

FINAL MEMORANDUM

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

Date: May 25, 2016

From: John Ferguson, HCP Coordinating Committees
Chairman

Cc: Kristi Geris

Re: Final Minutes of the April 26, 2016, HCP Coordinating Committees Conference
Call

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Coordinating Committees met by conference call on Tuesday April 26, 2016, from 9:30 a.m. to 12:15 p.m. Attendees are listed in Attachment A to these conference call minutes.

ACTION ITEM SUMMARY

- John Ferguson will communicate developing details about the 2016 Subyearling Chinook Salmon Workshop to the Coordinating Committees during the monthly Coordinating Committees meetings (Item I-C).
 - Lance Keller will provide the schedule for repairing Rock Island Dam Powerhouse 1 Unit B2 to Kristi Geris for distribution to the Coordinating Committees (Item I-C).
 - Tom Kahler will discuss with Jeff Fryer (Columbia River Inter-Tribal Fish Commission [CRITFC]) the Coordinating Committees' contingencies for approving CRITFC's annual request to tag sockeye salmon at Wells Dam in 2016, including:
1) using AQUI-S to anesthetize any fish and tagged in excess of the 800 specified in the CRITFC request letter, and tagging no more than 1,000 fish throughout the entire run; or 2) using MS-222 to anesthetize the fish and tagging no more than 800 fish throughout the entire run (Item III-A). *(Note: Kahler discussed this with Fryer, as requested.)*
 - Chelan PUD will provide a summary of discussions held in the early-2000s regarding a request to close orifice gates (OGs) at Rocky Reach Dam, including historical radio telemetry data demonstrating use of the OGs for adult fish passage (Item IV-A).
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- Chelan PUD will provide the Draft 2015 Rocky Reach and Rock Island Juvenile Fish Bypass Reports for Coordinating Committees review by Friday, April 29, 2016 (Item IV-B). *(Note: Lance Keller provided the Draft 2015 Rocky Reach Juvenile Fish Bypass Report to Kristi Geris on May 17, 2016, which Geris distributed to the Coordinating Committees on May 18, 2016.)*
- **The Coordinating Committees meeting on May 24, 2016, will be held by conference call** (Item V-B).

DECISION SUMMARY

- Wells HCP Coordinating Committee representatives present approved the request from Charles Frady (Washington Department of Fish and Wildlife [WDFW]) to conduct real-time trapping at the Wells Dam west fish ladder during the second half of May 2016 (Item III-C).
- Wells HCP Coordinating Committee representatives approved CRITFC's annual request to tag sockeye salmon at Wells Dam in 2016, via email, as follows: Douglas PUD and the National Marine Fisheries Service [NMFS] approved April 29, 2016; the U.S. Fish and Wildlife Service [USFWS], WDFW, and the Colville Confederated Tribes [CCT] approved May 2, 2016; and the Yakama Nation [YN] approved May 9, 2016 (Item III-A).

AGREEMENTS

- Wells HCP Coordinating Committee representatives present agreed to consider approval of CRITFC's annual request to tag sockeye salmon at Wells Dam in 2016, via email, after Douglas PUD receives additional information from Jeff Fryer (Item III-A).

REVIEW ITEMS

- Kristi Geris sent an email to the Coordinating Committees on May 18, 2016, notifying them that the Draft 2015 Rocky Reach Juvenile Fish Bypass System Report is available for a 30-day review, with edits and comments due to Lance Keller by Thursday, June 16, 2016 (Item IV-B).
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FINALIZED DOCUMENTS

- There are no documents that have been recently finalized.

I. Welcome

A. Review Agenda (John Ferguson)

John Ferguson welcomed the Coordinating Committees and asked for any additions or changes to the agenda. Tom Kahler added an update on the Wells Dam bypass passive integrated transponder (PIT)-tag detection system and also a Wells Dam west fish ladder trapping request.

