

Memorandum

To: Wells, Rocky Reach, and Rock Island HCP
Coordinating Committees Date: January 23, 2024

From: John Ferguson, HCP Coordinating Committees Chairman

cc: Kristi Geris, HCP Coordinating Committees Support

Re: Final Minutes of the December 19, 2023, 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, December 19, 2023, from 9:00 a.m. to 11:30 a.m. Attendees are listed in Attachment A to these conference call minutes.

Action Item Summary

1. The National Marine Fisheries Service (NMFS) will provide a summary of study fish and tagging protocols used in studies conducted at federal dams on the Columbia and Snake rivers in recent years, as well as a publication recently provided to Scott Carlon by Trevor Conder (NMFS biologist) (Item I-C). (*Note: Scott Carlon provided two study reports^{1,2} on January 23, 2024, which Kristi Geris distributed to the HCP Coordinating Committees that same day.*)
2. Chelan PUD will distribute a patch occupancy model (POM) process diagram for consideration regarding the steelhead overshoots discussion (Item I-C).
3. Chelan PUD will search their records for past investigations into dead-fish releases in the Upper Columbia River and will distribute any data located (Item I-C).
4. Chelan PUD will work with the authors of Skalski et. al (2023) to revise the language about “minimum adult survival” on page 13 of the final report, *Habitat Conservation Plan Confirmation Survival Study of Yearling Chinook Salmon through the Rocky Reach Project in 2023*, and will provide the final revised report for distribution (Item I-C).
5. Anchor QEA, LLC (Anchor QEA), will redistribute passive integrated transponder (PIT) data for nighttime detections of wild yearling spring Chinook Salmon at the Rocky Reach surface collector that Washington Department of Fish and Wildlife (WDFW) shared while discussing the 2023 Rocky Reach Confirmation Survival Study (CSS) protocols (Item III-C). (*Note: Kristi Geris redistributed WDFW’s comments on the draft 2023 Rocky Reach CSS Study Plan, which were originally distributed on February 14, 2023.*)

¹ Ham, KD, RA Harnish, AH Colotelo, KA Deters, J Martinez, PS Titzler, JR Skalski, RL Townsend, T Fu, X Li, CA Duberstein, ZD Deng, and GM McMichael. 2019. *Survival and Passage of Yearling and Subyearling Chinook Salmon and Steelhead at Lower Granite Dam, 2018: Technical Report*. PNNL-29052. Final report submitted by the Pacific Northwest National Laboratory to the U.S. Army Corps of Engineers, Walla Walla, Washington.

² Harnish, RA, JR Skalski, RL Townsend, and KD Ham. 2020. *In Search of a Cost-Effective Approach for Estimating Dam Passage Survival*. North American Journal of Fisheries Management 40:865–882, 2020. ISSN: 0275-5947. DOI: 10.1002/nafm.10448.

6. The Rock Island HCP Coordinating Committee will review the draft Confluence Parkway Non-Capacity Amendment and come prepared with questions, if any, for discussion during the HCP Coordinating Committees conference call on January 23, 2024 (Item III-D).
7. The Wells HCP Coordinating Committee will submit comments on the draft 2023 Post-Season Bypass Report and Passage-Dates Analysis no later than December 29, 2023, with a goal of a vote via email by close of business (COB) on January 5, 2024 (Item IV-A). *(Note: No comments were received on the draft report, and Wells HCP Coordinating Committee representatives will submit a vote via email by January 5, 2024.)*
8. Douglas PUD will target distributing the draft *2024 Total Dissolved Gas Abatement Plan* and appended *Wells Bypass Operating Plan (2024 GAP/BOP)* for a 30-day review by January 10, the draft document will be discussed during the HCP Coordinating Committees conference call on January 23, and Douglas PUD will request approval of the document during the HCP Coordinating Committees conference call on February 27, 2024 (Item IV-B). *(Note: the draft 2024 GAP/BOP was distributed on January 9, 2024.)*
9. NMFS will verify what federal projects are doing in terms of providing a surface passage route to address steelhead overshoots (Item V-A).
10. HCP Coordinating Committees representatives will identify questions that need to be resolved or data they have questions about to include in a steelhead overshoots summary table and will provide this input to Anchor QEA, which will coordinate with WDFW regarding POM questions, for further discussions during future HCP Coordinating Committees meetings, with a goal of reaching resolution on this topic by Q1 2024 (Item V-A).
11. The next scheduled HCP Coordinating Committees meeting is on Tuesday, January 23, 2024, from 12:00 p.m. to no later than 4:00 p.m. and is to be held by conference call (Item VI-B).

Decision Summary

1. The Rocky Reach HCP Coordinating Committee approved the statement of agreement (SOA), *Approval of the Results of the 2023 Rocky Reach Spring-Run Chinook Salmon Confirmation Survival Study*, as revised, via email as follows: Chelan PUD, NMFS, U.S. Fish and Wildlife Service (USFWS), WDFW, and the Yakama Nation (YN) approved on December 15, and the Confederated Tribes of the Colville Reservation (CTCR) approved on December 16, 2023 (Item III-A).

