Committees that same day.)
- Douglas PUD will communicate to the Columbia River Inter-Tribal Fish Commission (CRITFC) the discussions regarding Jeff Fryer's (CRITFC) annual request to tag sockeye salmon at Wells Dam that took place during the HCP Policy Committees conference call on October 6, 2020 (i.e., not conducting additional sampling for sockeye salmon until a thermal barrier has set up in the Okanagan River) and during the HCP Coordinating Committees conference call on October 27, 2020 (i.e., stipulate in the next request letter, a request that sockeye salmon sampling periods are concurrent with both spring *and* summer Chinook salmon trapping operations) (Item VI-B).
- The HCP Coordinating Committees meeting on November 24, 2020, will be held at 9:00 a.m., by conference call (Item VI-C).

Decision Summary

- Rocky Reach and Rock Island HCP Coordinating Committees representatives present approved the *Chelan PUD Rocky Reach and Rock Island HCPs Draft 2020 Fish Spill Report*, as revised (Item V-A).

Agreements

- Rocky Reach HCP Coordinating Committee representatives present agreed to Chelan PUD's request to begin the 2020/2021 ladder maintenance outage at Rocky Reach Dam 1 month earlier than usual to allow more time to complete required work. Rather than beginning work during the first week in January (per usual), maintenance work will begin on December 1, 2020 (Item V-D).

Review Items

- The draft *Project Survival Estimates for Yearling Chinook Migrating Through the Wells Hydroelectric Project, 2020 (2020 Spring Migrant Survival Verification Study)* was distributed to the Wells HCP Coordinating Committee by Kristi Geris on October 22, 2020. This draft report

is available for a 30-day review with edits and comments due to Tom Kahler and Andrew Gingerich by November 23, 2020 (Item II-B).

- Wells Project Land-Use Permit Application No. LUP 730-01 was distributed to the HCP Coordinating Committees by Kristi Geris on October 26, 2020. This application is available for a 30-day review with comments or indication of no comments due to Tom Kahler by November 25, 2020 (IV-A).
- The draft SOA, *Approval of the Results of the 2020 Wells Project Survival Verification Study, Phase III (Standard Achieved)*, was distributed to the HCP Coordinating Committees by Kristi Geris on November 13, 2020. Douglas PUD will request approval of the draft SOA during the HCP Coordinating Committees conference call on November 24, 2020 (Item II-B).
- The draft 2020 Wells Post-Season Bypass Report and Passage-Dates Analysis was distributed to the HCP Coordinating Committee by Kristi Geris on November 23, 2020. This draft report is available for a 30-day review with edits and comments due to Tom Kahler by December 23, 2020.

Finalized Documents

- The *Wells Project Subyearling Chinook Life-History Study 2011-2013 Final Report* and comment/response matrix were distributed to the HCP Coordinating Committees by Kristi Geris on November 13, 2020.

I. Welcome

A. Review Agenda (John Ferguson)

John Ferguson welcomed the HCP Coordinating Committees and reviewed the agenda. Ferguson said Wells Project Land-Use Permit Application No. LUP 730-01 was added under the Douglas PUD items. Tom Kahler noted that Drs. John Skalski and Richard Townsend have already provided Douglas PUD with the draft Passage-Dates Analysis document (a component of the 2020 Wells Dam Post-Season Bypass Report); however, Kahler has not yet had time to review the document. Kahler said he plans to distribute the draft analysis to the Wells HCP Coordinating Committee for review soon. Ferguson asked for any other additions or changes to the agenda. No other additions or changes were requested.

B. Meeting Minutes Approval (John Ferguson)

The HCP Coordinating Committees reviewed the revised draft September 22, 2020, conference call minutes. Kristi Geris said all comments and revisions received from members of the Committees were incorporated into the revised minutes. Geris said she also added Douglas PUD's survival verification study report and land-use permit application under Review Items. HCP Coordinating Committees members present approved the September 22, 2020, conference call minutes, as revised. The

National Marine Fisheries Service (NMFS) abstained because a NMFS representative was not present during the September 22, 2020, conference call.

C. Last Meeting Action Items (John Ferguson)

Action items from the HCP Coordinating Committees meeting on September 22, 2020, and follow-up discussions, were as follows. (Note: *Italicized text corresponds to agenda items from the meeting on September 22, 2020*):

- *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 be carried forward.
- *HCP Coordinating Committees members will discuss within the Priest Rapids Coordinating Committee (PRCC) rescheduling the December 2020 meeting 1 week earlier to accommodate the holiday, for further discussion during the HCP Coordinating Committees meeting on October 27, 2020 (Item IV-C).*

Denny Rohr (PRCC Facilitator) notified Kristi Geris and John Ferguson that the PRCC agreed to reschedule the PRCC meeting to the afternoon of December 15, 2020, to follow the HCP Coordinating Committees meeting.

