

## Memorandum

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

Date: June 28, 2022

From: John Ferguson, HCP Coordinating Committees Chairman

cc: Kristi Geris, HCP Coordinating Committees Support

Re: **Final Minutes of the May 24, 2022, HCP Coordinating Committees Meeting**

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The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plan (HCP) Coordinating Committees met in person at Chelan Fire District #3 in Leavenworth, Washington, on Tuesday, May 24, 2022, from 9:00 a.m. to 13:10 p.m. Attendees are listed in Attachment A to these meeting minutes.

### Action Item Summary

- Chelan PUD will continue providing Rocky Reach Dam and Rock Island Dam turbine unit maintenance updates as information becomes available (Item I-C).
- Anchor QEA, LLC, and Chelan PUD will coordinate logistics for the HCP Coordinating Committees meeting on Tuesday, July 26, 2022, to be held in person at the Rocky Reach Dam Visitor's Center (Item I-C). *(Note: this coordination is ongoing.)*
- Douglas PUD will confirm with Columbia River Inter-Tribal Fish Commission (CRITFC) staff that AQUI-S will be used to anesthetize study fish associated with CRITFC's annual request to tag Sockeye Salmon at Wells Dam in 2022 (Item III-A).
- The Rock Island HCP Coordinating Committee will discuss prioritization of Plan Species topics raised during the Rock Island relicensing process during the HCP Coordinating Committees meeting on June 28, 2022 (Item IV-C).
- National Marine Fisheries Service (NMFS) will discuss internally options available for the HCP renewal process to inform Rock Island relicensing discussions (Item IV-C).
- Chelan PUD will verify dates and times the Rock Island Adult Ladder Tailrace Entrance (TRE) was closed while calculating adult conversion rates for the 2021 Rock Island Dam Confirmation Survival Study (Item IV-D).
- Chelan PUD will develop a 1-year Statement of Agreement (SOA) for operation of the Rock Island Adult Ladder TRE for vote via email (Item IV-D). *(Note: Lance Keller provided this SOA for vote via email on June 24, 2022, which Kristi Geris distributed that same day.)*
- The HCP Coordinating Committees meeting on Tuesday, June 28, 2022, will be held in person at Douglas PUD Headquarters in East Wenatchee, Washington (Item VI-B).

## Decision Summary

- Wells HCP Coordinating Committee representatives present approved CRITFC's annual request to tag Sockeye Salmon at Wells Dam in 2022, contingent on the use of Aqui-S to anesthetize the study fish (Item III-A).

## Agreements

- HCP Coordinating Committees representatives present agreed to add Tim Taylor (Grant PUD) to the HCP Hatchery Committees and PRCC HSC primary email distribution list (Item II-B).
- HCP Coordinating Committees representatives present agreed to add Ben Goodman (Washington Department of Fish and Wildlife [WDFW]) to the HCP Hatchery Committees and PRCC HSC secondary email distribution list (Item II-C).
- Wells HCP Coordinating Committee representatives present agreed to Douglas PUD's request to expedite the review of Wells Project Land-Use Permit Application 1026-01. The Wells HCP Coordinating Committee provided indication of no further comments (Item III-B).
- Rock Island HCP Coordinating Committee representatives present agreed to consider a 1-year SOA for operation of the Rock Island Adult Ladder TRE for vote via email (Item IV-D).

## Review Items

- HCP Plan Species comments received during the Rock Island relicensing process were provided by Chelan PUD and distributed to the HCP Coordinating Committees by Kristi Geris on May 24, 2022 (Item IV-C).
- 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 June 24, 2022, for vote via email no later than Friday, July 1, 2022 (Item IV-D).

## Finalized Documents

- The final 2021 Wells HCP Annual Report, which was approved by the Wells HCP Coordinating Committee on May 5, 2022, was filed with the Federal Energy Regulatory Commission (FERC) on May 25, 2022, and was distributed to the HCP Coordinating Committees by Kristi Geris that same day.
- The final 2021 Rock Island and Rocky Reach HCP Annual Reports, which were approved by the Rock Island and Rocky Reach HCP Coordinating Committees on May 9, 2022, were filed with FERC on May 25, 2022, and were distributed to the HCP Coordinating Committees by Kristi Geris on May 26, 2022.

## I. Welcome

### A. Review Agenda (John Ferguson)

John Ferguson welcomed the HCP Coordinating Committees and reviewed the agenda. Ferguson asked for any additions or changes to the agenda. Lance Keller added Rock Island Adult Ladder TRE Closure.

### B. Meeting Minutes Approval (John Ferguson)

The HCP Coordinating Committees reviewed the revised draft April 26, 2022, conference call minutes. Kristi Geris said all comments and revisions received from members of the Committees were incorporated into the revised minutes. HCP Coordinating Committees members present approved the April 26, 2022, conference call minutes, as revised. NMFS abstained because a representative was not present during the April 26, 2022, conference call.