Agreements

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

Review Items

1. Wells Project Land-Use Permit Application for LUP 112-01 was distributed to the Wells HCP Coordinating Committee by Kristi Geris on November 20, 2023, and is available for a 30-day review with edits and comments due to Tom Kahler by December 20, 2023.
2. The draft 2023 Post-Season Bypass Report and Passage-Dates Analysis was distributed to the Wells HCP Coordinating Committee by Geris on November 30, 2023. Edits and comments are due to Kahler by December 29, 2023, and a vote via email will be requested by COB January 5, 2024 (Item IV-A).
3. The draft Confluence Parkway Non-Capacity Amendment was distributed to the Rock Island HCP Coordinating Committee by Geris on December 12, 2023, and is available for a 60-day review with edits, comments, or indication of no comment, due to Lance Keller by February 10, 2024 (Item III-D).
4. The *2023 Biological Evaluation of the Rocky Reach Juvenile Fish Bypass System Draft Report and 2023 Rock Island Dam Smolt Monitoring Program and Gas Bubble Trauma Evaluation Draft Report* were distributed to the Rocky Reach and Rock Island HCP Coordinating Committees by Geris on December 13, 2023, and are available for a 60-day review, with edits and comments due to Keller by February 12, 2024. Chelan PUD will request approval of the reports during the HCP Coordinating Committees conference call on February 27, 2024 (Item III-B).
5. The draft *Rock Island Dam Smolt Monitoring and Gas Bubble Trauma Evaluation Plan 2024* and draft *2024 Rocky Reach Juvenile Fish Bypass System Operations Plan* were distributed to the Rocky Reach and Rock Island HCP Coordinating Committees by Geris on December 13, 2023, and are available for a 60-day review, with edits and comments due to Keller by February 12, 2024. Chelan PUD will request approval of the plans during the HCP Coordinating Committees conference call on February 27, 2024 (Item III-C).
6. The draft 2024 GAP/BOP was distributed to the Wells HCP Coordinating Committee by Kristi Geris on January 9, 2024, and is available for a 30-day review with edits and comments due to Tom Kahler by February 10, 2024. Douglas PUD will request approval of the draft plan during the HCP Coordinating Committees conference call on February 27, 2024 (Item IV-B).
7. The draft *2024 Wells HCP Action Plan* was distributed to the Wells HCP Coordinating Committee by Kristi Geris on January 23, 2024, and is available for a 30-day review with edits and comments due to Tom Kahler by February 22, 2024. Douglas PUD will request approval of the draft plan during the HCP Coordinating Committees conference call on February 27, 2024.
8. The draft *2024 Rocky Reach and Rock Island HCP Action Plan* and draft *2024 Fish Spill Plan, Rock Island and Rocky Reach Dams Public Utility District No. 1 of Chelan County* were distributed to the Rocky Reach and Rock Island HCP Coordinating Committees by Kristi Geris on January 23, 2024, and are available for a 30-day review with edits and comments due to Lance Keller by February 22, 2024. Chelan PUD will request approval of the draft plans during the HCP Coordinating Committees conference call on February 27, 2024.

Finalized Documents

1. The final *Rock Island and Rocky Reach Anadromous Fish Agreements and Habitat Conservation Plans 2023 Comprehensive Progress Report* (Rock Island and Rocky Reach HCP 2023 No Net Impact [NNI] Comprehensive Progress Report), as revised, was distributed to the HCP Coordinating Committees by Kristi Geris before the conference call on December 19, 2023 (Item III-G).
2. The final SOA, *Approval of the Results of the 2023 Rocky Reach Spring-Run Chinook Salmon Confirmation Survival Study*, as revised, was distributed to the HCP Coordinating Committees by Geris after the conference call on December 19, 2023 (Item III-A).
3. The final *2022 Public Utility District No. 1 Of Douglas County, Northern Pikeminnow Removal and Research Program*, which was approved by the Wells HCP Coordinating Committee on July 31, 2023, after no disapprovals were received prior to the 60-day review period deadline, was distributed to the HCP Coordinating Committees by Geris on January 22, 2024.

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) 2023 Rocky Reach and Rock Island Juvenile Bypass Reports; 2) Confluence Parkway Non-Capacity Amendment; and 3) Rock Island and Rocky Reach HCP 2023 NNI Comprehensive Progress Report.
- Tom Kahler added the following: 1) *2024 Total Dissolved Gas Abatement Plan* and appended *Wells Bypass Operating Plan (2024 GAP/BOP)*; and 2) Wells HCP 2023 NNI Comprehensive Progress Report.

B. Meeting Minutes Approval (John Ferguson)

The HCP Coordinating Committees reviewed the revised draft November 28, 2023, conference call minutes. Kristi Geris said edits and comments received from members of the Committees were mostly minor clarifications and were incorporated into the revised minutes. There is one question for Andrew Murdoch asking whether his comment about a "dead-fish standard" in federal studies should actually say "dead-fish release," and A. Murdoch confirmed this edit is correct. Geris reviewed an edit by Douglas PUD, which corrected a statement that was mischaracterized in the draft minutes, and the Committees reviewed and approved the edit. Lastly, Geris noted the addition of documents distributed under Review Items. HCP Coordinating Committees representatives present approved the November 28, 2023, conference call minutes, as revised. Scott Carlon abstained because a NMFS representative did not participate in the November 28, 2023, conference call.

C. Last Meeting Action Items (John Ferguson)

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

- NMFS will provide a summary of study fish and tagging protocols used in studies conducted at federal dams on the Columbia and Snake rivers in recent years (Item I-C).*

Scott Carlon said he connected with Trevor Conder who provided Carlon with a publication for review. Carlon plans to review it again before distributing it to the HCP Coordinating Committees. He suggested that this action item be carried forward.
- Douglas PUD will draft for Wells HCP Coordinating Committee review an updated section in the Wells HCP 2023 NNI Comprehensive Progress Report that summarizes “whether each Plan Species is rebuilding,” per the Wells HCP (Item I-C).*

This will be discussed during today’s conference call.
- Chelan PUD will distribute a POM process diagram for consideration regarding the steelhead overshoots discussion (Item I-C).*

This action item will be carried forward.
- Anchor QEA will distribute the final 2024 HCP Coordinating Committees and Priest Rapids Coordinating Committee (PRCC) meeting schedule to the HCP Coordinating Committees, PRCC, and Tracy Hillman (HCP Tributary and Hatchery Committees Chairman) (Item I-C).*

Kristi Geris distributed the final schedule after the HCP Coordinating Committees conference call on November 28, 2023.
- Chelan PUD will correct a formatting issue with the secondary y-axis on graphs in the Rocky Reach and Rock Island HCPs, Draft 2023 Fish Spill Report before distributing the final approved report, as revised (Item III-A).*

This correction was made, and the final report, as revised, was distributed on December 1, 2023.
- Chelan PUD will follow up with NMFS regarding Rocky Reach and Rock Island HCP Coordinating Committees approval of the Rocky Reach and Rock Island HCPs, Draft 2023 Fish Spill Report, as revised (Item III-A).*

Lance Keller said he and Scott Carlon connected after the HCP Coordinating Committees conference call on November 28, 2023, and discussed Chelan PUD topics. Carlon agreed.
- Chelan PUD will search their records for past investigations into dead-fish releases in the Upper Columbia River and will distribute any data located (Item III-B).*

Keller said Chelan PUD is still reviewing their library of old reports. This action item will be carried forward.
- Chelan PUD will work with the authors of Skalski et. al (2023) to revise the language about “minimum adult survival” on page 13 of the final report, Habitat Conservation Plan Confirmation Survival Study of Yearling Chinook Salmon through the Rocky Reach Project in 2023, and will provide the final revised report for distribution (Item III-B).*

Keller recalled that this was a request from Kirk Truscott during last month's meeting, but since the revision is to the report authored by Skalski et. al (2023), Keller needs to work with those authors to complete the revision. This action item will be carried forward.