II. Douglas PUD/University of Washington

A. PRESENTATION: Wells Project Passage Survival Study, 2020 (Drs. John Skalski and Richard Townsend)

Dr. Richard Townsend projected a presentation titled, *Wells Project Passage Survival Study, 2020* (Attachment B), which was distributed to the HCP Coordinating Committees by Kristi Geris following the HCP Coordinating Committees conference call on October 27, 2020. Dr. John Skalski provided the presentation, as follows:

Slide 1 of Attachment B

Skalski said the 2020 study is the third in a series of studies for the Wells Project. He said the first study (actually three separate studies conducted from 1998–2000) that assessed survival through the Wells Project met (juvenile project) survival standards of 93% ($\hat{S}_{Dam} \geq 0.93$) with a standard error of less than 2.5% ($\widehat{SE}(\hat{S}) \leq 0.025$; as required by the Wells HCP). He said the 2010 check-in study also met these standards. He said this presentation focuses on the 2020 study. (Note: *To clarify, the 2020 study is the sixth separate survival study conducted for the Wells Project. The three studies conducted in 1998, 1999, and 2000, completed the three years of valid studies of Juvenile Project Survival required in Phase I of the Passage Survival Plan of the Wells HCP, resulting in advancement to Phase III (Standard Achieved) for yearling Chinook salmon and steelhead prior to the signing of the HCP in 2002.*)

Slide 2 of Attachment B

Skalski reviewed the study objectives, as bulleted on this slide.

Slide 3 of Attachment B

Skalski said this slide shows a map of the study area. He said there were multiple releases at the mouths of the Okanogan and Methow rivers, which were the treatment groups. He said the control group consisted of releases 1,000 feet downstream of Wells Dam in the tailrace. He said one study objective was then to estimate survival from the confluences of the Okanogan and Methow rivers to the Wells Dam tailrace.

Slide 4 of Attachment B

Skalski said for the Methow releases, the actual release number was 34,874 fish, and the Okanogan releases included 17,672 fish. He said the release ratio was 66.4% (Methow) versus 33.6% (Okanogan), which was close to the target ratio. He said these releases were then pooled and treated as a composite group moving downstream equaling 52,546 fish. He said, in total, there were about 105,000 passive integrated transponder (PIT)-tagged fish released for this study, which included 52,786 control fish released to the Wells Dam tailrace. He said detection rates were calculated for detection locations at Rocky Reach, McNary, John Day, and Bonneville dams. He said the full model allows evaluation of each release independent of survival through each reach and detection rate; or, depending on results of analysis of the homogeneity of detections and survival processes at and below Rocky Reach Dam, the model can be simplified. If detections and survival are homogenous below Rocky Reach Dam, Wells Project survival is estimated as the survival of releases at Okanogan and Pateros to Rocky Reach Dam, divided by the survival of Wells Dam tailrace released fish to Rocky Reach Dam.

Slide 5 of Attachment B

Skalski said there were triple releases every 2 days, and releases were staggered to facilitate downstream mixing. He said there would be an Okanogan release at 2:00 p.m. on Day 1, and then a Methow release at 10:00 a.m. and a Wells Dam tailrace release at 2:00 p.m. on Day 2. He said these represented a single replicate, and there were 16 of these replicates over the course of the study, from April 13 to May 14, 2020.

Slide 6 of Attachment B

Skalski said the next few slides summarize general observations.

Slide 7 of Attachment B

Skalski said the total release number equaled 105,332 fish. He reviewed the downstream detection numbers as bulleted on this slide, noting that the majority of the detections were at Rocky Reach Dam.

Slide 8 of Attachment B

Skalski said detection probability is the likelihood that a given fish arriving at the dam will be detected. He said the precision is based on detections at Rocky Reach, McNary, and John Day dams, which are usually in the mid- to upper teens. He said the lower values reflect the effects of the spill program, i.e., more water passing through the spillways and less fish going through the bypass systems. He said the detection rate at Bonneville Dam is the joint probability of survival from John Day Dam to Bonneville Dam and the probability of being detected at Bonneville Dam or the National Oceanic and Atmospheric Administration barge downstream of Bonneville Dam.