B. Meeting Minutes Approval (John Ferguson)

The Coordinating Committees reviewed the revised draft March 22, 2016, meeting minutes. Kristi Geris said all comments and revisions received from members of the Committees were incorporated into the revised minutes. She said she also added to the Decision Items Wells HCP Coordinating Committee approval of the Statement of Agreement (SOA) for Modified Wells Dam Trapping for Bull Trout in 2016. Coordinating Committees members present approved the March 22, 2016, meeting minutes, as revised.

C. Last Meeting Action Items (John Ferguson)

Action items from the Coordinating Committees meeting on March 22, 2016, and follow-up discussions, were as follows. (*Note: italicized text corresponds to agenda items from the meeting on March 22, 2016*):

- *John Ferguson will communicate developing details about the 2016 Subyearling Chinook Salmon Workshop to the Coordinating Committees during the monthly Coordinating Committees meetings (Item I-C).*
This will be discussed during today's conference call, and will also be carried forward.
 - *Lance Keller will provide the schedule for repairing Rock Island Dam Powerhouse 1 Unit B2 to Kristi Geris for distribution to the Coordinating Committees (Item I-C).*
Keller said he still needs to confirm this schedule with Rock Island Dam engineers. This action item will be carried forward.
 - *Tom Kahler will coordinate with Douglas PUD Information System (IS) staff to launch the HCP Tributary Committees Extranet Site (Item II-A).*
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Kahler said the HCP Tributary Committees Extranet Site is up and running. He said Julene McGregor (Douglas PUD IS Staff) presented the site to the HCP Tributary Committees during their last meeting on April 14, 2016. Kahler said a contact list still needs to be added to the site and Coordinating Committees access to the site needs to be arranged. This will be further discussed during the HCP Tributary Committees update.

- *Lance Keller will discuss internally how to properly address Pacific lamprey passage at Tumwater Dam as it relates to HCP Plan Species broodstock collection (Item II-A).* This will be discussed during today's conference call.
- *Tom Kahler will review bull trout trapping activities at Wells Dam in 2016 with the HCP Hatchery Committees and request an expedited approval, in order to request and receive email approval from the Wells HCP Coordinating Committee of the Draft SOA for Modified Wells Dam Trapping for Bull Trout in 2016 and the Draft 2016 Broodstock Collection Protocols prior to April 15, 2016 (Item III-A).* This was completed and the SOA and protocols were approved.
- *Coordinating Committees representatives will discuss bull trout trapping activities at Wells Dam in 2016 with their respective HCP Hatchery Committees representatives to help expedite the approval process (Item III-A).* This was completed, and the SOA and protocols were approved.
- *Tom Kahler will provide the 2016 Trapping Activities at Douglas PUD Facilities spreadsheet to Kristi Geris for distribution to the Coordinating Committees (Item III-C).* Kahler provided the spreadsheet to Geris on April 26, 2016, which Geris distributed to the Coordinating Committees that same day.

II. HCP Tributary and Hatchery Committees Update

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

Tracy Hillman updated the Coordinating Committees on the following actions and discussions that occurred at the last HCP Tributary Committees meeting on April 14, 2016:

- *Extranet Site:* Julene McGregor provided a presentation introducing the HCP Tributary Committees Extranet Site. Representatives and Alternates have member access to the site, and Hillman and Becky Gallaher (Chelan PUD) have administrator access. McGregor discussed logging in, navigating, searching, and uploading to the site. The
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HCP Tributary Committees intend to use the site as a repository for agendas, final meeting notes, monitoring reports, presentations, correspondence with project sponsors, final reports from project sponsors, and photographs of projects. John Ferguson noted that the Coordinating Committees should have access to the site, as well. Tom Kahler agreed, recalling that the Coordinating Committees should have access to all HCP Extranet sites. Hillman said the HCP Tributary Committees also discussed providing all HCP Tributary Committees Representatives administrator access (which allows users to upload documents directly to the viewable Document Library). Kahler said providing administrator access to all users may complicate things, and suggested that members use the Document Drop and Hillman and Gallaher (as administrators) post the documents accordingly. Hillman said he believes Gallaher can do this. *(Note: Kristi Geris contacted McGregor on April 28, 2016, and requested Coordinating Committees Representatives and Alternates visitor access to the HCP Tributary Committees Extranet site.)*