9. *Chelan PUD will distribute a revised draft SOA, Approval of the Results of the 2023 Rocky Reach Spring-Run Chinook Salmon Confirmation Survival Study, by COB on November 28 and Rebecca Buchanan's memorandum by November 29; the Rocky Reach HCP Coordinating Committee will submit edits and comments on the revised SOA by December 13, with a goal of a vote via email by December 14, or if needed, a vote during the HCP Coordinating Committees conference call on December 19, 2023 (Item III-B).*

The revised SOA and Buchanan's memorandum, "Potential Impact of Dead-Fish Drift on Project Survival Estimate from 2023 Rocky Reach Juvenile Survival Study," were distributed after the HCP Coordinating Committees conference call on November 28, 2023, and the revised SOA was approved via email on December 16, 2023.

10. *Chelan PUD will follow up with NMFS regarding the discussions and path forward for approving the SOA Approval of the Results of the 2023 Rocky Reach Spring-Run Chinook Salmon Confirmation Survival Study (Item III-B).*

This was completed.

11. *Douglas PUD will revise the memorandum "Wells Dam Lamprey Trapping and Fishway Modifications 2024" to include references to discussions that occurred within the Aquatic Settlement Work Group (SWG), and will provide the final revised memorandum for distribution (Item IV-A).*

The final memorandum, as revised, was distributed to the Wells HCP Coordinating Committee on November 29, 2023.

12. *Douglas PUD will follow up with NMFS regarding Wells HCP Coordinating Committee approval of the memorandum "Wells Dam Lamprey Trapping and Fishway Modifications 2024," including revisions and contingencies (Item IV-A).*

Scott Carlon said he and Tom Kahler connected yesterday on Douglas PUD topics.

13. *Douglas PUD will distribute the 2023 Post-Season Bypass Report and Passage-Dates Analysis as soon as possible, and the Wells HCP Coordinating Committee will submit edits and comments on the draft document before the HCP Coordinating Committees conference call on December 19, with a goal of a vote via email by December 31, 2023 (Item IV-B).*

The draft report and analysis were distributed on November 30, 2023. This will be further discussed during today's conference call.

14. *Douglas PUD will follow up with NMFS regarding the discussions and path forward for approving the 2023 Post-Season Bypass Report and Passage-Dates Analysis (Item IV-B).*

This was completed.

15. *HCP Coordinating Committees representatives will identify questions that need to be resolved or data they have questions about to include in a steelhead overshoots summary table and will provide this input to Anchor QEA, which will coordinate with WDFW regarding POM questions, for*

further discussions during future HCP Coordinating Committees meetings, with a goal of reaching resolution on this topic by Q1 2024 (Item V-A).

This will be further discussed during today's conference call.

16. *Anchor QEA will distribute the updated bullet list of possible agenda topics for the Subyearling Chinook Salmon Workshop scheduled for June 11, 2024, as discussed during today's HCP Coordinating Committees conference call, and the Joint Fisheries Parties will discuss this list with the PRCC (Item VI-A).*

Kristi Geris distributed this list after the HCP Coordinating Committees conference call on November 28, 2023.

II. HCP Hatchery and Tributary Committees Update

A. HCP Hatchery and Tributary Committees Update (John Ferguson)

John Ferguson said the HCP Hatchery Committees did not meet in December 2023. The next meeting of the HCP Hatchery Committees will be on January 17, 2024.

Ferguson updated the HCP Coordinating Committees on the following actions and discussions that occurred during the HCP Tributary Committees meeting on December 14, 2023:

- Nason Kahler Instream Complexity Phase II Project: The Rocky Reach HCP Tributary Committee received a time extension request from Chelan County Natural Resources Department (CCNRD) on the Nason Kahler Instream Complexity Phase II Project. The sponsor indicated that they would like to extend the contract from December 31, 2023, to December 31, 2024, because there are four wood structures they were unable to install in 2023, and those structures will have to be installed during the in-water work window in 2024. The Rocky Reach HCP Tributary Committee agreed to extend the contract period to December 31, 2024.
- Peshastin Creek River Mile (RM) 2.5 Project: The Rocky Reach HCP Tributary Committee received a time extension request from Cascade Fisheries on the Peshastin Creek RM 2.5 Project. The sponsor indicated that they would like to extend the contract from December 31, 2023, to April 30, 2024, because they need the extra time to reconvene the design team and make some refinements to the 30% designs. The Rocky Reach HCP Tributary Committee agreed to extend the contract period to April 30, 2024.
- Twisp to Carlton Reach Side Channel Project: The Wells HCP Tributary Committee received a time extension request from Cascade Fisheries on the Twisp to Carlton Reach Side Channel Project. The sponsor indicated that they would like to extend the contract from November 30, 2023, to March 31, 2024, because they need extra time to work on landowner outreach and coordination. The Wells HCP Tributary Committee agreed to extend the contract period to March 31, 2024.