### C. Last Meeting Action Items (John Ferguson)

Action items from the HCP Coordinating Committees meeting on April 26, 2022, and follow-up discussions were as follows. (*Note: Italicized text corresponds to agenda items from the meeting on April 26, 2022*):

- *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.
- *Anchor QEA, LLC, and Chelan PUD will coordinate logistics for the HCP Coordinating Committees meeting on Tuesday, July 26, 2022, to be held in person at the Rocky Reach Dam Visitor's Center (Item IV-D).*  
This coordination has started and is ongoing. This action item will also be carried forward.

## II. HCP Hatchery and Tributary Committees Update

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

Tracy Hillman updated the HCP Coordinating Committees on the following actions and discussions that occurred during the HCP Hatchery Committees meeting on May 18, 2022 (*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"*):

- *Hatchery Production Recalculation (Joint)*: Last month, the PUDs presented their proposed production numbers for each hatchery program. The Joint Fisheries Parties (JFP) are in the process of developing a counterproposal, which they will share with the PUDs by Friday, May 27, 2022. The PUDs will review the counterproposals and determine whether they agree

or disagree with the counterproposals. If the PUDs disagree with the JFP counterproposals, they will either request additional negotiations or initiate the dispute resolution process (i.e., elevate the issue to the HCP Coordinating Committees and HCP Policy Committees). If necessary, the Committees will hold a conference call on Monday, June 6, 2022, to discuss any significant concerns with the counterproposals.

- *Comprehensive Monitoring and Evaluation Report Review (Joint)*: All but the Wenatchee Sockeye Salmon chapter of the comprehensive monitoring and evaluation report have been submitted to the Committees. One chapter is currently in review. Comments on that chapter are due on June 30, 2022. The PUDs are currently preparing an executive summary for the comprehensive report.
- *Coronavirus Disease 2019 and Monitoring and Evaluation Activities (Joint)*: Each member of the Hatchery Committees discussed the effects of COVID-19 on their respective programs and activities. COVID-19 restrictions are relaxing, and the HCP Hatchery Committees met in person and plan to continue to meet in person until restrictions change. Virtual access will be provided for those who are unable to meet in person.
- *Spring Chinook Broodstock Collection at Wells Dam (Joint)*: Douglas PUD is currently collecting spring Chinook Salmon broodstock at Wells Dam. The spring Chinook Salmon run started slow but picked up quickly. Douglas PUD does not want to collect too many wild spring Chinook Salmon and asked if the JFP are able to identify the number of wild spring Chinook Salmon proposed in their counterproposal. The JFP are proposing collection of 136 wild spring Chinook Salmon. Douglas PUD will collect no more than 136 wild spring Chinook Salmon for broodstock purposes this year.
- *Tumwater Dam Question and Answer Session (Rock Island/Rocky Reach)*: Chelan PUD held a Tumwater Dam and Fishway Question and Answer Session from 4:00 p.m. to 7:00 p.m. on May 19, 2022, at Chelan PUD Fire District #3 in Leavenworth, Washington. The PUD Commissioners are seeking feedback from the community on Tumwater Dam.
- *Next Meeting*: The next meeting of the HCP Hatchery Committees will be on June 15, 2022.

Hillman updated the HCP Coordinating Committees on the following actions and discussions that occurred during the HCP Tributary Committees meeting on May 12, 2022:

- *Beaver-Powered Restoration Project Discussion*: Trout Unlimited met with the Rocky Reach HCP Tributary Committee to discuss the Beaver-Powered Restoration Project, which was funded by the Rocky Reach HCP Tributary Committee a few years ago. The purpose of the discussion was to present their findings and justification for starting restoration work in Beaver Creek, a tributary to the Wenatchee River, and to secure approval from the Committee to begin work in Beaver Creek. Trout Unlimited provided a report titled, *Trout Unlimited Beaver-Powered Restoration Project*, which provided justification for beginning restoration work in Beaver Creek. In addition, they gave a short presentation describing their approach and reasons for

selecting Beaver Creek for beaver-powered restoration. Following the presentation, the Rocky Reach HCP Tributary Committee agreed with beginning restoration work in Beaver Creek in 2023. In addition, they asked Trout Unlimited to submit a proposal to assess the effects of beaver dam analogues and post-assisted log structures on stream flows and water temperatures.