- *Presentation on the White River Restoration Project:* Recall, the HCP Tributary Committees requested presentations on projects funded by the Committees to review progress to date. Robes Parrish (USFWS) and Jason Lundgren (Cascade Columbia Fisheries Enhancement Group) provided a presentation on the White River Wood Atonement Project. The purpose of the project was to place log pilings in locations on the lower White River where wood would naturally accumulate. In 2014, they installed 128 pilings and 28 wood structures, and since installation, only five pilings have been lost, most of which were sheared off at the riverbed. These structures have experienced 2-, 5-, and 10-year flow events, have successfully racked wood, and continue to provide habitat for salmonids in the White River. Overall, the project is meeting its goals. Jim Craig noted that all of this has been done without the use of cables. Hillman said it was all just pile driving.
 - *Presentation on Restoration Projects in the Okanogan River Basin:* Chris Fisher (CCT) provided a presentation on six restoration activities in the Okanogan River Basin. Activities included working with a local science class to monitor the reconnection of a side channels at Conservancy Island. Hillman said there were few salmon present prior to opening of the side channels, and now there are many. He said the channels will continue to be monitored. Other activities included screening irrigation intakes
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and modifying the Okanogan River-Similkameen River cross channel. Hillman explained that as flow decreases in the Okanogan River, water diverts through the cross channel into the Similkameen River, dewatering portions of the Okanogan River. Therefore, a structure was installed in the cross channel to prevent this from happening, and is working well. Additional activities also included restoration projects in Canada and eliminating water loss in the Pleasant Valley Water Users Association Irrigation Canal. If eliminating water loss in the canal works, this will improve stream flow conditions in Loup Loup Creek. Fisher also discussed a proposed project to upgrade the North Fork Diversion on Salmon Creek.

- *Plan Species Accounts Audit:* The audit on the Rock Island and Rocky Reach Plan Species Accounts began on April 20, 2016, and results will be available soon.
- *Next Steps:* The HCP Tributary Committees' next scheduled meeting will be on May 12, 2016, following project tours.

Hillman updated the Coordinating Committees on the following actions and discussions that occurred at the last HCP Hatchery Committees meeting on April 20, 2016:

- *USFWS Bull Trout Consultation Update:* USFWS plans to have a final version of the Wenatchee River Steelhead Biological Opinion (BiOp) completed in May 2016.
 - *NMFS Consultation Update:* NMFS received the Wenatchee River Steelhead BiOp from the National Oceanic and Atmospheric Administration General Counsel (NOAA GC), and now NOAA GC is requesting a take surrogate for ecological interactions. Regarding Methow spring Chinook salmon, a draft permit is now complete. Historically, one permit was issued, which covered all PUDs; however, the PUDs are now requesting their own permits. NMFS agreed to comply with this request; however, NMFS indicated this will cause a delay in issuing the permits. NMFS is also undergoing a new National Environmental Policy Act process for the Methow Program permits, and is awaiting approval from NOAA GC. NMFS is planning to complete an Environmental Assessment or Environmental Impact Statement by mid-July 2016. Regarding the Mitchell Act lawsuit, NMFS is developing a BiOp to cover the funding of the Mitchell Act programs, which could cause delay to the programs. Lastly, NMFS hired four new staff to work on consultations to expedite the process.
 - *Draft Chewuch Homing Study Proposal:* An Imprinting and Homing Workgroup met
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on March 23, 2016, and discussed a study plan for an embryonic imprinting study. The workgroup agreed the treatment will be confined to the Chewuch River, and the Twisp River will serve as the control. The treatment will consist of applying Chewuch River water from the eye-up through feeding stages. A specific incubation system is needed to conduct the proposed study. The Issaquah Salmon Hatchery has such a system, and the HCP Hatchery Committees plan to visit it to attempt to replicate it. The timeline for implementation of the embryonic imprinting study will start with brood year 2017 fish, which will allow time to make and test the incubation system, as well as time for planning any infrastructure modifications. The plan is to run trials with hatchery-by-hatchery (HxH) fish before using wild broodstock, so that wild-by-wild (WxW) fish from endangered broodstock are not placed into a system that could potentially fail. However, using HxH spring Chinook salmon at a production scale could also create issues in meeting proportionate natural influence (PNI) objectives. Therefore, once the system appears to be successful, WxW fish will be used moving forward. Jeff Korth asked how success will be measured. Hillman replied, via PIT-tags and coded wire tags from carcass retrieval to estimate stray rates. Korth asked if there is a way to collect data prior to spawning, and Hillman said data will be obtained via PIT tag interrogation sites and carcass recovery.