- Nason Kahler Instream Complexity Phase I and Phase II Projects: The Rocky Reach HCP Tributary Committee received a budget amendment request from CCNRD on the Nason Kahler Instream Complexity Phase I and Phase II Projects. The sponsor requested an additional \$22,353.00 for the Phase I Project and \$24,588.60 for the Phase II Project. These additional funds are needed to complete the project. The Rocky Reach HCP Tributary Committee approved additional funding for both the Phase I and Phase II projects.
- Goose Creek Watershed Restoration Projects: The Rocky Reach HCP Tributary Committee received a budget amendment request from Cascade Fisheries on the Goose Creek Watershed Restoration Project. The sponsor asked to move \$10,434.89 from Sponsor Salaries, Travel, and Indirect/Overhead to Contract Labor. The Rocky Reach HCP Tributary Committee approved the budget amendment. The total contribution from the Rocky Reach HCP Tributary Committee for this project will not change.
- Twisp to Carlton Reach Side Channel Project Discussion: Cascade Fisheries and their consultant joined the meeting to discuss the conceptual design and feasibility assessment for the Twisp to Carlton Reach Side Channel Project, which is located at RM 35.5 on the Methow River. The sponsor described various elements of the preferred design and asked the Wells HCP Tributary Committee for feedback. The Committee provided feedback during the meeting and will prepare written comments for the sponsor by early January 2024.
- Upper Columbia Salmon Recovery Board (UCSRB) Science Conference: The UCSRB is hosting a science conference from January 24 to 25, 2024. In the past, the HCP Tributary Committees have agreed to contribute financially to UCSRB conferences. This year, the Committees agreed to contribute \$1,000 from each Plan Species Account to the conference.
- Rock Island and Rocky Reach Plan Species Accounts Review: Every 5 years the Rock Island and Rocky Reach HCP Tributary Committees request an external financial review of all financial transactions made by the two Committees. The Committees selected the accounting firm Cordell, Neher & Company to conduct the review. The review will occur in 2024. Funds to pay for the review come from the Rock Island and Rocky Reach Administrative Accounts.
- Next Meeting: The next meeting of the HCP Tributary Committees will be on January 11, 2024.

III. Chelan PUD

A. SOA, Approval of the Results of the 2023 Rocky Reach Spring-Run Chinook Salmon Confirmation Survival Study (Lance Keller)

The Rocky Reach HCP Coordinating Committee approved the SOA, *Approval of the Results of the 2023 Rocky Reach Spring-Run Chinook Salmon Confirmation Survival Study*, as revised, via email as follows: Chelan PUD, NMFS, USFWS, WDFW, and the YN approved on December 15, and the CTCR approved on December 16, 2023.

The final SOA was distributed to the HCP Coordinating Committees by Kristi Geris after the conference call on December 19, 2023.

B. 2023 Rocky Reach and Rock Island Juvenile Bypass Reports (Lance Keller)

The *2023 Biological Evaluation of the Rocky Reach Juvenile Fish Bypass System Draft Report* and *2023 Rock Island Dam Smolt Monitoring Program and Gas Bubble Trauma Evaluation Draft Report* were distributed to the Rocky Reach and Rock Island HCP Coordinating Committees by Kristi Geris on December 13, 2023, and are available for review.

Lance Keller said these are annual reports that Chelan PUD distributes for review each December. This year's reports are standard and similar to previous years. The only thing of note is in the Rock Island report. In August 2023, there were two Bull Trout mortalities in fairly close proximity to one another on the calendar, which prompted an investigation of the juvenile gatewell collection system associated with Powerhouse 2. A counterweight hanging on a regulating gate had come dislodged and fallen into the bypass channel. There were no observed impacts to juvenile salmonids or steelhead. This portion of the bypass channel was isolated but did not require a full shutdown of the system, and the counterweight was retrieved and reinstalled. Keller and Bill Gale spoke about this briefly offline. USFWS was notified of the incident within the required timeline and provided with the carcasses. While the right bank fishway at Rock Island Dam is dewatered for annual winter maintenance, mechanics plan to look into whether there is a better way to secure this counterweight so that this does not happen again.

Keller said finalizing these reports is not time sensitive. He acknowledged that this time of year is busy for the HCP Coordinating Committees; therefore, Chelan PUD is looking to the Committees to define the review period. John Ferguson suggested, considering that Gale is new to these reports, providing a 60-day or 90-day review. Keller agreed that this is a good idea. Scott Carlon suggested the 60-day review.

The *2023 Biological Evaluation of the Rocky Reach Juvenile Fish Bypass System Draft Report* and *2023 Rock Island Dam Smolt Monitoring Program and Gas Bubble Trauma Evaluation Draft Report* are available for a 60-day review, with edits and comments due to Keller by February 12, 2024. Chelan PUD will request approval of the reports during the HCP Coordinating Committees conference call on February 27, 2024.

C. 2024 Rocky Reach and Rock Island Juvenile Bypass Protocols (Lance Keller)

The draft *Rock Island Dam Smolt Monitoring and Gas Bubble Trauma Evaluation Plan 2024* and draft *2024 Rocky Reach Juvenile Fish Bypass System Operations Plan* were distributed to the Rocky Reach and Rock Island HCP Coordinating Committees by Kristi Geris on December 13, 2023, and are available for a 60-day review, with edits and comments due to Lance Keller by February 12, 2024.

Lance Keller said these are also annual documents that most HCP Coordinating Committees representatives are familiar with. Typically, these are updated via a simple date change. However, this year, there are two noteworthy changes, which have been discussed in previous HCP Coordinating Committees meetings. First, both plans integrate scanning for coded wire tags (CWTs) in Chinook Salmon and steelhead. Chelan PUD plans to purchase two V-Blocks (or V-Detectors), a main and a backup, specific to each facility. Second, both plans will reflect the early bypass system start date of March 1, 2024, as previously agreed to. This is why Chelan PUD is requesting a 60-day review, so Chelan PUD can request approval of the plans during the HCP Coordinating Committees conference call on February 27, 2024, ahead of the bypass start date. He expects that distribution of these plans will also reignite discussions about sampling protocols.

Keely Murdoch said the YN appreciates the addition of the CWT scanning at Rock Island and Rocky Reach. Regarding the early start up, particularly at Rocky Reach, from March 1 to April 1, only wild fish will be moving during this time period. There is no expectation that hatchery fish will be passing during this time. Acknowledging that wild fish are a very small proportion of the run, and understanding that wild fish move primarily at night, particularly when water temperatures are cold, she questions the utility of early start up sampling only occurring during the day. She understands that index time periods need to be comparable to normal operations, and she understands it makes sense to sample during the day during standard operations. Her concern is the normal indexing time period will not adequately sample wild fish from March 1 to April 1. She recalled that in the late 1990s, the prototype sampling configuration at Rocky Reach allowed staff to set the trap in the evening, collect fish overnight, then work up the fish in the morning. She asked whether the current configuration might allow this.

