

Memorandum

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

Date: April 27, 2023

From: John Ferguson, HCP Coordinating Committees Chairman

cc: Kristi Geris, HCP Coordinating Committees Support

Re: Final Minutes of the March 28, 2023, HCP Coordinating Committees Meeting

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plan (HCP) Coordinating Committees met in person at Douglas PUD Headquarters in East Wenatchee, Washington, on Tuesday, March 28, 2023, from 12:30 p.m. to 3:30 p.m. Attendees are listed in Attachment A to these meeting minutes.

Action Item Summary

1. Chelan PUD will continue providing Rocky Reach Dam and Rock Island Dam turbine unit maintenance updates as information becomes available (Item I-C).
2. Chelan PUD will edit Slide 7 of the 2023 Rocky Reach Confirmation Survival Study (CSS) presentation shared during the HCP Coordinating Committees conference call on February 28, 2023, to clarify that fish noted in this slide had already met the minimum fish length selection criteria and will provide the modified presentation to Kristi Geris for distribution to the HCP Coordinating Committees (Item I-C). *(Note: Lance Keller provided the modified presentation, which Geris distributed to the HCP Coordinating Committees on March 30, 2023.)*
3. Washington Department of Fish and Wildlife (WDFW) will provide additional project-specific steelhead overshoot data, including the following: 1) fish behavior in forebays; 2) creel data on steelhead harvest rates; and 3) a comparison between the 2010 to 2017 dataset (harvest) and the 2018 to 2022 dataset (no harvest) (Item I-C). *(Note: a presentation of these data was distributed to the HCP Coordinating Committees by Kristi Geris on April 13, 2023.)*
4. Chelan PUD will provide the final 2023 Rocky Reach CSS discussion slides that were shared during today's meeting to Kristi Geris for distribution to the HCP Coordinating Committees (Item III-A). *(Note: Lance Keller provided the final slides, which Geris distributed to the HCP Coordinating Committees on April 18, 2023.)*
5. Chelan PUD will revise the *Rock Island Dam Smolt Monitoring and Gas Bubble Trauma Evaluation Plan 2023* (2023 Rock Island Bypass Monitoring Plan) and *2023 Rocky Reach Juvenile Fish Bypass System Operations Plan* (2023 RRJSF Protocol) to clarify the origin of adipose fin (ad)-present fish examined, before distributing the final approved plans (Item III-B).
6. Chelan PUD will distribute a draft Rock Island Dam Right Bank Adult Fishway Tailrace Entrance (TRE) Closure Statement of Agreement (SOA) for review no later than April 15, 2023 (10 days

prior), for discussion and decision during the HCP Coordinating Committees meeting on April 25, 2023. The SOA will be provided along with background information on the following: a) Chelan PUD will verify dates and times the Rock Island adult ladder TRE was closed while calculating adult conversion rates for the 2021 Rock Island CSS; and b) Chelan PUD will provide a synopsis of the engineering options considered to meet the minimum 1.0-foot head differential target at all four entrances at the Rock Island Dam right bank adult fishway during high spring flows in the Columbia River (Item III-D). (*Note: a draft SOA was distributed to the Rock Island HCP Coordinating Committee by Kristi Geris on April 17, 2023.*)

7. The next scheduled HCP Coordinating Committees meeting is on Friday, March 31, 2023, from 4:00 p.m. to no later than 5:00 p.m. and is to be held by conference call (Item VII-A).
8. The next regularly scheduled HCP Coordinating Committees meeting is on Tuesday, April 25, 2023, from 12:00 p.m. to no later than 4:00 p.m. and is to be held in person at the Douglas PUD Auditorium in East Wenatchee, Washington (Item VII-A).

Decision Summary

1. Rock Island HCP Coordinating Committee representatives present approved the 2023 Rock Island Bypass Monitoring Plan, as revised (Item III-B).
2. Rocky Reach HCP Coordinating Committee representatives present approved the 2023 RRJSF Protocol, as revised (Item III-B).
3. Rock Island and Rocky Reach HCP Coordinating Committees representatives present approved the *2023 Fish Spill Plan, Rock Island and Rocky Reach Dams Public Utility District No. 1 of Chelan County (2023 Rock Island and Rocky Reach Fish Spill Plan)* (Item III-C).
4. Wells HCP Coordinating Committee representatives present approved the 2023 Broodstock Collection Protocols (Item IV-A).

Agreements

1. Rocky Reach HCP Coordinating Committee representatives present agree to convene an HCP Coordinating Committees conference call on March 31, 2023, from 4:00 p.m. to no later than 5:00 p.m. to further discuss and vote on the 2023 Rocky Reach CSS documents (Item III-A).

Review Items

1. The draft *Study Plan to Measure Yearling Chinook Survival through the Rocky Reach Hydroelectric Project in 2023* (2023 Rocky Reach CSS Plan), appended *Statistical Plan for the 2023 Yearling Chinook Salmon Survival Study at Rocky Reach Dam* (Statistical Plan), and *Chelan PUD Tagging and Fish Husbandry QAQC Plan for the 2023 Rocky Reach Survival Study* (Tagging and Fish Husbandry QAQC Plan) were distributed to the Rocky Reach HCP Coordinating Committee by

- Kristi Geris on January 31, 2023. The draft SOA, *Approval of the 2023 Study Plan, Statistical Plan, and Tagging and Husbandry QAQC Plan for the 2023 Rocky Reach Yearling Chinook Confirmation Survival Study (2023 Rocky Reach CSS SOA)* was distributed to the Rocky Reach HCP Coordinating Committee by Geris on March 27, 2023 (Item III-A).
2. The draft *Rock Island and Rocky Reach Anadromous Fish Agreements and Habitat Conservation Plans 2023 Comprehensive Progress Report* was distributed to the Rock Island and Rocky Reach HCP Coordinating Committees by Kristi Geris on February 10, 2023, and is available for a 60-day review with edits and comments due to Lance Keller by April 11, 2023 (Item III-H).
 3. The draft 2022 Wells HCP Annual Report was distributed to the Wells HCP Coordinating Committee by Kristi Geris on February 20, 2023, and is available for a 75-day review with edits and comments due to Geris by May 5, 2023.
 4. Wells Project Land-Use Permit Applications for LUP 720-02 and LUP 726-02 were distributed to the Wells HCP Coordinating Committee by Kristi Geris on March 1, 2023, and are available for a 30-day review with edits and comments due to Tom Kahler by March 31, 2023 (Item IV-B).
 5. The draft 2022 Rock Island and Rocky Reach HCP Annual Reports were distributed to the Rock Island and Rocky Reach HCP Coordinating Committees by Kristi Geris on March 9, 2023, and are available for a 60-day review with edits and comments due to Geris by May 10, 2023.
 6. Wells Project Land-Use Permit Application for LUP 830-01 was distributed to the Wells HCP Coordinating Committee by Kristi Geris on March 20, 2023, and is available for an expedited review with edits and comments due to Tom Kahler by March 31, 2023 (Item IV-B).
 7. A draft non-capacity amendment to revise the Rock Island Recreation Plan for the Walla Walla Point Park improvements was distributed to the Rock Island HCP Coordinating Committee by Kristi Geris on March 27, 2023, and is available for review with edits and comments due to Lance Keller by April 28, 2023 (Item III-E).
 8. Wells Project Land-Use Permit Application for LUP 782.0A-01 was distributed to the Wells HCP Coordinating Committee by Kristi Geris on April 5, 2023, and is available for a 30-day review with edits and comments due to Tom Kahler by May 5, 2023.
 9. The draft SOA, *Closure of Rock Island Right Bank Adult Fishway TRE Entrance During High Flows and Tailwater Elevation*, was distributed to the Rock Island HCP Coordinating Committee by Kristi Geris on April 17, 2023 (Item III-D).