- *Carrying Capacity Estimates:* Hillman provided a presentation on carrying capacity for Chiwawa spring Chinook salmon. The purpose of the presentation was to obtain feedback from the HCP Hatchery Committees about how carrying capacity should be estimated in Appendix 1 of the Draft Hatchery Monitoring and Evaluation (M&E) Plan. There are several methods for estimating carrying capacity, including via habitat (the maximum number of fish a given area can support) and via population (the maximum equilibrium population). Carrying capacity is regulated by density-dependent and -independent factors. Three types of stock-recruitment models were discussed, including Ricker, Beverton-Holt, and Smooth Hockey Stick. Using population data, one can calculate estimated population and habitat capacity for parr, smolts, and adults. Example results were discussed using a habitat model, and those results were compared to the results from the different stock-recruitment models. Precision was discussed, and also that carrying capacity estimates stabilize over time.
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The next steps are to complete these analyses for other spring Chinook salmon stocks (steelhead are more difficult). Ferguson asked if the number of adult spawners can be calculated that need to escape into the Chiwawa River to fully seed it. Hillman said this can be easily calculated with the Ricker and Smooth Hockey Stick models; however, adult management may add bias (i.e., removing adults who otherwise would migrate to an area and spawn adds some bias). He said there are also confounding effects due to differences in wild and hatchery spawners. He said Andrew Murdoch (WDFW) is conducting work that shows HxH fish have lower fitness than WxW, and also that hatchery fish spawn in the lower Chiwawa River where there is relatively poor habitat, but densities do not change much in preferred habitat. He said what changes is distribution in the tributaries, so at high escapement there are more fish present, and vice versa. He said stock-recruitment modeling needs a long time series of data with adequate contrast, and the Chiwawa River has more than 23 years of those data (i.e., both low and high escapement years). Bob Rose asked how river flow is calculated into carry capacity. Hillman said when evaluating the stock-recruitment relationships, spawning escapement explains about 60% of the variation in recruits (smolts). He said the remaining 40% unexplained variation is based on density-independent factors such as river flow and rain on snow events, among other things. He said an analysis can also be run using these factors as covariates in the models. Thus, flows can be included in the analyses. Rose asked if environmental factors include a hatchery component. Hillman said yes, and added that he is now evaluating genetic issues arising from the fitness studies Murdoch is conducting. Rose asked if there is funding set aside to develop these ideas for monitoring in the Douglas and Chelan PUDs Habitat Committees. Hillman said that each HCP has a fixed amount of money in a Tributary Assessment Program Account that can be used for monitoring or assessments. The Wells Assessment Fund has been used to assess restoration projects primarily in Canada. The Wells Tributary Assessment funds are nearly exhausted. Money still exists within the Rocky Reach and Rock Island Assessment Accounts. Following the guidelines within the Agreements, the HCP Habitat Committees determine how the money is spent.