Keller said K. Murdoch's comments are in line with what she has shared in the past. Keller reiterated the reasoning behind the index sampling time period is to be comparable to past data. Chelan PUD has consulted with Dr. John Skalski (University of Washington, Columbia Basin Research) on this. Chelan PUD knows from around-the-clock sampling in the past that fish are passing at all hours, and understands the YN is concerned about sampling being representative. However, index sample data are calibrated against data in the Columbia River Data Access in Real Time (DART) database. Sampling is designed to index presence or absence during specific time frames so that data from March 1 to April 1 can be compared to April and beyond through the rest of the spring Plan Species run. That is, from a DART perspective, does 5% of the spring outmigration stretch into March? The data need to be "apples to apples" to allow DART to make this comparison. To note, the Rocky Reach surface collector PIT array (site code RRJ in the Columbia Basin PIT Tag Information System [PTAGIS]) will be running, which will provide additional resolution in March that has not been available in previous years. Regarding the sampling configuration at Rocky Reach, the capacity of the raceway is 350 fish, which requires presence of a crew to actively monitor fish as they enter the system. The trap cannot be deployed and be left unattended, not in the current configuration. K. Murdoch asked

whether Keller expects more than 350 fish a night. Keller said he is unsure, because this is the first time the system will be operated in March in the current configuration. Additionally, it is not Chelan PUD's practice to deploy a screen for an extended amount of time and leave it operating unattended.

Keller asked, further, what can be done with these data? How can these data be compared to the existing dataset? K. Murdoch said there is no reason to conduct index sampling in March if it does not adequately account for the wild migration. Sampling only during the day might be comparable to later in the season, but it may not be representative of what is moving in March. PIT detections will help inform this, but only a small proportion of what is already a small proportion is PIT-tagged. Further, it is unclear what this proportion is. She is not sure what alone can be done with PIT tag data. Sampling only during the day may be missing an opportunity. Keller said changing the sampling schedule in March means changing the schedule for the entire season which would affect the entire long-term dataset.

John Ferguson asked, to K. Murdoch's point, what is the purpose of sampling? Keller said the purpose is to make a direct comparison of the proportion of fish migrating on a specific Julian date to past Julian dates. Ferguson asked, to K. Murdoch's other point, will the PIT data be informative? Does WDFW have an estimate of this year's PIT-tagging effort at screw traps? Andrew Murdoch said he has not yet reviewed the fall 2023 data, but these analyses will be complete in the next month or so.

A. Murdoch asked whether DART is based solely on index sampling or whether it also includes PIT detections at RRJ. Keller said there is no cross-walking with RRJ detections and that DART is purely based on index sampling. A. Murdoch asked, only fish encountered? Keller said this is correct.

Scott Carlon asked K. Murdoch whether she has an idea about what hours of the night fish are moving. Is there peak movement or do fish move throughout all hours of the night? K. Murdoch said she does not recall this exact timing, but A. Murdoch shared PIT data for nighttime detections of wild yearling spring Chinook Salmon at the Rocky Reach surface collector while discussing the 2023 Rocky Reach CSS protocols, and she suggested revisiting those data. Anchor QEA will redistribute PIT data for nighttime detections of wild yearling spring Chinook Salmon at the Rocky Reach surface collector that WDFW shared while discussing the 2023 Rocky Reach CSS protocols. *(Note: Geris redistributed WDFW's comments on the draft 2023 Rocky Reach CSS Study Plan, which were originally distributed on February 14, 2023.)*

Carlon asked about the start and end times for sampling in March. Keller said in the draft protocols as currently written, for Rocky Reach, Chelan PUD is proposing that the hours for early operations be the same as the normal index sampling. Bypass operation, as well as the RRJ PIT array, will start on March 1, 2024, at 0000 hours. Index sampling will occur at the top of the hour at 0800, 0900, 1000, and 1100 hours and continue for 30 minutes. Carlon recalled that in the early 1990s, at

Bonneville Dam in early spring, a lot of fish were moving in the hour before sunrise and hour before sunset. Movements trailed off by 0100 to 0200 hours. Ferguson said this was the same at Lower Granite Dam. However, it is hard to say whether fish were actively migrating during those times or were already in the bypass system and just decided to pass through at that time.

Andrew Gingerich said he is curious to know whether it really matters which hours sampling occurs, so long as this is consistent throughout the entire run. It seems the goal is to build a frequency distribution. Say 99% of fish travel at night; so long as this percentage stays the same, one should be able to build the same frequency distribution. The intent of indexing is to collect data the same way across time, and the time is not so important, so long as the percentage stays consistent. K. Murdoch said this is true if the proportion of fish moving during the day versus night stays the same throughout the entire sample period. However, it is unknown what proportions are during March because these data do not exist. Gingerich said, hypothetically, if 99% of fish in March are moving at night, he would suspect that 99% of fish in April would also be moving at night. K. Murdoch said starting in April, hatchery fish are moving, and it is unknown whether these index samples represent what is happening when only wild fish are moving and water temperatures are colder. Conditions change from March to April. Sampling has never been done in March, and it is not fair to assume the data are the same from March to April. Gingerich agreed: data are deficient in March. He suggested looking at early April versus late April, because if there is a change, it is likely gradual. He also suggested reviewing PIT data for any dramatic changes from early April to late April. K. Murdoch agreed this is a good idea. She said if only wild fish are being missed in March, the data cannot be expanded correctly.

Ferguson asked whether Douglas PUD's available fyke net data showed any diel or other patterns in March. Tom Kahler said fyke netting did start in March. Sampling was during both day and night. Fish numbers collected in March were minimal and always under the 5% threshold, which was the basis for the April 12 bypass start date at that time. There were wild fish, but he is unclear what this represents. These data were collected prior to widespread use of data processing software, and he is unsure about the sampling protocol. He would need to ask internally to get more information.