Finalized Documents

1. The 2023 Broodstock Collection Protocols that were approved by the HCP Hatchery Committees and Priest Rapids Coordinating Committee (PRCC) Hatchery Subcommittee and distributed to the Wells HCP Coordinating Committee on March 16, 2023, is the final version of this document (Item IV-A).

2. The final report, *Osoyoos Lake: In-Lake 2021 (BY2020) and Historical Temporal Summary*, was distributed to the HCP Coordinating Committees by Kristi Geris on March 30, 2023.

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. The following revisions were requested:

- Lance Keller added the following: 1) review of the draft non-capacity amendment to revise the Rock Island Recreation Plan for the Walla Walla Point Park improvements; and 2) a reminder about the draft *Rock Island and Rocky Reach Anadromous Fish Agreements and Habitat Conservation Plans 2023 Comprehensive Progress Report* out for review.
- Kristi Geris added an additional Wells Project Land-Use Permit Application (LUP 830-01) under the existing LUP agenda item.

B. Meeting Minutes Approval (John Ferguson)

The HCP Coordinating Committees reviewed the revised draft February 28, 2023, conference call minutes. Kristi Geris said all edits and comments received from members of the Committees were minor clarifications, and edits were incorporated into the revised minutes. Geris also closed out three Chelan PUD action items and added distribution of the draft non-capacity amendment to revise the Rock Island Recreation Plan for the Walla Walla Point Park improvements under *Review Items*. HCP Coordinating Committees representatives present approved the February 28, 2023, conference call minutes, as revised. Scott Carlon abstained, because a National Marine Fisheries Service representative did not participate in the February 28, 2023, conference call.

C. Last Meeting Action Items (John Ferguson)

Action items from the HCP Coordinating Committees conference call on February 28, 2023, and follow-up discussions were as follows (*Note: Italicized text corresponds to agenda items from the conference call on February 28, 2023*):

1. *Chelan PUD will continue providing Rocky Reach Dam and Rock Island Dam turbine unit maintenance updates as information becomes available (Item I-C).*
This action item will be discussed during today's meeting and will also be carried forward.
2. *Chelan PUD will verify dates and times the Rock Island adult ladder TRE was closed while calculating adult conversion rates for the 2021 Rock Island CSS (Item I-C).*
This action item will be discussed during today's meeting.
3. *Chelan PUD will provide a synopsis of the engineering options considered to meet the minimum 1.0-foot head differential target at all four entrances at the Rock Island Dam right bank adult fishway during high spring flows in the Columbia River (Item I-C).*

This action item will be discussed during today's meeting.

4. *Chelan PUD will inquire internally about the feasibility of conducting an investigative study using acoustically tagged wild-origin spring Chinook Salmon and the acoustic receivers deployed for the 2023 Rocky Reach CSS (Item IV-B).*

This action item will be discussed during today's meeting.

5. *Chelan PUD will estimate the proportion of ad-present yearling Chinook Salmon expected at Rocky Reach Dam in 2023 that are of hatchery origin based on estimated proportions of ad-clipping conducted at each production facility (Item IV-B).*

This action item will be discussed during today's meeting.

6. *Chelan PUD will inquire internally about modifying the fish selection criteria for inclusion in the 2023 Rocky Reach CSS, such that the minimum fish length is reduced from 120 millimeters (mm) to 110 mm to include additional wild-origin yearling Chinook Salmon in the study sample (Item IV-B).*

This action item will be discussed during today's meeting.

7. *Chelan PUD will inquire internally about modifying the daily fish collection period for the 2023 Rocky Reach CSS further into the evening hours to try and capture additional wild-origin yearling Chinook Salmon for inclusion in the study sample (Item IV-B).*

This action item will be discussed during today's meeting.

8. *Chelan PUD will edit Slide 7 of the 2023 Rocky Reach CSS presentation shared during today's conference call to clarify that fish noted in this slide had already met the minimum fish length selection criteria and will provide the modified presentation to Kristi Geris for distribution to the HCP Coordinating Committees (Item IV-B).*

This action item will be carried forward.

9. *Chelan PUD will distribute for review a draft 2023 Rocky Reach CSS SOA, and revised study documents, if appropriate. Rocky Reach HCP Coordinating Committee representatives will contact Lance Keller with questions or comments in order to be prepared to vote on these documents during the HCP Coordinating Committees conference call on March 28, 2023 (Item IV-B).*

Lance Keller provided the draft SOA, which Kristi Geris distributed to the HCP Coordinating Committees on March 27, 2023.

10. *Chelan PUD will inquire internally about the feasibility to scan for coded wire tags (CWTs) at both the Rocky Reach Juvenile Sampling Facility (RRJSF) and Rock Island Juvenile Sampling Facility (RIJSF) starting in 2023 (Item IV-C).*

This action item will be discussed during today's meeting.

11. *Chelan PUD will discuss internally about installing a passive integrated transponder (PIT) detection system on the bypass trap gate or associated conveyance structure at the RIJSF (Item IV-D).*

Lance Keller said this was a comment received from Jim Craig on the draft 2023 Rock Island Bypass Monitoring Plan. Keller said when more fish enter the RIJSF than can be processed, a diverter gate opens and sends excess fish back to the river. Keller discussed Craig's question with Scott Hopkins (Chelan PUD), who reported that from 2015 to 2022, there were only eight instances that required opening this slide gate. This included one instance in 2019, and seven instances in 2020. On average across the eight instances, the gate was open for 3.7 hours. Considering the location of the structure, how infrequently the gate is opened, and that opening that gate does not impact their ability to index the run, installation of PIT detection does not seem necessary. Craig said he appreciates Keller looking into this.