Slide 9 of Attachment B

Skalski said this slide shows the 16 replicates across the study for both upstream and downstream releases, specifically survival of upstream releases down to Rocky Reach Dam and survival of Wells Dam tailrace releases to Rocky Reach Dam. He said the point of this slide is: 1) there is no seasonal trend for yearling Chinook salmon estimated survival, which is consistent with previous evaluations; and 2) the 95% confidence intervals for each replicate are overlapping, indicating that there is no difference in survival between replicates. He said almost all datasets cross the center line of average survival (blue dashed line). He said there are no trends, and the data are consistent across replicates. He said the confidence intervals are shown by the vertical bars and are consistent release to release, and sample size is consistent among replicates.

Slide 10 of Attachment B

Skalski said the next slides review the mark-recapture methods to test survival.

Slide 11 of Attachment B

Skalski said one consideration of the model is to assume both release groups—upstream and downstream—once below Wells Dam, have the same survival to Rocky Reach Dam. He said the model uses the ratio of survival between upstream and downstream release points to produce mixing plots, which can be found in the appendix of the report. He said there are 16 releases and four detection locations—Rocky Reach, McNary, John Day, and Bonneville dams. He said this slide shows one plot of releases from the first replicate with the distribution of detections at Rocky Reach Dam. He said the three lines represent Okanogan, Methow, and Wells Dam tailrace releases. He said there is consistent overlap in the patterns as fish move downriver, which is what one hopes to see.

He said the sample sizes at Rocky Reach Dam are higher than downstream detection locations, so there is more definition in these plots. He said often times there will be a single peak; however, here there are a lot of submodes, and all release groups showed the same patterns, which is partly accredited to the study design and how the releases were staggered in time to facilitate fish from reach release passing the project at similar times.

Slide 12 of Attachment B

Skalski said another consideration of the model is to assume upstream detections have no effect on downstream survival and detection. He said to test this, there are a series of Burnham tests¹ and results can be pooled to evaluate the number of detections and level of detection rates. He said only four of the 160 individual tests were significant at the 10% level ($\alpha = 0.10$), when by random chance one would expect 16 significant tests out of 160 tests at the 10% level. He said zero of the 32 pooled tests were significant at the 10% level ($\alpha = 0.10$). Since these results are less than what one would expect to occur randomly, these findings mean there is no evidence of any effect of fish detection at Rocky Reach Dam on downstream processes (survival) and their being detected downstream.

Slide 13 of Attachment B

Skalski said another part of this evaluation is making sure the release groups are comparable. He said this means all three release groups and each single replicate share the same fish source so there is no difference in upstream and downstream releases to bias the test. He said this also means balanced loading, as shown in the table on this slide. He said this fish loading schedule² for the 16 replicates was developed in advance to make sure there was a balancing of all fish pulled from a raceway. He said additionally, transport times were standardized. He said, for example, trucking times from loading to release were standardized for all release locations, and barge times were also standardized so all fish in each release had the same amount of handling.

Slide 14 of Attachment B

Skalski said that their assessment of the size distribution of smolts indicated comparable-sized fish were used across release groups.

Slide 15 of Attachment B

Skalski reviewed the schematic shown on slide 4 and said this is considered the full model. He said upstream and downstream releases can be a separate evaluation at each reach, along with separate capture rates. He said back to slide 15, when detections and survival processes are equal, the most parsimonious model is selected that uses fewer parameters, which boosts precision.

¹ Burnham et al. 1989 and Burnham et al. 1987

² M=Methow, O=Okanogan, W=Wells Dam tailrace

Slide 16 of Attachment B

Skalski said the slides to this point were the preamble showing results of their assessment of the data and testing of assumptions that inform how to proceed with the analysis, and the next slides summarize the results.

Slide 17 of Attachment B

Skalski said this slide shows the survival estimates for each of the 16 replicates, with the standard error shown in parentheses. He said survival can be more than 100%. He said 13 of 16 replicates used the simple model and the other replicates used the full model. He said the overall project survival was 95.17%, with a standard error of 0.0142. He said these results meet the HCP juvenile project survival standard of $\geq 93\%$ and precision standard of $\leq 2.5\%$.

Slide 18 of Attachment B

Skalski said this slide shows the 16 replicates over the course of the season. He said a couple things to note: 1) all data are overlapping, which means there is no difference between individual replicate estimates; and 2) all estimates cross over the mean value (blue dashed line) and confidence intervals around the mean (blue shaded area). He said this means there was no seasonal trend observed with the upstream and downstream releases. He said basically, from April 13 to May 14, 2020, survival estimates were very constant, with a best estimate of 95.17% survival.

Slide 19 of Attachment B

Skalski said this slide compares the first 3-year average from the initial 1998–2000 studies to the 2020 study, which shows no significant difference in survival. He said this slide also compares the 1998–2000 studies and 2010 check-in study to the 2020 study, which again, shows no significant difference. He said this means there is equal survival across the course of over a 20-year period when survival was studied.