- *General Salmon Habitat Program Draft Applications:* The Committees received 13 General Salmon Habitat Program draft proposals. These were cost-share proposals with the Salmon Recovery Funding Board. The Committees identified six projects that did not warrant a full proposal, because these did not have strong technical or biological merit, were not cost effective (low benefits per cost), or were rejected based on a policy decision. The Committees solicited full proposals for seven projects. Final applications are due on May 19, 2022. The proposed projects are located in the Wenatchee, Entiat, and Methow River basins.
- *Next Meeting:* The next meeting of the HCP Tributary Committees will be on June 9, 2022, and the Committees will review full proposals and make funding decisions at that time.

#### **B. HCP Hatchery Committees / Priest Rapids Coordinating Committee Hatchery Subcommittee Primary Email List – Tim Taylor (Tracy Hillman)**

Tracy Hillman said Tim Taylor is a new Grant PUD Senior Biologist who will be listening to HCP Hatchery Committees and Priest Rapids Coordinating Committee Hatchery Subcommittee meetings to become familiar with Grant PUD programs. HCP Coordinating Committees representatives present agreed to add Taylor to the HCP Hatchery Committees and PRCC HSC primary email distribution list.

#### **C. HCP Hatchery Committees / Priest Rapids Coordinating Committee Hatchery Subcommittee Secondary Email List – Ben Goodman (Tracy Hillman)**

Tracy Hillman said Ben Goodman (who took over Charles Frady's position at WDFW) is working on hatchery evaluation for Douglas PUD. HCP Coordinating Committees representatives present agreed to add Goodman to the HCP Hatchery Committees and PRCC HSC secondary email distribution list.

### **III. Douglas PUD**

#### **A. DECISION: CRITFC's Annual Request to Tag Sockeye Salmon at Wells Dam in 2022 (Tom Kahler)**

Tom Kahler said CRITFC's annual request to tag Sockeye Salmon at Wells Dam in 2022 was distributed to the HCP Coordinating Committees by Kristi Geris on May 3, 2022. Kahler said this is a typical request from Jeff Fryer (CRITFC), which he provides each year. This year, the request describes the usual effort plus the inclusion of up to 250 temperature logging tags. Kahler understands these fish will be double tagged (i.e., part of the 800 total tagged fish). He recalled in the past, the Wells HCP Policy Committee described the conditions under which this effort can take place, which is concurrent with existing trapping activities up until a temperature barrier sets up in the Okanogan

River<sup>1</sup>. Kahler plans to remind Fryer of these conditions. Kahler also recalled that Kirk Truscott requested to review Fryer's request each year.

Truscott asked how the fish will be anesthetized. Kahler said Aqui-S has been used for the past several years. Truscott said he would like confirmation of this. Kahler said he can ask and also make this a stipulation of approval. Douglas PUD will confirm with CRITFC staff that Aqui-S will be used to anesthetize study fish associated with CRITFC's annual request to tag Sockeye Salmon at Wells Dam in 2022.

Wells HCP Coordinating Committee representatives present approved CRITFC's annual request to tag Sockeye Salmon at Wells Dam in 2022, contingent on the use of Aqui-S to anesthetize the study fish.

### **B. Wells Project Land-Use Permit Application 1026-01 (Tom Kahler)**

Tom Kahler said Wells Project Land-Use Permit Application 1026-01 was distributed to the HCP Coordinating Committees by Kristi Geris on May 16, 2022. Kahler said Okanogan PUD wants to install an osprey nesting pole on the CTCR side (east side) of the Okanogan River. This is a routine process to solicit comments from the JFP via the Wells HCP Coordinating Committee. After distributing for review, there was a request to expedite this application because ospreys are in the process of building nests right now. To note, Douglas PUD did consider the fish predation aspect of this application; however, approving installation of a nesting pole may reduce the likelihood of birds creating nests on electrical poles, which could affect power transmission.

Wells HCP Coordinating Committee representatives present agreed to Douglas PUD's request to expedite the review of Wells Project Land-Use Permit Application 1026-01. The Wells HCP Coordinating Committee provided indication of no further comments.

## **IV. Chelan PUD**

### **A. Rock Island Dam Powerhouse 1 Maintenance Update (Lance Keller)**

Lance Keller said crews completed performance testing on Turbine Unit B4, which is informing the path forward on Turbine Unit B3. Crews started disassembling Turbine Unit B3 and the return-to-service date is April 2023. As a reminder, because Turbine Unit B3 is one of the original turbine units there may be unexpected repairs and replacements that are needed.

### **B. Rocky Reach Dam Turbine Units Maintenance Update (Lance Keller)**

Lance Keller said work continues on Turbine Unit C4. The return-to-service date has moved back from August to September 2022, because crews decided to take this opportunity to install additional governor controls while the unit is out for service. Importantly, completion of Turbine Unit C6

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<sup>1</sup> I.e., temperatures greater than or equal to 21°C at the USGS 12447200 Okanogan River at Malott Washington gage for a period greater than or equal to 12 hours.

allowed work to start on Turbine Unit C5, which is estimated to be complete by January 2023. This is important to complete before the Rocky Reach Dam Confirmation Survival Study is conducted in spring 2023.