12. *Chelan PUD will provide an email confirmation that the Rocky Reach Dam adult fish ladder was returned to service on February 28, 2023, as scheduled (Item IV-F).*

Lance Keller provided this email confirmation, which Kristi Geris distributed to the HCP Coordinating Committees on March 28, 2023.

13. *Chelan PUD will provide an email notification when Rocky Reach Dam Turbine Unit C5 returns to service (Item IV-H).*

Lance Keller provided an email notification that Turbine Unit C5 was returned to service on March 1, 2023, which Kristi Geris distributed to the HCP Coordinating Committees on March 28, 2023.

14. *WDFW will provide additional project-specific steelhead overshoot data, including the following: 1) fish behavior in forebays; 2) creel data on steelhead harvest rates; and 3) a comparison between the 2010 to 2017 dataset (harvest) and the 2018 to 2022 dataset (no harvest) (Item V-A).*

This action item will be carried forward.

II. HCP Hatchery and Tributary Committees Update

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

Tracy Hillman said the HCP Tributary Committees did not formally meet in March 2023, but will join the Upper Columbia Regional Technical Team for presentations by project sponsors from March 29 to 30, 2023. The next meeting of the HCP Tributary Committees will be on April 13, 2023.

Hillman updated the HCP Coordinating Committees on the following actions and discussions that occurred during the HCP Hatchery Committees meeting on March 15, 2023 (*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"*):

- *2023 Broodstock Collection Protocols (joint)*: The Committees reviewed and approved the 2023 Broodstock Collection Protocols. The protocols were submitted to the Wells HCP Coordinating Committee for review and approval.
- *10-Year Comprehensive Report Synthesis Presentation (joint)*: Rod O'Connor (Grant PUD) shared a presentation titled *PUD Comprehensive Report Summary*. The purpose of the presentation was to provide the Committees with a high-level view of the findings within the 10-year comprehensive reports. Recall that the objectives of the 10-year comprehensive report were to evaluate the performance and effects of the PUD hatchery programs, inform management of hatchery programs with science, and fulfill Endangered Species Act requirements. Most, but not all, of the objectives were achieved for the different hatchery programs. Of note, stray rates and proportion of hatchery-origin spawner targets for spring Chinook Salmon and steelhead were not achieved. The Committees will use the information and results within the 10-year comprehensive reports to identify possible management recommendations to address the objectives that were not met or objectives that may not be adequately assessed using current monitoring approaches. Andrew Murdoch asked whether this presentation is available. Hillman said it was distributed to both hatchery committees and is posted on the extranets, but he can also make sure A. Murdoch receives it if he does not have it.
- *Brood Year 2021 Wenatchee Summer Chinook Salmon Acclimation/Release Planning (joint)*: WDFW and Chelan PUD reported that juvenile Wenatchee summer Chinook Salmon at Eastbank Fish Hatchery are experiencing high levels of bacterial kidney disease. The Committees discussed whether all the fish should be released into the Wenatchee River, all should be acclimated at Dryden Pond for later release, or some should be released into the Wenatchee River and the remainder should acclimate at Dryden Pond. The Committees are working with fish health experts on the best approach. Hillman noted, since the meeting, the Committees decided on the third option. That is, release some into the Wenatchee River and acclimate the remainder at Dryden Pond. John Ferguson asked whether the fish would be split equally. Hillman said he thinks the plan is to release fish showing symptoms into the river and acclimate the remainder at Dryden Pond. Keely Murdoch said she thinks there are three ponds at Eastbank Fish Hatchery, and one-third is going to Dryden Pond and two-thirds are going to the river.
- *Chiwawa Spring Chinook Salmon Release (joint)*: WDFW provided notice of an emergency release of the juvenile spring Chinook Salmon rearing at the Chiwawa Acclimation Facility. The early release was in response to increases in mortality (approaching 1,000 losses per day) due to bacterial kidney disease. Fish health estimated that about 50% of the fish were infected. These fish could not be treated because of cold water temperatures at the facility.
- *Steelhead Egg Thiamine Level Testing (Wells)*: Douglas PUD requested Wells HCP Hatchery Committee approval to sample 5 grams (approximately 50 eggs) of green eggs from

each of 30 to 60 steelhead females annually over a 3-year period (2023 to 2025). The eggs will come from Columbia Safety Net program fish and be examined for thiamine levels. Results from the study will be used to inform incubating and rearing actions at the Wells Fish Hatchery. The Wells HCP Hatchery Committee approved the request.

- *Next Meeting:* The next meeting of the HCP Hatchery Committees will be on April 19, 2023.

III. Chelan PUD

A. **DECISION: 2023 Rocky Reach CSS SOA, 2023 Rocky Reach CSS Plan and appended Statistical Plan, and Tagging and Fish Husbandry QAQC Plan (Lance Keller)**

The draft 2023 Rocky Reach CSS Plan, appended draft Statistical Plan, and draft Tagging and Fish Husbandry QAQC Plan were distributed to the Rocky Reach HCP Coordinating Committee by Kristi Geris on January 31, 2023. The draft 2023 Rocky Reach CSS SOA was distributed on March 27, 2023.

Lance Keller recalled he had several action items related to this topic and suggested starting by addressing each. Ancillary discussions intermittently took place as reported below.

Action Item: Regarding Ad-Present Hatchery-Origin Yearlings

Chelan PUD will estimate the proportion of ad-present yearling Chinook Salmon expected at Rocky Reach Dam in 2023 that are of hatchery origin based on estimated proportions of ad-clipping conducted at each production facility (Item IV-B).

Keller said Catherine Willard (Chelan PUD HCP Hatchery Committees representative) helped with this action item and determined that approximately 9.8% of the hatchery-origin yearling Chinook Salmon released above Rocky Reach Dam will have an ad fin. Based on a total hatchery release above Rocky Reach Dam of approximately 4.3 million fish, this equals approximately 419,000 ad-present and approximately 3.88 million ad-clipped hatchery-origin fish.

Action Item: Regarding Fish Selection Criteria of 120-mm versus 110-mm

Chelan PUD will inquire internally about modifying the fish selection criteria for inclusion in the 2023 Rocky Reach CSS, such that the minimum fish length is reduced from 120 mm to 110 mm to include additional wild-origin yearling Chinook Salmon in the study sample (Item IV-B).