Slide 20 of Attachment B

Skalski said the next goal was to calculate a new 5-year average. He noted for each of the five averages over the past 20 years, all individual estimates (shown in the middle column) exceeded the 93% project minimum survival standard, and the standard errors were less than the standard error requirement of 2.5%. He said each annual study met the HCP requirements, and the average now is 96.04% and the estimated standard error is less than 1%. He noted that survival has been fairly constant over the past 4 to 5 studies and the standard error has been very constant.

Kirk Truscott asked if the 5-year arithmetic average standard error of 0.0098 is correct. Skalski said yes, and explained that the 5-year estimate in the middle column is coupled with empirical variance and the variance is divided by the sample size; therefore, the average becomes more and more

precise over time as more annual values are incorporated (i.e., the mean becomes more precise than what the individual estimates contribute). Truscott said he wanted to confirm that this value is not the sum of the 5 years divided by the number of years. Skalski said the mean is, but the standard error is the square root divided by the sample of five, or the variance of the mean, which gets smaller and smaller as more years are added. He said in 2030, he expects the standard error to go down even more.

Slide 21 of Attachment B

Skalski said he was also asked to address delayed effects; therefore, a Ricker relative survival estimate was calculated to evaluate the proportion of fish released upstream and downstream and the recovery rates. He said the first equation evaluates survival of Okanogan and Methow releases to Bonneville Dam and survival of Wells Dam tailrace releases to Bonneville Dam. He said comparing these ratios equals 93.37% survival with a standard error of less than 2.5%. He said one might expect survival to Bonneville Dam to be lower than to Rocky Reach Dam because there is more time for synergistic effects to play out. He said a paired-survival estimate showed no significant difference despite the tight standard error. He said this means there is no evidence or signs of delayed effects for fish migrating through the Wells Project, which is consistent with previous evaluations.

Summary and Discussion

Skalski said in summary, this was a fairly clean study with good downstream mixing and no problems with the test of assumptions. He said everything was consistent with how fish were handled. He said 13 of 16 replicates used the simplest model once fish reached a common point at Rocky Reach Dam. He said the estimate of survival met the 93% requirement with a standard error of less than 2.5%. He said in terms of delayed effects, there was little to no evidence of delayed effects downstream to Bonneville Dam.

John Ferguson said he does not believe he has ever seen a survival study of this magnitude turn out as clean and consistent among replicates and treatments as seen here. He said "hats off" to the design and execution, and he asked if his perception is accurate. Skalski said this is correct, that part of this is due to well-conducted logistics. He said there was very little man-induced variability. He said he thinks Douglas PUD has the logistics down pat, so this variable is taken out of the analyses. He said partly this pattern is also due to the fish stock used in the study. He said it is more likely to see these types of results with spring releases, and there would be a drop in survival if the study was conducted with summer migrants, e.g., from June 1 to July 1.

Ferguson asked about the representativeness of the study in terms of environmental conditions that treatment fish were exposed to this year. Tom Kahler said he reviewed how conditions fit against the flow duration curves and operations were normal. He said there were no weird set of operational

circumstances and river flows were well within the normal flow duration curve for the Wells Project that the Wells HCP Coordinating Committee approved in December 2019; therefore, operational and environmental criteria were met for the study.

Andrew Gingerich said he would like to extend his gratitude to Skalski, Townsend, Betsy Bamberger (Douglas PUD Fish Health Specialist), and Kahler. Gingerich said he appreciated having support to conduct this study, which was not a small effort. He thanked Skalski and Townsend for the great presentation and help with the statistics, and Bamberger for help with the field work.

**B. Draft Project Survival Estimates for Yearling Chinook Migrating Through the Wells Hydroelectric Project, 2020 (2020 Spring Migrant Survival Verification Study)
(Andrew Gingerich and Tom Kahler)**

John Ferguson said the draft *Project Survival Estimates for Yearling Chinook Migrating Through the Wells Hydroelectric Project, 2020 (2020 Spring Migrant Survival Verification Study)* was distributed to the Wells HCP Coordinating Committee for review by Kristi Geris on October 22, 2020. Ferguson said today, Anchor QEA will distribute to the HCP Coordinating Committees the presentation, *Wells Project Passage Survival Study, 2020*, that was presented by Drs. John Skalski and Richard Townsend. (Note: Geris distributed this presentation following the HCP Coordinating Committees conference call on October 27, 2020.)