Keller said he appreciates hearing Gingerich's perspective, which is the objective—to create a frequency distribution using a consistent methodology. He also appreciates K. Murdoch's input. He plans to review RRJ detections in past years and explore environmental cues, notably in the early and late April time frame. He reiterated that the overall goal is to produce bypass operations data that show 95% coverage for spring migrating Plan Species as a whole. Whatever is done in March will have to continue in April and May, and it will need to be comparable to the long-term dataset.

K. Murdoch said she appreciates this. She understands the goal is to figure out whether there is a need to move the bypass operations start date, but this can only be determined if the data can answer yes, the proportion of fish moving at night is constant. If the answer is no, then the index

sample collected in March may not expand correctly. If there is a difference in behavior by fish origin, again, the data are not expandable. Both need to be understood to say the index samples can be expanded. Keller clarified that the goal is not to expand the data to a 24-hour period; rather, the data need to be comparable to a specific Julian date and time. K. Murdoch said she understands this. She is saying the proportions of fish moving in March compared to April are not the same. April is overwhelmed with hatchery fish, and March is only wild fish, so 10% wild fish in one month is not the same as 10% wild fish in the other month. There does need to be an understanding of behavioral differences by origin, because what is collected during a sample period changes over time due to origin or seasonal biases.

D. Confluence Parkway Non-Capacity Amendment (Lance Keller)

Lance Keller said a draft Confluence Parkway Non-Capacity Amendment was distributed to the Rock Island HCP Coordinating Committee by Kristi Geris on December 12, 2023. Keller said this is a non-capacity amendment, which means there are no changes to the megawatts of the project. There is no in-water work. The three main changes include the following: 1) a minor change to the project boundary; 2) a change in the recreation boundary for Wenatchee Confluence State Park; and 3) elimination of the pedestrian bridge as an element of the Recreation Plan and relocation of other infrastructure associated with Wenatchee Confluence State Park. In other words, this amendment is to remove a small area out of the project boundary to create an easement for the City of Wenatchee so that the progressive design process for the Confluence Parkway can move forward.

Keller said this amendment is available for a 60-day review with edits, comments, or indication of no comment, due to him by February 10, 2024. Therefore, this amendment can also be discussed during the meeting in January 2024, if needed. Rock Island HCP Coordinating Committee representatives can contact him with questions, and Meaghan Connell's and Janel Ulrich's (Chelan PUD Licensing and Compliance Department) contact information are also included in the original email.

Scott Carlon asked about the location of the existing and proposed work. Geris shared on WebEx Attachment B and Attachment C of the draft amendment, which show aerial views of the proposed adjustments.

John Ferguson asked about adding this to the agenda in January 2024. Keller said Rock Island HCP Coordinating Committee approval is not required, but agreed that adding it to the agenda is a good idea in case there are questions.

The Rock Island HCP Coordinating Committee will review the draft Confluence Parkway Non-Capacity Amendment and come prepared with questions, if any, for discussion during the HCP Coordinating Committees conference call on January 23, 2024.

E. Rocky Reach Dam and Rock Island Dam Maintenance Updates (Lance Keller)

Lance Keller reviewed maintenance updates at Rocky Reach Dam and Rock Island Dam, as follow:

Rocky Reach Dam

Keller said that work continues on Turbine Unit C11 and Turbine Unit C10. Recall, these are the last remaining large units to have the servo rod issue addressed. Chelan PUD took over part of the disassembly of Turbine Unit C10. The wicket gates have been moved out of the powerhouse and were shipped to Voith's third party subcontractor for rehabilitation. The previous return-to-service dates are still holding (July 2024 for C11 and January 2025 for C10).

Rock Island Dam

Keller said that work continues on Turbine Unit B3. The return-to-service date has not changed (June 2024). Recall, Chelan PUD took over this work from Andritz Hydro. In Powerhouse 2, work also continues on the first bulb turbine unit, Turbine Unit U5. This work is being completed for the first time by General Electric, so crews are working and learning through the process.

F. Rocky Reach Dam and Rock Island Dam Adult Fishway Winter Maintenance Updates (Lance Keller)

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

Rock Island Dam

Keller said the right ladder was dewatered the week of December 4, and the middle ladder was dewatered on December 11, 2023, both on schedule. There were successful fish rescues in both the upper and lower right ladder and middle ladder. He will provide a summary of fish rescued shortly. There were no mortalities. All adult fish were returned upstream of Rock Island Dam, and all juvenile fish were deposited in the tailrace of Rock Island Dam, as requested by the YN during last year's winter maintenance discussions. These ladders will remain out of service for maintenance until the middle ladder is returned to service in mid-January 2024, at which point the left ladder will be dewatered for maintenance. *(Note: Keller provided fish rescue numbers to date at Rock Island Dam for this winter maintenance period after the conference call on December 19, 2023, which Kristi Geris distributed that same day.)*

John Ferguson asked whether there have been any issues to date. Keller said there have been none and that all maintenance has gone as planned and is on course for the scheduled return-to-service dates.

Rocky Reach Dam

Keller said the plan is to begin dewatering the upper ladder on January 2, 2024. Headgates will be installed at the top end of the ladder. When it is safe, crews will enter the fishway to follow the receding water, rescuing fish along the way. The entrances to the tailrace will remain open so fish in the lower fishway are not trapped during this process and can voluntarily leave the lower ladder area ahead of dewatering during the week of January 8, 2024.

G. Rock Island and Rocky Reach HCP 2023 NNI Comprehensive Progress Report (Lance Keller)

Lance Keller said the final Rock Island and Rocky Reach HCP 2023 NNI Comprehensive Progress Report, as revised, was distributed to the HCP Coordinating Committees by Kristi Geris before the conference call on December 19, 2023. Keller said Chelan PUD appreciates the thorough review of this report and Plan Species section. A comment table outlining how comments were addressed was distributed with the final report. Chelan PUD is excited to get this report finalized within the calendar year.

Bill Towey left the conference call.