Keller shared on WebEx the 2023 Rocky Reach CSS discussion slides (Attachment B), which were distributed to the HCP Coordinating Committees by Geris on April 18, 2023. Keller said Slide 1 of Attachment B shows fish length data at the RRJSF in 2022. During indexing each day, the first 100 fish of each species are measured and weighed. Using a hypothetical start date and 30 days of study fish collection, this slide shows the percentage of the yearling Chinook Salmon population represented by fork length compared between the two proposed fish size ranges, 225 to 120 mm

versus 225 to 110 mm. For ad-clipped yearling Chinook Salmon, including fish down to 110-mm fish only adds another 3.55% of the population to the sample, based on data collected in 2022. For ad-present yearlings, including fish down to 110-mm add an additional 16.33% of the population to be included in the sample, equaling 84.84% of the total population. Collectively (ad-clipped and ad-present), including fish down to 110-mm covers 95.73% of the yearling Chinook Salmon population that was observed in 2022. Based on these data, while still cautious about tag burden but also hearing the request from the Rocky Reach HCP Coordinating Committee, Chelan PUD is prepared to edit the size criteria to include the 225 to 110 mm range. Chelan PUD feels this is a decent compromise, notably to include more of the ad-present population. The draft 2023 Rocky Reach CSS SOA does not include this language, but the draft 2023 Rocky Reach CSS Study Plan will be edited to reflect this change.

Kirk Truscott recalled last month, talking about fish size selection and reviewing work by Pacific Northwest National Laboratory (PNNL). By just eyeballing the graph showing mortal injury related to fish length and tag burden, it looked like differential survival was near 110 mm. Whether it was really 106 mm, 105 mm, or something close, he does not know for sure. He appreciates Chelan PUD conducting this analysis.

Truscott said that, additionally, the Rocky Reach HCP Coordinating Committee discussed the timing of sampling. Notably, that daily sampling takes place from 0800 to 1100 hours, which is not during the peak movement of yearlings of this size range. He is still interested in extending sampling operations, as was done in 2010 to 2011. He asked whether this extended operations data is comparable to the 2022 data. Keller said this was another action item, which will be discussed next.

Action Item: Regarding Daily Fish Collection Period

Chelan PUD will inquire internally about modifying the daily fish collection period for the 2023 Rocky Reach CSS further into the evening hours to try and capture additional wild-origin yearling Chinook Salmon for inclusion in the study sample (Item IV-B).

Keller said Slide 2 of Attachment B shows the diel passage timing of PIT-tagged, hatchery-origin Chinook Salmon at the RRJ PIT antenna from April 1 to May 31, 2022, which appears to align with data included in WDFW's comment letter on the study plan, showing diel passage of PIT-tagged, wild origin Chinook Salmon at the RRJ PIT antenna.

Slide 3 of Attachment B shows diel collections of yearling Chinook Salmon at the RRJSF from April 24 to June 4, 2011. From 2010 to 2011, Chelan PUD staffed crews to operate the RRJSF 24 hours per day, 7 days per week, to collect data on diel movement in addition to conducting the daily indexing from 0800 to 1100 hours. Outside of the normal daily indexing period, crews targeted 20-minute sampling to enumerate passage numbers and monitor fish condition. That is, no size observations were conducted, just enumerating ad-clipped versus ad-present fish and noting their condition took

place. Ad-clipped and ad-present data track similarly. The data are very similar from 0000 hours to 0400 hours, and a little separation begins starting at 0500. In 2011, the marking approach for hatchery fish was different compared to present day. Keller said Willard and Alene Underwood (former Chelan PUD HCP Hatchery Committees representative) indicated that, in 2011, there were more ad-present hatchery-origin fish. Keller said the green line and the secondary y-axis show average hours sampled each day. The maximum sample time (screen deployment) was 20 minutes per hour, and indexing occurred during normal times for no more than 30 minutes. The carrying capacity of the RRJSF is approximately 350 fish. In the early and late hours of the day, sometimes crews could not hit sampling time targets because too many fish were coming through the facility. Moving the study fish collection hours to collect more ad-present fish means also collecting more of every fish species in the system. Notably, the Sockeye and Coho Salmon outmigrations have grown considerably since 2011. Additionally, this study targets 30 fish for upstream releases and 50 fish for downstream releases per day, but ideally, all study fish will not be collected in one sample. The intention is to collect fish as was done in 2021, across the entire sampling period. Recall that for the 2021 Rock Island CSS, a total of 14.86% of the tagged study fish were ad-present. On the same collection days, at the RRJSF, a total of 8.41% of the sampled fish were ad-present, excluding study fish. This was for fish down to 120-mm minimum, but in general, Chelan PUD thinks this was representative.

Keller said Slide 4 of Attachment B shows runtime data and expanded smolt count data. He noted that in 2022 there was just shy of 350,000 Sockeye Salmon in the index samples. Chelan PUD is concerned that if sampling moves outside the normal index sampling period into the dawn and dusk hours, this might actually decrease their ability to handle target fish because there will be less sampling time to handle more fish besides yearling Chinook Salmon. Chelan PUD might be overextending the crews, and Chelan PUD is not sure it would be a benefit to the study. There may be more yearling Chinook Salmon collected, but at the same time, there will be more of all spring-migrating species collected that have to be processed. Therefore, Chelan PUD prefers to stay within the proposed sample hours.

Discussion: Regarding Fish Selection Criteria of 110-mm versus 95-mm

Andrew Murdoch asked if Truscott said 95 mm instead of 110 mm, how would Chelan PUD respond? Keller said he thinks 110 mm is the appropriate limit. A. Murdoch asked, 110 mm due to tag burden? Keller said yes, given that double tagging is needed to achieve the resolution needed for this study design and in an attempt to reach a common ground with the Rocky Reach HCP Coordinating Committee. Chelan PUD feels there are limitations in the technology given the data the District needs to collect. If project survival comes in two points under the standard, Chelan PUD needs to know why the standard was missed. If project survival moves up, Chelan PUD wants to know why as well. A. Murdoch asked how including 110-mm fish translates into sample size. For example, does this mean an additional four fish? Keller said that, across the entire study, he cannot say. One person

selects fish for the entire study period, and this is the same person who has selected study fish in past years. Each day, feedback is provided to this person about fish lengths for the run at large so that he can select study fish that are representative of that day's run-of-river fish. A. Murdoch asked if he reviewed the 2021 Rock Island CSS Report, will he see a frequency of length of study fish compared to run-of-river fish? Keller said yes, and he also shared these data last month. A. Murdoch said, so, when Chelan PUD provides these size requirements, generally, they are met? Keller said yes, the data show that this is true. Chelan PUD also has a backup person for fish selection, if needed. Should he be needed, he will select fish for one full replicate (paired test and control replicates) before switching back to the regular person, who is the RRJSF Foreman, Dennis Litchfield.