Ferguson said in discussions with Tom Kahler, he understands that Douglas PUD would like to wrap up the study and obtain approval of the study report in this calendar year, in terms of compliance with the Federal Energy Regulatory Commission. Ferguson said with this in mind, he proposed the report be available for a 30-day review with comments due November 23, 2020, a discussion during the HCP Coordinating Committees meeting on November 24, 2020, and a vote to approve during the HCP Coordinating Committees meeting on December 15, 2020. He said given the study results, this seems doable. Kahler said in the past, Douglas PUD has also produced an SOA approving the study results for Wells HCP Coordinating Committee approval. He said Douglas PUD wants to provide the Wells HCP Coordinating Committee the opportunity to review and comment on the report. He said if comments are received and focus more on the report and not the results, then Douglas PUD could request approval of the SOA in November and if needed, postpone requesting approval of the report until December. Wells HCP Coordinating Committee representatives agreed with this approach.

Douglas PUD will distribute a draft SOA approving the results of the *Project Survival Estimates for Yearling Chinook Migrating Through the Wells Hydroelectric Project, 2020 (2020 Spring Migrant Survival Verification Study)*, for approval during the HCP Coordinating Committees conference call on November 24, 2020. (Note: Kahler provided a draft SOA to Kristi Geris on November 13, 2020, which Geris distributed to the HCP Coordinating Committees that same day.)

Wells HCP Coordinating Committee representatives will review and provide edits and comments on the draft *Project Survival Estimates for Yearling Chinook Migrating Through the Wells Hydroelectric Project, 2020 (2020 Spring Migrant Survival Verification Study)* to Kahler and Andrew Gingerich by November 23, 2020, and be prepared to vote to approve the report during the HCP Coordinating Committees conference call on November 24, 2020, or possibly the HCP Coordinating Committees conference call on December 15, 2020.

III. 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 October 8, 2020:

- *Methow Salmon Recovery Foundation Projects*: The Methow Salmon Recovery Foundation discussed three projects with the HCP Tributary Committees. These projects included the Upper Beaver Creek Final Design and Restoration Project, Sugar Levee Project, and Vandervort Property Appraisal Project, all of which have some level of funding from the Committees. The purpose of the discussions was to update the HCP Tributary Committees on the status of the projects, solicit feedback from the Committees, and continue coordination and communication with the Committees. This discussion was in response to the Committees' requirement to be engaged in the development of these projects. The HCP Tributary Committees provided feedback and input on the projects and asked the sponsor to keep the Committees updated on progress. The HCP Tributary Committees will also review draft designs when these are available.
- *Lower Chiwawa River Project*: The U.S. Bureau of Reclamation (Reclamation) met with the Rock Island HCP Tributary Committee to discuss the Lower Chiwawa River Floodplain Reconnection and Instream Enhancement Project. This project was supported by the Rock Island HCP Tributary Committee but did not receive funding from the Salmon Recovery Funding Board. Reclamation has about \$100,000 to use to help design projects in the Lower Chiwawa River, and Reclamation would like to work with the Rock Island HCP Tributary Committee on developing a reach-based restoration approach. The Rock Island HCP Tributary Committee agreed to work with Reclamation on this project; however, the Committee recommended waiting until results are available from the Upper Columbia Regional Technical Team's prioritization process. The prioritization process will identify impaired habitat conditions and limiting factors within the Lower Chiwawa River. Once the prioritization process is complete, the Rock Island HCP Tributary Committee and Reclamation can move forward with developing a reach-based approach. This will likely happen in December 2020 or January 2021.
- *Next Meeting*: The next meeting of the HCP Tributary Committees will be on November 12, 2020.

Hillman updated the HCP Coordinating Committees on the following actions and discussions that occurred during the HCP Hatchery Committees conference call on October 21, 2020 (*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"*):