### **C. Rock Island Relicensing – Plan Species Topics (Lance Keller)**

Lance Keller said HCP Plan Species comments received during the Rock Island relicensing process were provided by Chelan PUD and distributed to the HCP Coordinating Committees by Kristi Geris prior to the HCP Coordinating Committees meeting on May 24, 2022. Keller said these comments are organized by submittal method, commenting agency, individual commentor, comment, and submittal date. He recalled that these are no longer Rock Island relicensing topics; rather, the Rock Island HCP is established to address these types of comments. As Rock Island HCP Coordinating Committee representatives want to discuss a specific topic, he asked Committee members to place the topic on an upcoming agenda for HCP Coordinating Committees monthly meetings. These topics can be discussed any time, and as long as is needed to coordinate agency input. Although, in reviewing the commentors, most are Rock Island HCP Coordinating Committee representatives.

Keely Murdoch suggested developing a process and schedule for addressing each comment. Some comments are not relevant to this stage of relicensing, and some might require more in-depth discussion. Keller said Chelan PUD does not view these as relicensing topics. Rather, these topics were pulled out of the relicensing venue because these are HCP-related topics that could have been raised whether relicensing was occurring or not. Murdoch said the Yakama Nation's concern is the HCP expires halfway through the FERC license, and there are uncertainties about the HCP related to relicensing. She sees a direct connection. She understands Plan Species have a direct nexus with the HCP, but these topics are only coming forward because of relicensing. These topics could have been brought forward at the end of the HCP, but some topics need more data. Keller said Chelan PUD is aware of the gap and is discussing internally how to proceed forward on this particular topic. He noted that this concern has been expressed by other stakeholders, as well.

John Ferguson asked about Murdoch's suggestion to bring topics forward in a scheduled way. Murdoch said she anticipated that issues originating in the Rock Island relicensing forum would be sent to the HCP Coordinating Committees for discussion, and resolution from the HCP Coordinating Committees would then be sent back to the relicensing forum for follow-up. Under this concept, she thought all comments from relicensing would be reviewed and addressed, and ones not relevant to this stage of relicensing might be put on hold. She suggested developing a systematic way to make sure all comments are addressed. Keller said yes, Chelan PUD would like for the HCP Coordinating Committees to drive which topics to discuss and when. Ferguson suggested adding Rock Island relicensing as a standing agenda item during future HCP Coordinating Committees meetings, starting with a discussion on prioritization of topics next month. Rock Island HCP Coordinating Committee representatives present agreed with this approach.

Scott Carlon asked if there is a feedback loop for comments submitted by entities not represented here (in the HCP forum). Keller said comments received to date are from HCP representatives, so this feedback loop is closed. If non-HCP representatives provide topics, Chelan PUD would encourage them to coordinate with a signatory to coordinate feedback. This has not happened to date, but Chelan PUD is tracking how to complete this feedback loop, if needed.

Kirk Truscott asked about the date of the FERC relicensing proceedings. Keller said he believes the official FERC submittal is due in Q3 or Q4 2023. Bill Towey confirmed this is correct for the Pre-Application Document (PAD). Chelan PUD is concentrating now on studies to inform development of the PAD. Truscott said there may be difficult topics that come up and he cautioned not to delay these discussions such that they extend into the required FERC process. He encouraged the Rock Island HCP Coordinating Committee to participate in this early engagement. Some of these discussions might mean changes to the HCP. Keller noted that during this early engagement period (of relicensing), there is the possibility of Parties agreeing to disagree for now until the official process is underway. Chelan PUD has already had healthy discussions on tough topics. It is not the Chelan PUD's intention to delay these discussions; rather, it is important to address these topics when appropriate.

Towey agreed that prioritization of topics is important, regardless of early implementation or PAD development, because this prioritization will be applicable through the continuum of relicensing. Ferguson asked where the gap will be discussed. Keller said he believes it will occur inside the realm of the HCP, first, with the signatory group of the existing HCP.

Ferguson said the Rock Island HCP Coordinating Committee will discuss prioritization of Plan Species topics raised during the Rock Island relicensing process during the HCP Coordinating Committees meeting on June 28, 2022. Carlon said NMFS will also discuss internally options available for the HCP renewal process to inform Rock Island relicensing discussions.