A. Murdoch said the reason to have a minimum fish size is to address potential negative biases in the study results. WDFW deals with biases all of the time, and sometimes the study just needs to include the biases that are then corrected for, post hoc. He thinks this is what should be done here. It takes time and resources, but at the end of the day, there would be no need for a minimum fish size and the study could include all run-of-river fish. This study does a good job at addressing other biases, but maybe there is an alternative study design that could incorporate the tag-burden bias. In his experience, if a bias cannot be controlled for, then just figure out how to quantify it and adjust for it, post hoc. Keller said for this study, he believes Chelan PUD has addressed this bias in the best way possible by identifying a minimum fish size. Chelan PUD is also proposing to use smaller tags to address tag-burden biases. A. Murdoch said PNNL has conducted studies down to 95 mm and recommends a minimum fish size of 95 mm. Keller said Chelan PUD also tagged down to 95 mm for the Subyearling Behavioral Investigation, but that was not a project-level survival study. A. Murdoch said PNNL was also using the older generation tag and a tag burden up to 3.6%. Keller said this study does not just use a Juvenile Salmon Acoustic Telemetry System (JSATS) tag; it uses a JSATS plus a PIT tag to get the resolution needed through the surface collector structure and Unit C1 and Unit C2. A. Murdoch said he thinks Dr. John Skalski (University of Washington, Columbia Basin Research) was even the analyzer for these five PNNL studies, which he also thinks were dual tagged with PIT tags. Keller asked about the resolution of these studies. What were they evaluating? A. Murdoch said these were not project-level studies; they were evaluating passage survival, but the study fish were still going through turbines.

Discussion: Regarding Entiat Release Group

Chad Jackson asked about the reasoning for excluding an Entiat River release group. Keller said that logistically, it would be difficult to transport these fish to a release location in an unbiased fashion and plan for these fish to mix with the control group in the Rocky Reach Dam tailrace and arrive downstream at Kirby Billingsley Hydro Park in East Wenatchee, Washington, and the Rock Island Dam boat restriction zone at the same time. Further, if this was done this year, this means splitting up 23 fish, which will impact precision. A. Murdoch said from WDFW's perspective, spring Chinook Salmon migrating through the Rocky Reach Project are from the Entiat River and

from above Wells Dam. It seems like a “no brainer” to include these. Then, one could review PIT-tag data for fish migrating from the smolt trap to Rocky Reach Dam to estimate travel time to get at the temporal overlap. Keller said perhaps, but what about sample size? A. Murdoch said he would need to look at this, but the concept of these survival studies is to mimic where these fish are coming from. Keller asked, if the planned release groups are parsed out, what is the power in a few fish? A. Murdoch said he understands this under the current study design, but if there were an Entiat release, there would be a different study design.

K. Murdoch agreed including an Entiat release would be more representative, especially to study the backwater inundation area where there is a lot of sediment deposition and possibly higher mortality. Not accounting for any Entiat fish is really just representing the Methow and Okanogan rivers. Keller said he understands K. Murdoch’s comments. He thinks he recalls a report by the Independent Scientific Advisory Board that found yearlings exiting the Entiat River have higher smolt-to-adult survival rates. However, at this point, Chelan PUD is hesitant to include an Entiat release because this means releasing very few fish there and diminishing the resolution of other releases. A. Murdoch said his choice would be to design the study so it is not losing precision by weighting the results for that distribution. Keller said this is what was done for the 2010 Rock Island Survival Study. There was an independent release that preserved the original paired release design, but that study was always designed that way. Unfortunately, this study is beyond this option in terms of timing and the tags available. Additionally, these results need to be comparable to past data to create a combined average. A. Murdoch said this seems to be the legacy of these studies. Can they ever change? Are the HCP Coordinating Committees locked into these survival study designs? Keller said, actually, Chelan PUD has pivoted their survival studies drastically. Chelan PUD pivoted from Hydroacoustic Technology Inc. tags, when there was an evolution of tag technology, and adopted JSATS tags. Chelan PUD is not proposing the same size selection as past studies and is adopting smaller sizes for study fish. If there were no changes, the Committees would not be having these discussions. A. Murdoch said he is not talking about just these changes. Douglas PUD uses PIT detection, Chelan PUD focuses on route specific passage survival, and Grant PUD does a combination of these things. Ferguson said to keep in mind that these studies are driven by the HCPs. Section 5.2.2 of the Rocky Reach HCP says that Chelan PUD will measure juvenile project survival; if the study has valid results, Chelan PUD will add the data point to past data. The HCP stipulates that conditions must be representative. These consistencies are built into the language. Keller asked, is Chelan PUD outside of what was done in 2011? A little, but he believes these changes make the study more representative. Chelan PUD also hears the Rocky Reach HCP Coordinating Committee’s request to tag smaller fish, so Chelan PUD is compromising by proposing to tag down to 110-mm fish. Also to note, each HCP is different and the agreements of the three Mid-Columbia PUDs are independent of one-another.

Scott Carlon asked whether there is another way to study Entiat fish. That is, a more discrete way to understand how these fish are escaping the Entiat River. He does not know who the cost burden

would fall on, but he is wondering about another study outside of this HCP requirement. Keller said this leads to Chelan PUD's last action item.

Action Item: Regarding Feasibility of an Investigative Study

Chelan PUD will inquire internally about the feasibility of conducting an investigative study using acoustically tagged wild-origin spring Chinook Salmon and the acoustic receivers deployed for the 2023 Rocky Reach CSS (Item IV-B).

Keller said at this time, Chelan PUD is not entertaining the idea of an additional study. Chelan PUD hears from the Rocky Reach HCP Coordinating Committee the desire for another study specific to smaller wild Chinook Salmon, and Chelan PUD is open to continuing these discussions; however, that is separate from this 2023 Rocky Reach CSS.

Discussion: Regarding a Vote for Approval

K. Murdoch said she appreciates Chelan PUD coming down to 110 mm. As A. Murdoch mentioned, PNNL is tagging down to 95 mm—their research recommends doing this, with the combined acoustic and PIT tags. This survival study should also be doing this so as to not eliminate survival of smaller fish. She thinks A. Murdoch offered interesting ideas on how to include a larger size range, and she wishes she was hearing more willingness from Chelan PUD to take this approach. Chelan PUD has been at the forefront of advancing technology, and she would like to see this continue, but she is hearing reluctance to go down this path. Keller said Chelan PUD is willing to continue these discussions; however, the District does not want to add a commitment for another study to the 2023 Rocky Reach CSS.

A. Murdoch asked whether a 2021 Rock Island CSS final report will be distributed. Keller said Chelan PUD can distribute this. A. Murdoch said Litchfield may do a good job at capturing what you get, but if you do not collect smaller fish, they will not be there to select for the study. Keller said he appreciates the feedback. Ferguson also recalled Keller previously explaining that real-time coordination takes place with Litchfield, so he can adjust on the fly, as needed. Keller said this is correct.