IV. Douglas PUD

A. 2023 Post-Season Bypass Report and Passage-Dates Analysis (Tom Kahler)

Tom Kahler recalled walking through these results during the last meeting and indicated that no comments have been received on the draft report distributed on November 30, 2023. John Ferguson also recalled that Douglas PUD covered this topic well last month and hoped to finalize the report this calendar year. Kahler said that would be ideal. A 30-day review would have ended the week of Christmas, when most folks are out of office for the holiday, which was the reason for targeting a shorter review period. This document is a report on what has already happened, and he feels Drs. Rebecca Buchanan and Richard Townsend did a good job on the report. Douglas PUD is also supportive of a vote via email if folks need more time with the document. Ferguson suggested an email vote by December 29, 2023.

Andrew Murdoch said he has not yet reviewed this report and needs more time before a vote. Whatever deadline is chosen, he will strive to meet it. Ferguson said the target deadline was today or before December 31, 2023.

Scott Carlon said NMFS can vote today, but a vote via email by the end of the month is fine, as well.

Bill Gale said if WDFW submits comments on the report, USFWS will be reluctant to vote before reviewing the comments.

Keely Murdoch said if there is supposed to be a 30-day review for these reports, then the Wells HCP Coordinating Committee should have until December 30, 2023, to provide comments. Kahler said Douglas PUD intended to have this report available for review earlier, but it took longer to draft than expected. Finalizing the report within this calendar year is more for tidiness in the administrative record.

Ferguson said considering that December 30 is a Saturday, he suggested the Wells HCP Coordinating Committee submit comments on the draft 2023 Post-Season Bypass Report and Passage-Dates Analysis no later than December 29, 2023, with a goal of a vote via email by COB on January 5, 2024. Ferguson said if the Committee is not ready to approve by January 5, this will be further discussed during the HCP Coordinating Committees conference call on January 23, 2024. *(Note: No comments were received on the draft report, and Wells HCP Coordinating Committee representatives will submit a vote via email by January 5, 2024.)*

B. 2024 GAP/BOP (Andrew Gingerich)

Andrew Gingerich said there is a requirement in Douglas PUD's 401 Certification³ to vet these annual documents with the Aquatic SWG and Wells HCP Coordinating Committee. The Aquatic SWG reviews the GAP and appended BOP, and the BOP is the nexus with the Wells HCP Coordinating Committee. During the bypass season, the GAP/BOP is how Douglas PUD manages the river for water quality parameters such as total dissolved gas and to provide safe passage of salmon and steelhead. Each year, Douglas PUD strives to distribute the GAP/BOP for both committees' review by mid-January because Douglas PUD's Federal Energy Regulatory Commission (FERC) license requires the GAP/BOP to be filed with FERC by February 28 of each year. This means the document needs to be distributed for a 30-day review and approved by both committees in time to meet the February 28 submittal deadline. This agenda item is a notification that the 2024 GAP/BOP is forthcoming, and the 30-day review period is a hard deadline. The GAP/BOP is a straightforward document that the Wells HCP Coordinating Committee has been reviewing since 2012. Most committee members have seen this document, but there will be one change from the usual operations. During high river flow, involuntary spill is typically concentrated through Spillway 7. In 2024, Turbine Unit 6 will be offline for a long-term rebuild; therefore, the GAP/BOP will shift concentrated spill, should it occur, from Spillway 7 to Spillway 9. Whenever there are modest changes to the GAP/BOP, Douglas PUD tries to be clear about what changed, as was requested by Kirk Truscott in the past.

Douglas PUD will target distributing the draft 2024 GAP/BOP for a 30-day review by January 10, 2024. The draft document will be discussed during the HCP Coordinating Committees conference call on January 23, and Douglas PUD will request approval of the document during the HCP Coordinating Committees conference call on February 27, 2024.

³ Washington State Department of Ecology-issued Clean Water Act 401 Water Quality Certification

C. Wells HCP 2023 NNI Comprehensive Progress Report – Q1 2024 (Tom Kahler)

Tom Kahler recalled sharing last year that review of this draft report was expected by March 2023. Douglas PUD has been working with its Canadian partners, the Department of Fisheries and Oceans Canada (DFO) and Okanagan Nation Alliance (ONA), to develop the Fish and Water Management Tool component of the report. This has been a substantial effort by DFO, ONA, and other collaborators. Douglas PUD's last update estimated that a draft would be available by early Q4 2023, with a goal of finalizing the report in this calendar year. Canadian parties have done well but are not quite done with their sections of the report. Douglas PUD has a meeting with them on December 15, 2023, to discuss how to wrap up the final products. Douglas PUD now anticipates the draft report, including an updated section that summarizes "whether each Plan Species is rebuilding," will be ready by Q1 2024. This agenda item is just an update that Douglas PUD, DFO, and ONA are still working on this.

John Ferguson asked whether there are questions. None were expressed.

D. Wells Dam Maintenance Update (Andrew Gingerich)

Andrew Gingerich said there are no new updates on dam safety and the east embankment work since last month.

Gingerich said, as mentioned under the GAP/BOP discussion, Turbine Unit 6 will be out of service for a rebuild for approximately 1 year. The current schedule has the unit being offline through August 2024. Turbine Unit 6 operation has some influence on bypass operations, which will be described in the Spill Playbook that is appended to the GAP. There are no other modifications to bypass operations that may affect Plan Species. Douglas PUD expects the bypass to run and function as normal because the GAP/BOP is proposing to concentrate spill through locations with automatic gates; therefore, the threshold for pulling bypass barriers is back up to the normal 200,000 cubic feet per second (200 kcfs). In the past couple of years, this needed to be lowered to 175 kcfs due to ongoing maintenance and per the Wells Dam Emergency Action Plan.

Gingerich said gates 11 and 3 are not expected to be available due to maintenance. These gates are not located in juvenile bypass bays or spillways. Bypass operations will rely on Spillways 2, 4, 6, 8, and 10. These locations will have bypass baffle barriers in place.