#### **D. Rock Island Adult Ladder Tailrace Entrance Closure (Lance Keller)**

Lance Keller said Thad Mosey (Chelan PUD Biologist) leads the Spill Program and is the on-the-ground biologist who interacts with the District Fishway Attendants. For several years now, Fish Passage Center (FPC) has conducted annual inspections of the fish ladders at all mainstem hydropower projects on the Columbia and Snake rivers. Each year, it has been institutional practice for Chelan PUD to coordinate with FPC when there are higher tailwater elevations and a need to close the Rock Island Dam Right Bank Adult Fishway TRE to meet the minimum 1-foot head differential at the remaining three entrances at Rock Island Dam Powerhouse 2. There was a general understanding this closure was communicated back to the HCP Coordinating Committees. With the departure of tenured staff at FPC that Chelan PUD worked with regarding the TRE closure, additional questions were asked via an email from Michelle DeHart (FPC) to the JFP, including some Rock Island



HCP Coordinating Committee representatives. It became apparent that the assumed feedback loop was not in place.

Keller said for background, the Rock Island Dam Right Bank Adult Fishway has four separate entrances: Left Powerhouse Entrance (LPE), two Right Powerhouse Entrances (RPE), and the TRE. The head differential target for each of these entrances is 1.0 to 1.5 feet. High spring flows in the Columbia River cause the elevation of the tailrace to rise. When the tailwater elevation exceeds 574.5 feet above mean sea level (MSL), meeting the minimum 1.0-foot head differential target at all four entrances becomes difficult.

Keller further explained that the adult fishway entrance slots at the right bank fishway are fully open vertical slots, and when high tailwater elevations encroach on the fishway entrances, it is difficult to provide enough attraction flow to meet the 1.0-foot head differential without exceeding maximum target velocities of 4.0 feet per second (fps) in the fishway transportation channels. It has been documented in FPC reports (2007 to 2012) that a common practice during these high flow periods is to close a single RPE or the TRE so the remaining three entrances can meet the minimum 1.0-foot head differential target without exceeding a velocity of 4.0 fps in the transportation channel.

Keller shared slides and described the configuration of the Rock Island Dam Right Bank Adult Fishway and its four entrances. He clarified that the closure of the TRE is a Rock Island HCP Coordinating Committee adult passage topic and FPC has no authority over ladder operations at Rock Island Dam. Chelan PUD plans to draft an SOA establishing annual communication procedures regarding closure of the TRE to bring the other three entrances into compliance.

Keely Murdoch asked how often this happens and how does this tie in with measuring adult survival with the TRE closed? She also has questions about long-term solutions versus this short-term solution. Is there a better solution than closing a fish ladder entrance during the peak of spring Chinook Salmon migration? How does the Wanapum Reservoir impact this? Can the Mid-Columbia Hourly Coordination help prevent this? Can the TRE be modified to handle more flow? Was the TRE closed while calculating adult conversion rates for the 2021 Rock Island Dam Confirmation Survival Study?

Keller said high flows and closing the TRE is common each year during the months of April, May, June, and July. He can also verify dates and times the TRE was closed while calculating adult conversion rates for the 2021 Rock Island Dam Confirmation Survival Study. He recalled that adult conversion rates are calculated by taking adult travel times from Priest Rapids Dam to Rocky Reach Dam and back-calculating timing relative to the first harvest opportunity on July 1. The TRE was closed for the duration of June, and he can review these dates to see which fish were exposed to the TRE closure. Regarding options other than closing the TRE, Chelan PUD has scoped out constructing keyhole entrances, similar to those at Wanapum Dam. Additionally, Chelan PUD has tried leaving

stop logs in the RPE. However, there is no safe way to remove the stop logs without shutting down the fish ladder. Another option is to operate the wing gates again, which have been taken out of commission. However, this option diminishes attraction flow by narrowing the entrance to the fish ladder at a particular location, and probably does not benefit fish. Regarding fishway operations and the Wanapum Reservoir, there is no coordination at this point. The Wanapum Reservoir does affect the immediate tailwater of Rock Island Dam, as well as the overall river flow passing Rock Island Dam. Thinking back to the Wanapum drawdown, this resulted in head differentials well outside the specifications of the turbine units because the tailwater was so low. Ultimately, Chelan PUD provided most of the spill through Spillway 2 to create a "bathtub effect" given the bathymetry of the tailrace and instantaneously raising tailwater elevations relative to the Wanapum elevation enough to sequentially start operating Powerhouse 2 Units.

John Ferguson asked what this SOA might include. Keller said he thinks this SOA would acknowledge that: 1) Chelan PUD will strive to maintain a minimum head differential of 1.0 foot with all four entrances open, while preserving target velocities through the transportation channels; and 2) the Rock Island HCP Coordinating Committee supports closure of the TRE when the tailwater elevation exceeds 574.5 feet above MSL to meet the head differentials at the other three entrances. Chelan PUD would monitor the freshet and when it seems the tailwater elevation might exceed 574.5 feet above MSL, he would provide notification to the Rock Island HCP Coordinating Committee that fishway attendants will start closing the TRE to meet differentials.