Truscott said his suggestion to look at 110 mm was based on the information in hand. At that time, he was unaware of this literature that suggests 95 mm, as A. Murdoch and K. Murdoch mentioned. Truscott recalled discussing extending operation of the bypass in 2024, which may be an opportunity to mimic sampling in 2011. Are fish collected during dawn and dusk hours similar in size to fish collected during the 0800 to 1100 index sampling period? This will be an opportunity to make sure that fish collected during indexing represent all fish arriving at the facility. He understands the concern about tying this 2023 Rocky Reach CSS to another study in 2024, and there are disagreements about issues, but folks still need to move forward. He suggested making a commitment within the 2023 Rocky Reach CSS SOA, that, for example, all Parties will agree to resolve

fish size tag-burden biases before the next 10-year CSS, or something to that effect. Keller asked whether Truscott is suggesting including language in the SOA that commits to continued discussions or a specific action. Truscott said, action. Bill Towey asked, what action? Truscott said he does not know. A. Murdoch said everyone is dancing around wild fish survival. Wild fish survival is consistently lower than hatchery. Truscott suggested that Parties commit to conducting literature reviews or studies to embrace the size-related bias associated with tag burden. Or, if in 2024, fish sizes are different during the extended sampling compared to index sampling, then these survival studies are not representative of fish migrating through the project area, so the Parties need to commit to studying that. Towey said Chelan PUD is supportive of these discussions, but to couple it with a decision for the 2023 Rocky Reach CSS is where Chelan PUD draws the line. He thinks the mechanisms are in place such that any topic can be discussed at any time. It is the coupling to this CSS that is concerning.

Keller asked whether A. Murdoch's comment that wild fish are not surviving well is relative to the Rocky Reach Project. A. Murdoch said no, this is based on measuring survival using PIT tags. Wild fish have lower in-river survival compared to hatchery fish, and this is not just limited to release-to-first downstream location, this usually continues on, although sample size decreases moving downstream. The only way to measure the survival of wild fish is not equaling how the PUDs measure survival at the dams. Maybe there is a size bias through the hydropower dams that explains the lower survival of wild fish. In the federal system, PIT detections at juvenile bypass systems are decreasing because of increased spill. Once fish reach the ocean, wild fish have higher marine survival. Dr. Rebecca Buchanan (University of Washington, Columbia Basin Research) published a study comparing hatchery and wild survival. Wild springers survived lower than hatchery fish in freshwater, and then the opposite occurred in marine waters. Summers were equal. Keller asked what stretch of the river this evaluation was conducted, and A. Murdoch noted it was conducted in the Snake River. The same trends are observed in the Snake River, without the same precision. In other venues, managers are trying to improve detections because the traditional PIT detections at juvenile bypass systems have diminished as increased spill results in fewer fish passing via those bypass systems. The government is taking actions intended to improve survival, but those actions also reduce the opportunities to measure it.

K. Murdoch said, regarding a vote to approve, the Yakama Nation would like to request a 5-day extension to thoroughly vet this decision internally. She has discussed this with the regional coordinator, who recommended sticking with 95 mm. She would like to talk with her policy representative and others. Ferguson said 5 business days is Tuesday, April 4, 2023. Keller said if there is a "no" vote, this does not leave much time before a possible study start date of April 17, 2023. Chelan PUD hoped, with the amount of time the District has spent coordinating with each Rocky Reach HCP Coordinating Committee representative ahead of today's meeting, that these discussions would have already taken place. K. Murdoch said the draft SOA was just distributed

yesterday. The HCP requires that SOAs be distributed at least 10 days before a decision. Per today's discussions, it sounds like Truscott's comments may be added to a revised SOA, and there also may be a revised study plan to consider. Keller said the only edit to the study plan will be changing 120 mm to 110 mm. He did not distribute the draft SOA until yesterday because he thought it might change based on discussions with Rocky Reach HCP Coordinating Committee representatives. Chelan PUD is also supportive of editing the SOA on the fly, today. Ferguson asked whether Friday, March 31, 2023, might be amenable to everyone. Keller said this works for Chelan PUD. K. Murdoch said she can try to reach David Blodgett, III, by Friday.

Towey asked, procedurally, should the Rocky Reach HCP Coordinating Committee move forward with a vote, and can the Yakama Nation abstain for now?

Jackson said that WDFW would accept more time if it is being offered and is okay with a vote via email.

Carlton said that he thinks National Marine Fisheries Service will vote to approve and is supportive of decoupling other studies from this 2023 Rocky Reach CSS—not to discredit what A. Murdoch has shared, which is why he suggested maybe another way to study the Entiat.

Jim Craig said U.S. Fish and Wildlife Service is okay with an email vote. If he were to vote today, he would vote to approve.

Truscott said his only reservation to voting yes is whether 110 mm is the correct minimum given the additional information on tagging down to 95 mm. He does not know these studies or what the precision is. The commitment to continue down the road to be as representative as possible is important. If the preference is to tag down to 95 mm, does Chelan PUD have enough tags to do this, assuming some level of negative bias? Keller said yes, but the issue is that fish could be falling out of the project survival estimate, and mathematically, it will just look like mortality without knowing from what. Ferguson said, in other words, this means tagging a few smaller fish, and not expecting to see much except possibly more tag-burden mortality. That is the concern. Truscott said it seems these differences will not get resolved by the time the study needs to be implemented. A. Murdoch said he thinks the Joint Fisheries Parties need to convene to discuss this. Truscott said the Confederated Tribes of the Colville Reservation are okay with a vote via email.

A. Murdoch asked whether Chelan PUD has a maximum tag-burden threshold in mind. Keller said the literature says various things. In the data the District presented showing mortal injury related to fish length and tag burden, the lines deviate around 110 mm fork length. Chelan PUD does not have a percentage in mind. A. Murdoch said neither does he; he was just asking.

Towey said, come Friday, if there is a "no" vote, Chelan PUD would like an opportunity for dialogue and prefers this not be done via email. Chelan PUD wants these discussions to be very transparent.

A. Murdoch mentioned a Joint Fisheries Parties meeting; there will be deliberations there—how does this get documented and tracked? Ferguson said he envisioned today that the Committee would start with a discussion of the information and topics and then proceed to a vote on the SOA. If the vote is “yes,” then it is done. If it is “no,” he planned to share on WebEx a blank document for representatives to craft language explaining why this study design does not meet the requirements in the HCP because this is what a “no” vote is saying. This language will then help inform next steps. He agreed a conference call may be needed for the vote on Friday.

Rocky Reach HCP Coordinating Committee representatives present agree to convene an HCP Coordinating Committees conference call this Friday, March 31, 2023, from 4:00 p.m. to no later than 5:00 p.m. to further discuss and vote on the 2023 Rocky Reach CSS documents.