- *Reintroduction of Endemic Anadromous Fish Upstream from Chief Joseph Dam (joint)*: The CCT provided a presentation titled, *Reintroduction of Salmon Upstream of Chief Joseph and Grand Coulee Dams*. The presentation included a description of the project location, forums involved in the work, and the four-phased approach to reintroduction. Phase 1 work included identifying donor stocks, risk assessment, habitat assessments, review of fish passage technologies, life-cycle modeling, and recommended future studies. Phase 1 is now complete, and it demonstrates that the CCT should move into Phase 2 of the study. Phase 2 deals with coordination, planning, and preparing a strategic implementation plan. In parallel with the Phase 2 work, the CCT are conducting "Cultural and Educational" releases of fish. Interestingly, of 753 yearling Chinook salmon that were PIT-tagged and released well upstream of Grand Coulee Dam (1,092 km from the ocean), a few have returned to the Columbia River (i.e., the fish left Lake Roosevelt and passed Grand Coulee Dam, migrated to the ocean, and one has returned to Chief Joseph Hatchery). The HCP Hatchery Committees were grateful for the presentation. Hillman said this was a very interesting presentation and the HCP Coordinating Committees may also be interested in hearing it. John Ferguson asked Kirk Truscott if he would be interested in presenting this to the HCP Coordinating Committees. Truscott said he thinks Casey Baldwin (CCT) would be interested in presenting this, but he will need to ask him. HCP Coordinating Committees representatives expressed interest in hearing the presentation. Truscott said he can distribute the presentation to the HCP Coordinating Committees and Ferguson said Anchor QEA will coordinate with the CCT to arrange a presentation during a future HCP Coordinating Committees conference call. (*Note: Truscott provided this presentation to Kristi Geris following the HCP Coordinating Committees conference call on October 27, 2020, which Geris distributed to the HCP Coordinating Committees that same day.*)
- *Broodstock Collection Protocols (joint)*: The HCP Hatchery Committees are in the early process of updating the broodstock collection protocols. The Committees have identified important issues to cover in the 2021 broodstock collection protocols and identified who will lead the writeup of certain sections of the protocols.
- *COVID-19 and Monitoring and Evaluation (M&E) Activities (joint)*: Each member of the HCP Hatchery Committees discussed the effects of COVID-19 on their respective M&E activities. Virtually nothing has changed since last month. Monitoring is occurring within the hatcheries

and crews are operating rotary screw traps. Broodstock collections are proceeding as planned and monitoring crews are conducting summer Chinook salmon spawning surveys.

- *Update on 10-year Comprehensive M&E Report (joint)*: The PUDs reported that because of the COVID-19 pandemic, the enormous amount of data to compile, process, and analyze, and the difficulty in securing reference-population data, the draft comprehensive report will be submitted to the HCP Hatchery Committees on July 1, 2021.
- *2021 Hatchery M&E Implementation Plan (Wells)*: Douglas PUD submitted a draft 2021 Hatchery M&E Implementation Plan for review. Members will review the draft plan and provide comments to Douglas PUD by November 16, 2020.
- *2019 Wells Complex M&E Annual Report (Wells)*: Douglas PUD received a few comments on the draft 2019 Wells Complex M&E Annual Report. These comments have been addressed and Douglas PUD will submit the edited report to the Wells HCP Hatchery Committee for approval.
- *NMFS Representation on the HCP Hatchery Committees (Administration)*: NMFS has officially identified Emi Melton as the alternate on the three HCP Hatchery Committees. She replaces Charlene Hurst, who no longer works for NMFS. Brett Farman will continue as the designated representative on the Committees.
- *Next Meeting*: The next meeting of the HCP Hatchery Committees will be on November 18, 2020.

IV. Douglas PUD

A. Wells Project Land-Use Permit Application No. LUP 730-01 (Tom Kahler)

Tom Kahler said Wells Project Land-Use Permit Application No. LUP 730-01 (Attachment C) was distributed to the HCP Coordinating Committees by Kristi Geris on October 26, 2020. Kahler said this application is for an existing property owner who removed trees from the property with the intent to turn the land into alfalfa production. He said this application is similar to the last land-use permit application³ for a property owner located in the Okanogan River Basin, in that the Douglas PUD Lands Department is taking this opportunity to formalize the property owner's use of Wells Project lands for agricultural purposes by issuing the landowner a permit to do what the property owner has already been doing. He said the property owner also has a well and a pump on the property for irrigation purposes.

Kirk Truscott asked if the action is converting the land from an orchard to alfalfa production, and Kahler said this is correct. Truscott said he assumes there is some level of tilling involved, and Kahler said he does not know. Truscott said he would assume if the action is converting orchard grass to

³ Wells Project Land-Use Permit Application for No. LUP 143-01 (distributed to the HCP Coordinating Committees by Kristi Geris on July 15, 2020).

alfalfa, this requires tilling and seeding, and he is wondering if there are cultural resource requirements associated with a ground disturbance. Kahler corrected himself that the orchard will be converted to hay production (not alfalfa), and he said he will inquire internally regarding Truscott's question about whether the proposed activities are subject to cultural resource requirements. (Note: Kahler provided a response to Truscott's question to Geris following the HCP Coordinating Committees conference call on October 27, 2020, which Geris distributed to the HCP Coordinating Committees that same day.)

John Ferguson said this application is available for comment, and Geris confirmed the application is available for a 30-day review with comments or indication of no comments due to Kahler no later than Wednesday, November 25, 2020.