E. Wells Dam Adult Fishway Winter Maintenance Update (Tom Kahler)

Tom Kahler said a fish salvage memorandum describing dewatering activities in the Wells Dam east fishway was distributed to the Wells HCP Coordinating Committee by Kristi Geris on December 7, 2023. Crews dewatered the east fishway for annual maintenance beginning on November 27 and concluded on December 5, 2023. The crane broke down, so the second part of dewatering could not be completed until the following week; and then there was a pumping issue, so dewatering the

collection gallery took 2 days. Crews were able to quickly turn around the regular maintenance work, and the east fishway is now back in service.

Kahler said crews dewatered the west fishway for annual maintenance beginning on December 13 and concluded on December 18, 2023. A fish salvage memorandum describing these activities will be distributed once Douglas PUD receives fish salvage numbers from WDFW. He anticipates the ladder will be returned to service by January 11, 2024. John Ferguson asked whether dewatering the west fishway went smoothly and whether there is anything notable. Kahler said the west fishway went well and is always easier compared to dewatering the east fishway, which requires pumping water across the project. Ferguson noted the 44 Pacific Lamprey salvaged from the east fishway and asked about numbers in the west fishway. John Rohrback said in the west fishway, numbers of rescued Pacific Lamprey were on the order of 10 or fewer. *(Note: a fish salvage memorandum describing dewatering activities in the Wells Dam west fishway was distributed to the Wells HCP Coordinating Committee by Geris on December 21, 2023.)*

V. WDFW

A. Steelhead Overshoots Follow-Up and Next Steps (John Ferguson)

John Ferguson said the HCP Coordinating Committees have been discussing steelhead overshoots for a year now. There is an action item for HCP Coordinating Committees representatives to identify questions that need to be resolved or data they have questions about and provide this input to Anchor QEA, which will coordinate with WDFW regarding POM questions. The goal is to reach a resolution on this topic by the end of Q1 2024.

Lance Keller said Chelan PUD has no updates for today but plans to continue working on the POM diagram action item and reviewing available data and past presentations provided to date on in-basin and out-of-basin overshoots.

Andrew Gingerich said Douglas PUD has spent some time thinking about what the data can and cannot say and whether there are additional data to inform the question raised by WDFW. It seems WDFW is proposing some sort of management action—surface passage has been described—however, the details are not quite clear to him. He has heard surface passage is the way to go to address the steelhead overshoot issue, but he is not sure anyone has collectively vetted technical information pre- and post-surface spill operations at a location to inform how effective this action has been. He has not seen these data or how the data were evaluated.

Ferguson asked whether Douglas PUD is interested in reviewing reports on how effective surface spill is and how it is measured, to gain a better sense of the basis for the action. Gingerich said yes. He has heard that Douglas PUD and Chelan PUD are the only districts not doing this, and everyone else

is. However, he has yet to see data showing how effective this management action is, which he thinks is important.

Chad Jackson said, from a process standpoint, WDFW wants to reach agreement on a problem statement and the order of magnitude. Once this science is agreed to, then the discussion will be about a corrective fix. Surface spill has been mentioned by WDFW. Andrew Murdoch has published papers showing that a portion of overshoots made it back downstream from Priest Rapids Dam when the project was providing surface spill. A. Murdoch said he will locate and provide a few surface spill studies for distribution to the HCP Coordinating Committees. *(Note: A. Murdoch provided these studies after the conference call on December 19, 2023, which Kristi Geris distributed that same day.)*

Keely Murdoch said the Committees should discuss what a surface passage route means, because it means something different at every project. Perhaps just doing the same thing as Grant PUD is not the best approach. The federal projects have been doing what she believes is minimal surface passage, something like 4 hours per day, 3 days per week. She understands this is increasing now, she thinks by double. As the Committees review data from different projects, keep in mind what the project is doing in relation to the results, and whether what is being done is sufficient.

Scott Carlon said K. Murdoch's guess about surface spill at federal projects sounds about right, but he will verify what the federal projects are doing in terms of providing a surface passage route to address steelhead overshoots.

Ferguson thanked Jackson for clarifying WDFW's stance—are the Committees agreeing or disagreeing on the science, and what is the degree of the problem. Ferguson appreciates this stepwise process, and he suggested carrying this action item forward into Q1 2024.

VI. HCP Administration

A. Subyearling Chinook Salmon Workshop (John Ferguson)

John Ferguson recalled that during last month's meeting, he assigned Committees members to contact potential speakers. Before that meeting, the three PUDs met to coordinate on the workshop and topics. Following the HCP Coordinating Committees meeting in November, there was an action item to share these discussions with the PRCC. The three PUDs also identified a need to reconvene following their meeting. There is now a PUD planning call scheduled for January 16, 2024, at 10:00 a.m., and this topic is also on the HCP Coordinating Committees' agenda for January 23, 2024. At that point, hopefully the agenda is set, and members can start contacting speakers for a Subyearling Chinook Salmon Workshop on June 11, 2024.

B. Next Meetings (John Ferguson)

The next scheduled HCP Coordinating Committees meeting is on Tuesday, January 23, 2024, from 12:00 p.m. to no later than 4:00 p.m. and is to be held by Microsoft Teams conference call. Microsoft Teams will replace WebEx moving forward.

The HCP Coordinating Committees meeting on February 27, 2024, is from 12:00 p.m. to no later than 4:00 p.m. and will be held by conference call.

The HCP Coordinating Committees meeting on March 26, 2024, is from 12:00 p.m. to no later than 4:00 p.m. and will be held in-person at the Chelan PUD Service Center in Wenatchee, Washington.

List of Attachments

Attachment A List of Attendees

Attachment A
List of Conference Call Attendees

Name	Organization
John Ferguson	Anchor QEA, LLC
Kristi Geris	Anchor QEA, LLC
Lance Keller*	Chelan PUD
Bill Towey* ^o	Chelan PUD
Tom Kahler*	Douglas PUD
Andrew Gingerich*	Douglas PUD
John Rohrback	Douglas PUD
Scott Carlon*	National Marine Fisheries Service
Bill Gale*	U.S. Fish and Wildlife Service
Chad Jackson*	Washington Department of Fish and Wildlife
Andrew Murdoch*	Washington Department of Fish and Wildlife
Keely Murdoch*	Yakama Nation

Notes:

- * Denotes HCP Coordinating Committees representative or alternate
- o Left the conference call after the Chelan PUD items