Keller said Chelan PUD will provide the final 2023 Rocky Reach CSS discussion slides that were shared during today’s meeting to Geris for distribution to the HCP Coordinating Committees.

B. DECISION: 2023 Rock Island Bypass Monitoring Plan and 2023 RRJSF Protocol (Lance Keller)

The draft 2023 Rock Island Bypass Monitoring Plan and draft 2023 RRJSF Protocol were distributed to the Rock Island and Rocky Reach HCP Coordinating Committees by Kristi Geris on February 10, 2023, and were available for a 30-day review with edits and comments due to Lance Keller by March 13, 2023.

Keller said comments were received from Jim Craig, which were already discussed under *Item I-C. Last Meeting Action Items*. Keller said comments were also received from Keely Murdoch, which were similar to comments received from Kirk Truscott in 2015, and resulted in the following action item:
Chelan PUD will inquire internally about the feasibility to scan for CWTs at both the RRJSF and RIJSF starting in 2023 (Item IV-C).

Keller said he spoke with Scott Hopkins about whether this is feasible and what value would come of this. Chelan PUD prefers not to scan for CWTs due to logistical issues and the resulting extended fish holding and handling time. Four staff process the entire sample. That is, examine the first 100 fish of each species, for species, clip, weight, length, descale, injury, and mortality, and then enumerate the remaining fish. Scanning for CWTs does not provide value to what staff are trying to accomplish for this effort, which is looking at run timing, evaluating fish condition, and operating the bypass. Chelan PUD does scan for CWTs for the Real Time Research, Inc. (RTR), effort at Rock Island Dam, and that facility had been tailored specifically for this tagging project..

K. Murdoch said it would be nice to know how many wild fish are migrating downstream through these facilities. This is useful information for fish managers. The RTR work is definitely important, but she is surprised there are no standard operating procedures for scanning for CWTs. It takes little time

to run a fish over a V-Block (or V-Detector). Keller said this is one of the logistical issues: this environment produces too much feedback to operate a V-Block. Attempting to do so would slow the process and extend fish holding and handling time.

K. Murdoch said this only needs to be done for ad-present fish, and it was mentioned earlier that only 9.8% of hatchery-origin yearling Chinook Salmon arriving at Rocky Reach Dam will be ad-present. There is probably a similar number coming from the Wenatchee River. She hopes to scan steelhead too. At Rock Island Dam, in total, this might mean scanning approximately 30% of the ad-present yearling and steelhead coming through the facility. Keller said, even if not scanning every fish, it is still Chelan PUD's view that this is a logistical challenge and doing this does not translate into an action that supports the objectives of this data collection effort.

K. Murdoch asked, then why in the Chelan PUD reports does it say ad-present or ad-clipped if it does not matter? Saying "ad-present" implies things that are not true. Reporting clip type seems to be important enough for run timing. Keller said all data are entered into the Columbia River Data Access in Real Time database based on species and run, such as yearling Chinook Salmon versus subyearling Chinook Salmon, and not parsed out based on ad-presence or absence. Keller recalled during the last meeting, K. Murdoch made this same comment. Keller said in the past, Chelan PUD has used "hatchery" and "unknown," he suggested changing "ad-present" to "unknown," and K. Murdoch said she would think about it. K. Murdoch said she would like Chelan PUD to make the change to "unknown." She said, in this day and age, she would think everyone would want to know what proportion of the population is wild. Keller said if this alleviates confusion, Chelan PUD can make this change. In terms of scanning for CWTs, based on the purpose of the data collection, and beyond folks just wondering about it, Chelan PUD does not see the value in the additional handling of these fish.

Andrew Murdoch asked whether Chelan PUD has incidental take reporting requirements. Keller said he believes this is by clip. A. Murdoch said WDFW's take permits have separate take for hatchery and wild fish, and these cannot just be combined. Keller said he thinks Chelan PUD's permits call out ad-clipped or ad-present. Perhaps Chelan PUD will start calling this "unknown."

Keller said Chelan PUD will revise the 2023 Rock Island Bypass Monitoring Plan and 2023 RRJSF Protocol to clarify the origin of ad-present fish examined before distributing the final approved plans.

Truscott said he is disappointed. It seems like a relatively easy procedure to scan ad-present fish, given the low percentage of ad-present fish. Only a small proportion of the overall yearling Chinook Salmon population is sampled at the RIJSF (less than 1%), and scanning for CWTs can provide information on what proportion of wild fish are passing the facility. If data are not collected on wild fish, how do managers adaptively manage the HCP to support recovery? He is really

disappointed. In 2024, when expanded bypass operations are monitored, he is going to push this to the very limit to collect available information to make an assessment of wild fish migration timing and fish size through expanded operations at both facilities. He is getting fed up. It seems to be the position of the District that it can be done, but the District is not willing to do it.

A. Murdoch said when WDFW operated the Rock Island bypass, staff would go above and beyond and scan everything, for both steelhead and Chinook Salmon. This was not required under the Smolt Monitoring Program, but staff just did it.

Keller asked Truscott what he would do with these data. Truscott said he would know under that emigration period what proportion of ad-present yearling Chinook Salmon are wild and what their emigration timing looks like compared to the hatchery run. These data do not include the period prior to April 1, but those data will be collected later. It appears this is something that is doable in 2023, but if Chelan PUD wants to wait to 2024, then this will wait until then. This will give Chelan PUD time to budget for it. Keller said he appreciates the feedback and notification that Truscott will push this hard.

John Ferguson summarized that the vote will not include scanning for CWTs.

K. Murdoch said, like Truscott, she is disappointed. She is just hearing it is inconvenient. These are important data. She is glad Chelan PUD is scanning CWTs for the RTR effort. Just because something is inconvenient does not mean it should not be done. Keller said he appreciates the feedback, and noted that multiple reasons were provided.

Rock Island and Rocky Reach HCP Coordinating Committees representatives present approved the 2023 Rock Island Bypass Monitoring Plan, as revised, and the 2023 RRJSF Protocol, as revised.

C. DECISION: 2023 Rock Island and Rocky Reach Fish Spill Plan (Lance Keller)

The draft 2023 Rock Island and Rocky Reach Fish Spill Plan was distributed to the Rock Island and Rocky Reach HCP Coordinating Committees by Kristi Geris on February 15, 2023, and was available for a 30-day review with edits and comments due to Lance Keller by March 17, 2023. Keller said no comments were received.

Rock Island and Rocky Reach HCP Coordinating Committees representatives present approved the 2023 Rock Island and Rocky Reach Fish Spill Plan.