Jim Craig said the proposed operation seems to benefit fish passage. Ferguson said the proposed SOA serves almost like a Standard Operating Procedure. Keller said the SOA will also establish this communication with the Rock Island HCP Coordinating Committee, where the discussion belongs, which was the internal disconnect that FPC noted in the email exchanges.

Keller said there is a lot of snowpack still to come off the mountains and suggested reviewing and approving an SOA via email before the next HCP Coordinating Committees meeting. He plans to include all of the background information, history, and information on adult conversions in the background section of the SOA.

Kirk Truscott asked if the four entrances are wired for passive integrated transponder (PIT) detection, or if Chelan PUD has a sense of the proportion of fish passing across the four entrances? Keller said the entrances are not wired for individual PIT detection; however, the fishway attendants have a good feel on where fish enter. The corner RPE is the entrance selected the most by adult salmon and steelhead, followed by the LPE. These entrances require manual intervention to open and close; therefore, these entrances are opened and left open.

Truscott said he would think that operating the wing gates would increase the attraction flow. Keller said this was discussed internally. The wing gates no longer operate and are fixed at an opening of

3 feet. Operating at less than 3 feet would result in auxiliary water supply not penetrating out into the tailrace as needed to attract adults into the entrance.

Truscott said he thinks an SOA for immediate operation will be appropriate. However, he suggested this SOA only be for this adult migration year, so as to not shut the door on other alternatives, and then renew this SOA, as needed. Keller agreed and said Chelan PUD will develop a 1-year SOA for operation of the Rock Island Adult Ladder TRE. Rock Island HCP Coordinating Committee representatives present agreed to consider a 1-year SOA for operation of the Rock Island Adult Ladder TRE for vote via email. *(Note: Keller provided a draft SOA for vote via email on June 24, 2022, which Kristi Geris distributed that same day.)*

## V. Chelan PUD / Douglas PUD

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

John Ferguson recalled that this check-in is on the agenda every quarter, and he asked if Chelan PUD, Douglas PUD, or HCP Coordinating Committees representatives have updates on subyearling Chinook Salmon studies. No updates were shared.

## VI. HCP Administration

### A. HCP Policy Committees June 7, 2022, In-Person Meeting (John Ferguson)

John Ferguson said currently, the HCP Policy Committees still plan to convene in person on June 7, 2022. A request for agenda items has been distributed; however, to date, no substantive items have been received. This meeting may be postponed, pending receipt of agenda items.

### B. Next Meetings (John Ferguson)

The next scheduled HCP Coordinating Committees meeting is on Tuesday, June 28, 2022, from 9:00 a.m. to 12:00 p.m., to be held in person at Douglas PUD Headquarters in East Wenatchee, Washington. *(Note: this meeting was changed to 12:00 p.m.)*

The HCP Coordinating Committees meeting on July 26, 2022, will be held in person at the Rocky Reach Visitor's Center.

The HCP Coordinating Committees meeting on August 23, 2022, will be held in person at Douglas PUD Headquarters in East Wenatchee, Washington.

John Ferguson said he has been coordinating with Bryan Nordlund (PRCC Facilitator) regarding convening the HCP Coordinating Committees and PRCC monthly meetings at Douglas PUD Headquarters in East Wenatchee, Washington (opposed to the Grant PUD building in Wenatchee,

Washington). Nordlund said this topic is on today's PRCC meeting agenda, and as long as representatives agree to this location, he does not foresee any issues with this arrangement.

## VII. Joint HCP Coordinating Committees / Priest Rapids Coordinating Committee

### A. PRESENTATION: Reintroduction of Salmon Upstream of Chief Joseph and Grand Coulee Dams (Upper Columbia United Tribes, Spokane Tribe of Indians, Coeur d'Alene Tribe, and Confederated Tribes of the Colville Reservation)

Laura Robinson (Upper Columbia United Tribes [UCUT]), Conor Giorgi (Spokane Tribe of Indians), Tom Biladeau (Coeur d'Alene Tribe), and Casey Balwin (Confederated Tribes of the Colville Reservation) co-presented the presentation, *Reintroduction of Salmon Upstream of Chief Joseph and Grand Coulee Dams* (Attachment B), which was distributed to the HCP Coordinating Committees by Kristi Geris following the HCP Coordinating Committees meeting on May 24, 2022.