V. Chelan PUD

A. DECISION: 2020 Rocky Reach and Rock Island Fish Spill Report (Lance Keller)

Lance Keller said the *Chelan PUD Rocky Reach and Rock Island HCPs Draft 2020 Fish Spill Report* was distributed to the HCP Coordinating Committees by Kristi Geris on September 19, 2020. Keller recalled during the initial review, there was a comment to update the axis on some graphs, which he did, and a revised draft spill report was distributed on September 23, 2020. The revised draft report was available for a 30-day review with edits and comments due to Keller by October 19, 2020. Keller said no additional comments were received from the Rocky Reach and Rock Island HCP Coordinating Committees.

Rocky Reach and Rock Island HCP Coordinating Committees representatives present approved the *Chelan PUD Rocky Reach and Rock Island HCPs Draft 2020 Fish Spill Report*, as revised.

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

Lance Keller said work on Turbine Unit B4 continues. He recalled reporting last month that the return-to-service date for Turbine Unit B4 was towards the end of December 2020 but could go into January 2021. He said this schedule still holds true.

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

Lance Keller said work continues on Turbine Unit C2 and Turbine Unit C7 in the Rocky Reach Dam powerhouse. He said it does appear that the Turbine Unit C2 outage could extend into December 2020. He recalled reporting last month, maintenance crews thought this work could be completed by November 2020. He said the return-to-service schedule for Turbine Unit C7 of March 2021 is still holding. He said Turbine Unit C3 remains out of service until crews complete work in the dry on Turbine Unit C2. He said once complete, crews will pull the headgates to water up the unit for the

watered-up portion of the maintenance effort, and then these headgates can be moved to dewater Turbine Unit C3.

D. 2020/2021 Rock Island and Rocky Reach Adult Fishway Winter Maintenance (Lance Keller)

Lance Keller reviewed adult fishway maintenance updates at Rock Island Dam and Rocky Reach Dam, as follows:

Rock Island Dam

Keller said the winter adult fishway maintenance period is rapidly approaching, with outages at Rock Island Dam occurring from December through February. He said typically, one to two ladders are out of service for inspection and maintenance at a time. He said Rock Island Dam has three fish ladders, which means at least one ladder is watered up at all times. He said currently, maintenance work planned for Rock Island Dam is all routine. He said he does not yet know which ladders will be out of service first, but he will pass along this information once he knows.

Rocky Reach Dam

Keller said based on the anticipated workload, Chelan PUD would like to request an early outage for the Rocky Reach Dam adult fishway. He said one of the biggest projects driving this request is the need to replace a large dewatering pump for the lower section of the fishway. He said this pump failed during dewatering last year, which caused a 1-week delay in dewatering the fishway. He said once the fishway was dewatered, crews assessed the pump and determined the pump is not repairable. He said after dewatering the fishway this year, crews will need to extract the pump for replacement, which is estimated to be approximately 500 hours of extra work on top of the already planned work on the rest of the adult fishway, as well as Turbine Unit C2 and Turbine Unit C7 to keep these units on schedule. He said Chelan PUD is proposing to begin the outage on Tuesday, December 1, 2020, to allow time to dewater the entire fishway in the first week of December, and the following week, start extracting the pump, replace it back in the fishway, and make sure the pump is functioning properly. He said there is also actuator work that is needed, which will require additional time to complete. He said collectively, all of this work for the Rocky Reach Dam adult fishway 2020/2021 maintenance period is the driver for requesting an earlier than normal outage. He said typically, the winter outage at Rocky Reach Dam is January 1 through February 28. He said as Chelan PUD has noted with previous early outage requests, should crews complete all work prior to February 28, crews will return the Rocky Reach Dam adult fishway back to service as soon as possible.

John Ferguson asked if Chelan PUD needs Rocky Reach HCP Coordinating Committee approval today, for planning purposes? Keller said ideally, yes, if the Committee is comfortable with voting today. He said if the Committee needs more days to think about this, Chelan PUD could possibly

accommodate a vote via email shortly after today. He said there are a lot of moving parts and pieces to pull together regarding conducting a fish rescue, inside a designated confined space, among other things.

Rocky Reach HCP Coordinating Committee representatives present agreed to Chelan PUD's request to begin the 2020/2021 ladder maintenance outage at Rocky Reach Dam 1 month earlier than usual to allow more time to complete required work. Rather than beginning work during the first week in January (per usual), maintenance work will begin on December 1, 2020.

Keller said Chelan PUD appreciates the Committee approving this outage today, which will be very helpful.