D. Rock Island Dam Right Bank Adult Fishway TRE Closure SOA (Lance Keller)

Lance Keller said all of Chelan PUD's effort has been focused on the 2023 Rocky Reach CSS, so this discussion will need to be postponed to next month. Keller plans to distribute data on this topic, and will likely reach out to representatives, before the meeting in April 2023.

John Ferguson said a discussion next month and a decision in May 2023 seems possibly too late because this will be into high spill period when the entrance may have to be closed. Ferguson suggested data, discussions, and possibly a draft SOA no later than 10 days before the meeting, for a decision in April 2023. Keller agreed.

Chelan PUD will distribute a draft Rock Island Dam Right Bank Adult Fishway TRE Closure SOA for review no later than April 15, 2023 (10 days prior), for discussion and decision during the HCP Coordinating Committees meeting on April 25, 2023. The SOA will be provided along with background information on the following: a) Chelan PUD will verify dates and times the Rock Island adult ladder TRE was closed while calculating adult conversion rates for the 2021 Rock Island CSS; and b) Chelan PUD will provide a synopsis of the engineering options considered to meet the minimum 1.0-foot head differential target at all four entrances at the Rock Island Dam right bank adult fishway during high spring flows in the Columbia River. *(Note: a draft SOA was distributed to the Rock Island HCP Coordinating Committee by Kristi Geris on April 17, 2023.)*

E. Draft Non-Capacity Amendment to Revise the Rock Island Recreation Plan for the Walla Walla Point Park Improvements (Lance Keller)

A draft non-capacity amendment to revise the Rock Island Recreation Plan for the Walla Walla Point Park improvements was distributed to the Rock Island HCP Coordinating Committee by Kristi Geris on March 27, 2023, and is available for review with edits and comments due to Lance Keller by April 28, 2023.

Keller said Chelan PUD's License Compliance Department is requesting Rock Island HCP Coordinating Committee review and comment on this amendment. This amendment is proposing a new sports court, American Disabilities Act-accessible trail, and new fencing. All improvements are well above the shoreline. This amendment for review was distributed to all committees and forums associated with the Rock Island license.

John Ferguson asked where Walla Walla Point Park is located. Keller said this park is located upstream of the last amendment (Wenatchee Riverfront Park Development). Scott Carlon asked whether this is related to the Confluence Parkway improvements, and Keller said no.

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

Lance Keller said work continues on Turbine Unit B3, and the estimated return-to-service date of Q1 2024 is still holding.

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

Lance Keller said, as noted via email, Turbine Unit C5 was returned to service on March 1, 2023, and is operating as planned. Turbine Units C1 to C10 are all operational in time for the 2023 Rocky Reach CSS. Work is ongoing in Turbine Unit C11.

Chelan PUD will continue providing Rocky Reach Dam and Rock Island Dam turbine unit maintenance updates as information becomes available.

H. Rock Island and Rocky Reach Anadromous Fish Agreements and Habitat Conservation Plans 2023 Comprehensive Progress Report (Lance Keller)

Lance Keller reminded the Rock Island and Rocky Reach HCP Coordinating Committees that the draft *Rock Island and Rocky Reach Anadromous Fish Agreements and Habitat Conservation Plans 2023 Comprehensive Progress Report* is available for review with edits and comments due to Keller by April 11, 2023.

IV. Douglas PUD

A. DECISION: 2023 Broodstock Collection Protocols (Tom Kahler)

The 2023 Broodstock Collection Protocols approved by the HCP Hatchery Committees and PRCC Hatchery Subcommittee were distributed to the Wells HCP Coordinating Committee on March 16, 2023.

Tom Kahler said this document for approval is the same as usual. John Ferguson said Wells HCP Coordinating Committee representatives have been involved in these discussions via the HCP Hatchery Committee, and he asked whether there is anything remarkable to discuss before voting. Nothing was expressed.

Wells HCP Coordinating Committee representatives present approved the 2023 Broodstock Collection Protocols.

The version distributed to the Wells HCP Coordinating Committee on March 16, 2023, is the final version of this document.

B. Wells Project Land-Use Permit Applications for LUP 720-02, LUP 726-02, and LUP 830-01 (Tom Kahler)

Wells Project Land-Use Permit Applications for LUP 720-02 and LUP 726-02 were distributed to the Wells HCP Coordinating Committee by Kristi Geris on March 1, 2023, and are available for a 30-day review with edits and comments due to Tom Kahler by March 31, 2023.

Wells Project Land-Use Permit Application for LUP 830-01 was distributed to the Wells HCP Coordinating Committee by Geris on March 20, 2023, and is available for an expedited review with edits and comments due to Kahler by March 31, 2023.

Kahler said these are all existing activities that have not been permitted. This agenda topic is an opportunity to address comments, if any. None were expressed.

V. Washington Department of Fish and Wildlife

A. Steelhead Overshoots Follow-up and Next Steps (Chad Jackson and Andrew Murdoch)

John Ferguson asked for questions or comments on this topic. None were expressed. Ferguson said this will be added to next month's agenda.

VI. HCP Administration

A. Next Meetings (John Ferguson)

The next scheduled HCP Coordinating Committees meeting is on Friday, March 31, 2023, from 4:00 p.m. to no later than 5:00 p.m. and is to be held by conference call.

The HCP Coordinating Committees meeting on April 25, 2023, is from 12:00 p.m. to no later than 4:00 p.m. and will be held in person at the Douglas PUD Auditorium in East Wenatchee, Washington.

The HCP Coordinating Committees meetings on May 23 and June 27, 2023, are from 12:00 p.m. to no later than 4:00 p.m. and will be held in person at the Douglas PUD Auditorium in East Wenatchee, Washington.

List of Attachments

Attachment A List of Attendees

Attachment B 2023 Rocky Reach CSS Discussion Slides

Attachment A
List of Meeting Attendees

Name	Organization
John Ferguson	Anchor QEA, LLC
Kristi Geris	Anchor QEA, LLC
Tracy Hillman ^{††}	BioAnalysts
Lance Keller [*]	Chelan PUD
Bill Towey [*]	Chelan PUD
Catherine Willard ^o	Chelan PUD
Kyle Hatch ^o	Blue Leaf Environmental
Tom Kahler [*]	Douglas PUD
Andrew Gingerich [*]	Douglas PUD
Scott Carlon [*]	National Marine Fisheries Service
Jim Craig [*]	U.S. Fish and Wildlife Service
Chad Jackson [*]	Washington Department of Fish and Wildlife
Andrew Murdoch [*]	Washington Department of Fish and Wildlife
Kirk Truscott [*]	Confederated Tribes of the Colville Reservation
Keely Murdoch [*]	Yakama Nation

Notes:

- * Denotes HCP Coordinating Committees member or alternate
- †† Joined by phone for the HCP Hatchery and Tributary Committees update
- o Joined by phone for Item III-A