#### Slides 1 to 9

Robinson introduced the presenters. She explained that salmon have been blocked from the Upper Columbia River Basin for several years, now. Historically, there were hundreds of thousands of spring, summer, and fall Chinook Salmon and Sockeye Salmon in the Upper Columbia River. The UCUT are underway on a phased approach to reintroduction above five hydroelectric projects, including: Chief Joseph and Grand Coulee dams on the Columbia River, and Little Falls, Long Lake, and Nine Mile dams on the Spokane River.

#### Slides 10 to 17

Giorgi said in 2014, the UCUT outlined a phased approach to evaluate the feasibility of reintroducing anadromous species. In 2015, Phase 1 began and included identifying donor stocks, risk assessment, habitat assessments, review of fish passage technologies, life cycle modeling, and recommended future studies. In 2019, a Phase 1 report was presented to the Independent Scientific Advisory Board (ISAB), who concluded that reintroduction could be successful and recommended moving forward with Phase 2.

#### Slides 18 to 25

Biladeau said Phase 2, which is now underway, starts replacing Phase 1 assumptions with empirical data. The Phase 2 Implementation Plan (P2IP) is a roadmap on how best to proceed. The P2IP outlines a budget and starts with collecting data (Step 1: Years 1 to 6) and then interim passage testing (Step 2: Years 7 to 21). As more information becomes available, the timeline and budget estimates may change.

This year, a Pilot Juvenile Chinook Outmigration Study was initiated using acoustic telemetry and PIT tags to collect survival and behavioral data. Results are pending.

### Slides 26 to 34

Baldwin said the UCUT are conducting cultural and educational releases in parallel to this phased approach because they wanted to do more than just conduct scientific experiments. From 2017 to 2021, this has included releasing 1,058 adult Chinook Salmon and 11,501 juveniles.

Another short-term objective is ecosystem restoration, which has occurred in Tshimikain Creek, Sanpoil River, Little Spokane River, Rufus Woods Reservoir, and the Transboundary Reach. Observations of redds and collection of wild juveniles in these areas serve as a proof of concept for the phased approach.

### Slides 35 to 37

Giorgi said in 2017, the UCUT started juvenile releases. Of 750 yearling summer Chinook Salmon, 90 fish were detected below Chief Joseph Dam, which means these fish passed three dams without fish passage. In 2019, one of these fish made it all the way back up to Chief Joseph Hatchery. In 2020, three siblings also returned to the Columbia River. This further demonstrates proofs of concept.

### Discussion

Keely Murdoch said Slide 22 indicates that the P2IP proposes no operational changes to power, flood risk management, or irrigation, but this slide does not address changes in fish management or harvest scenarios. Biladeau said in Phase 1, all modeling was based on current harvest scenarios. Murdoch asked if there were changes in escapement or management. Biladeau said no. Baldwin said the modeling applied the same harvest rates downstream and ocean harvest stayed the same. Giorgi said cultural and educational releases were also an additional benefit contributing to the fisheries.

Murdoch said she is interested in hearing more details about what is being proposed for Phase 2, such as how many fish will be released and from where. Murdoch said Biladeau reviewed the goals of Phase 2 and a Gantt chart timeline (Slide 19), but she does not fully understand what is happening during Phase 2. Biladeau said the P2IP is a 120-page-plus document that outlines all of the studies planned for Phase 2, including target release sizes, detection technologies, and other study criteria. The goal of the studies is to collect data on smolt-to-adult return ratios and uses power analysis estimates based on different levels of survival of surplus adults from downstream hatchery facilities.

John Ferguson asked if the \$3 million Washington State investment (Slide 9) is a one-time deal, or will there be an annual budgeting for this in the future? Robinson said the UCUT are hoping this funding will be annual. The current funding was offered without needing to ask for it; rather, the State just penciled in a 2-year budget of \$3 million. Discussions are starting about next steps and determining what to propose. The UCUT are considering pursuing more funding from the State.

There is also support from WDFW and the Governor's office. The UCUT feel confident that there will be some level of sustained support.

Ferguson asked who conducted the life cycle modeling. Baldwin said Kevin Malone (Kevin Malone Consulting) is the contractor and keeper of the model. Baldwin said the UCUT helped with development of the model, with the intention of handing it off at some point. The model was constructed to be simple enough that any of us could run it, but there is so much to do on this project that we try to delegate as much as possible.

Jim Craig congratulated the UCUT on efforts to date and proofs of concept. Being able to provide some of these fish from the Leavenworth National Fish Hatchery Complex has been one of the more rewarding parts of his career.

Scott Carlon said, having some history with reintroduction in Canada at Enloe Dam, he asked how the working relationship has been with the federal or provincial governments for this project. Baldwin said he has not interacted much with Department of Fisheries and Oceans Canada (DFO); rather, most coordination has been through the Okanagan Nation Alliance (ONA). During Phase 1, DFO participated a little. Giorgi agreed and said prior to COVID-19, there was some interaction with DFO, but not since. Robinson said the provincial and federal governments and the Nations are connected through a letter of agreement, so DFO is interested in what the UCUT are doing.