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. HCP Policy Committees October 6, 2020, Conference Call (John Ferguson)

John Ferguson said the HCP Policy Committees convened by conference call on October 6, 2020, which followed the HCP Policy Committees conference call on September 1, 2020. Ferguson recalled last month, characterizing the September 1, 2020, conference call as positive. He said the HCP Policy Committees discussed how to collect and tag sockeye salmon at Wells Dam or the Priest Rapids Dam Off-Ladder Adult Fish Trap (OLAFT) for research purposes. He said this positive tone continued into the October 6, 2020, conference call. He said the Wells HCP Policy Committee reviewed five alternatives, including four having to do with the Wells Dam east ladder and one with the OLAFT. He said the Committee did some research, talked through the alternatives, and agreed to proceed with collecting additional fish on days in addition to Carlton collection dates, if needed, only during the time period when the thermal block has set up in the Okanogan River. He said this allows sockeye salmon to get up to the Okanogan River as soon as possible and operating the trap for additional days will not impart additional delays. He said the Wells HCP Policy Committee recognizes the value of these data and the goal to PIT tag up to 800 fish; and in some years, this may require additional sampling. He said there is an outstanding action item to touch base with the Okanogan Nation Alliance to discuss the continued need for these data. He said the Wells HCP Policy Committee also did not formalize exactly how to recognize a thermal block, but there was general agreement that Tom Kahler (and possibly others) will monitor temperatures and Kahler will distribute an email to Wells HCP Coordinating and Policy Committees representatives. Ferguson asked if others who attended the HCP Policy Committees conference call had additional comments to share.

Keely Murdoch said she contacted Jeff Fryer after the conference call to discuss what was resolved, and Fryer raised a concern that had not been raised before. Murdoch said the HCP Policy Committees only discussed concurrent trapping with the Carlton Program, and Fryer brought up a concern about the earlier part of the run before trapping for the Carlton Program starts up. Murdoch said usually, trapping for sockeye salmon starts about 2 weeks before the Carlton Program, concurrent with trapping for spring Chinook salmon (springers). She said the HCP Policy Committees did not discuss this and Fryer was concerned about missing the first part of the run. Ferguson agreed this was not mentioned before. Murdoch said she did mention this at first, but then the focus shifted to trapping for summer Chinook salmon (summers). Kahler said trapping for springers occurs through June 28, and crews retain wild summers that are encountered during that period. Murdoch said according to the broodstock collection protocols that the HCP Hatchery Committees put together, trapping at Wells Dam for springers technically is scheduled through the end of June and trapping for summers starts on July 1. She said she thinks the concept is still valid (i.e., as long as trapping for sockeye salmon is concurrent with trapping for whichever species). Kahler said he cannot speak for the entire Wells HCP Policy Committee, but he agrees this seems to be the intent.

Ferguson thanked Murdoch for bringing this forward and suggested that Douglas PUD communicate to CRITFC the discussions regarding Fryer's annual request to tag sockeye salmon at Wells Dam that took place during the HCP Policy Committees conference call on October 6, 2020 (i.e., not conducting additional sampling for sockeye salmon until a thermal barrier has set up in the Okanagan River) and during the HCP Coordinating Committees conference call on October 27, 2020 (i.e., stipulate in the next request letter, a request that sockeye salmon sampling periods are concurrent with both spring *and* summer Chinook salmon trapping operations).

C. Next Meetings (John Ferguson)

The next scheduled HCP Coordinating Committees meeting is on November 24, 2020, to be held by conference call.

The December 15, 2020, and January 26, 2021, meetings will be held by conference call.

VII. List of Attachments

Attachment A List of Attendees

Attachment B Presentation, *Wells Project Passage Survival Study, 2020*

Attachment C Wells Project Land-Use Permit Application No. LUP 730-01

Attachment A
List of Attendees

Name	Organization
John Ferguson	Anchor QEA, LLC
Kristi Geris	Anchor QEA, LLC
Tracy Hillmant	BioAnalysts
Dr. John Skalski††	University of Washington, Columbia Basin Research
Dr. Richard Townsend††	University of Washington, Columbia Basin Research
Lance Keller*	Chelan PUD
Tom Kahler*	Douglas PUD
Andrew Gingerich*	Douglas PUD
Betsy Bamberger	Douglas PUD
Scott Carlon*	National Marine Fisheries Service
Jim Craig*	U.S. Fish and Wildlife Service
Chad Jackson*	Washington Department of Fish and Wildlife
Keely Murdoch*	Yakama Nation
Kirk Truscott*	Colville Confederated Tribes

Notes:

- * Denotes HCP Coordinating Committees member or alternate
- † Joined for the HCP Hatchery and Tributary Committees Update
- †† Joined for the presentation: 2020 Survival Verification Study Report and Results