Ferguson asked if the Chief Joseph Fish Hatchery ladder is the only collection point being considered right now, or if another attraction ladder might be considered? Biladeau said there may be a need for that, but he hopes to first test the capability of the current hatchery ladder. There is also interest in additional collection facilities on the south (opposite) shore. Giorgi said they want to avoid impeding the hatchery's ability to reach their objectives or cause capacity issues. The UCUT are trying to figure out what is realistic. Ferguson asked if surface collection at the Grand Coulee Dam cul-de-sac has been considered? Baldwin said this option is being considered and appears to have the most potential. Ferguson asked about the forebay range from Grand Coulee Dam. Kirk Truscott said during the juvenile migration period during spring, this is around 50 feet. The rate at which juveniles emigrate through the system might be a factor in determining if the UCUT will propose to incorporate a more centralized collector at Grand Coulee Dam or collect juveniles in tributaries of Lake Roosevelt.

Andrew Gingerich asked what level of resolution in behavior is expected? For example, will these studies inform preferred passage routes? Biladeau said this depends on whether the sample size is large enough to make conclusions like this. He hopes so. This first year will be an opportunity to modify sample sizes. It may be determined that 750 acoustically tagged fish are not enough. Giorgi said there will also be an opportunity to improve the receiver array and identify gaps. Biladeau applauded the staff at Chief Joseph and Grand Coulee dams who have been assisting with these

efforts. These staff have never been involved with fisheries studies, but for the most part, everything went well.

Bryan Nordlund asked if the UCUT looked into tributary collection opposed to reservoir collection? Not a screw trap, but screen collection like on the Yakima River. Baldwin said not a lot. He is unaware of tributary collection that has been implemented successfully, particularly in this large of an area. It was decided to see what the initial survival studies show and then decide it is necessary to go down that road. It is easier to collect fish at a pinch point downstream.

Carlton asked if Ferguson has been involved in similar work in California. Ferguson said peripherally. NMFS and the California Department of Water Resources are implementing pilot studies to evaluate the feasibility of collecting winter-run Chinook Salmon in the McCloud River arm of Shasta Reservoir. He and others evaluated the feasibility of providing passage at two dams on the Tuolumne River to support reintroduction of spring run Chinook Salmon and steelhead. They evaluated whether a floating surface collector could be incorporated at the upper dam or the upper portion of its reservoir, and these were judged to not be feasible. The team developed a novel head-of-reservoir concept that was judged to be feasible. The concept combined Coanda screens, deep slot entrances and a corner collector.

Robinson said after sharing the first draft P2IP, supportive comments and technical feedback were received. A revised draft P2IP and a summary of comments, including how comments were applied, will be sent to the ISAB for review, then posted to a website. She can share this information with the HCP Coordinating Committees and PRCC in early summer 2022.

The HCP Coordinating Committees and PRCC thanked the UCUT for the presentation.

## VIII. List of Attachments

Attachment A List of Attendees

Attachment B *Reintroduction of Salmon Upstream of Chief Joseph and Grand Coulee Dams*

## Attachment A

Name	Organization
John Ferguson	Anchor QEA, LLC
Kristi Geris	Anchor QEA, LLC
Tracy Hillman <sup>††</sup>	BioAnalysts
Bryan Nordlund <sup>∞</sup>	Fish Passage Engineering, PLLC
Laura Robinson <sup>∞</sup>	Upper Columbia United Tribes
Conor Giorgi <sup>∞</sup>	Spokane Tribe of Indians
Tom Biladeau <sup>∞</sup>	Coeur d'Alene Tribe
Casey Balwin <sup>∞</sup>	Confederated Tribes of the Colville Reservation
Lance Keller <sup>*</sup>	Chelan PUD
Alene Underwood <sup>+∞</sup>	Chelan PUD
Catherine Willard <sup>+∞</sup>	Chelan PUD
Tom Kahler <sup>*†</sup>	Douglas PUD
Andrew Gingerich <sup>*</sup>	Douglas PUD
Scott Carlon <sup>*</sup>	National Marine Fisheries Service
Jim Craig <sup>*</sup>	U.S. Fish and Wildlife Service
Kirk Truscott <sup>*</sup>	Confederated Tribes of the Colville Reservation
Keely Murdoch <sup>*</sup>	Yakama Nation

Notes:

- \* Denotes HCP Coordinating Committees member or alternate
- † Joined by phone
- †† Joined by phone for the HCP Hatchery and Tributary Committees update
- ∞ Joined for the presentation, *Reintroduction of Salmon Upstream of Chief Joseph and Grand Coulee Dams*