- *Adult Pacific Lamprey Release within Tumwater Dam Fish Ladder:* The YN presented a Scope of Work to conduct a study to evaluate how adult Pacific lamprey navigate
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through the Tumwater Dam fishway. Thirty fish will be released directly into the ladder, including ten near the entrance, ten in the middle, and ten in the upper portion. The HCP Hatchery Committees discussed concerns regarding releasing PIT-tagged fish directly into the ladder. Lamprey could potentially attach to an array for a long time, which could affect the monitoring of Chinook salmon delays by inundating the PIT detector with tag signals. The HCP Hatchery Committees agreed to conduct the study now, prior to the Chinook salmon run. If river flow reaches 10,000 cubic feet per second (cfs), the ladder will be shut down. In this situation, it was noted there is the potential for lamprey to become trapped in the fishway. The HCP Hatchery Committees discussed how to detach lamprey from arrays if it should happen, including nudging the lamprey off the array with a stick, or adding odors to the water to draw them off. The HCP Hatchery Committees had no objections to the proposal. Rose said he believes the release will occur next week, after staff are trained.

- *Blackbird Pond Acclimation PIT-tag Data Results:* Chelan PUD provided a presentation about straying of fish released from Blackbird Pond. Chelan PUD coordinated with Trout Unlimited to acclimate steelhead at Blackbird Pond, with Trout Unlimited providing the water right, and WDFW operating the pond. Currently, approximately 25,000 steelhead are acclimated in Blackbird Pond, with the objective to create more steelhead fishing opportunities in the Wenatchee River near Blackbird Island, including providing residualized steelhead as a fishery for kids. Steelhead were first reared in Blackbird Pond in 2010. From 2013 to 2015, juvenile survival from release to McNary Dam was comparable to truck-plant releases in the Wenatchee River. Date of transfer to Blackbird Pond is significantly associated with juvenile survival to McNary Dam. Juvenile survival is higher for fish that are transferred to the pond at a later date. One of the purposes of acclimating steelhead at Blackbird Pond is to reduce stray rates to non-Wenatchee River sub-basin streams. There is no significant difference in stray rates between Blackbird Pond and combined truck-plant releases for 2010 or 2011. The purpose of this presentation was that there are structural issues with the intake screen, which would take significant investments and a permitting process, so the HCP Hatchery Committees are considering the costs and benefits associated with operating Blackbird Pond. The
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facility was built before the Chiwawa Acclimation Facility, and needs improvements. To summarize, the fate of the pond needs to be decided. Korth noted that prior to the last recalculation of the HCP hatchery programs, there was no place to raise steelhead. He said Turtle Rock stray rates were huge, and WDFW was focused on reducing stray rates, so Blackbird Pond was initially the best option available. He said now, other acclimation facilities are available.

- *Next Meeting:* The HCP Hatchery Committees' next scheduled meeting will be on May 18, 2016.

III. Douglas PUD

A. DECISION: CRITFC Sockeye Tagging (Tom Kahler)

Tom Kahler said CRITFC's annual request to tag sockeye salmon at Wells Dam in 2016 (Attachment B) was distributed to the Coordinating Committee by Kristi Geris on March 31, 2016, and a revision to the request (Attachment C) was distributed on April 22, 2016. Kahler said Attachment B is CRITFC's formal request for routine tagging that Jeff Fryer conducts at Wells Dam each year. Kahler added that in 2015, more adult sockeye salmon than usual were observed moving upstream through the fish ladders late in the migration at Mid-Columbia River dams. He said, Fryer is interested in whether those late arrivals successfully make it to the spawning grounds because he has never tagged that portion of the run in the past. Kahler said Attachment C requests tagging of up to 200 late-run fish in addition to the 800 fish in the original request. He said Fryer is not expecting to tag very many, but hopes for at least 50 fish, and 200 fish would be ideal.

John Ferguson asked about the proposed trapping operations for sockeye tagging. Kahler said Fryer is proposing that sockeye tagging coincide with WDFW's routine stock assessment and steelhead broodstock collection efforts. Kahler said Fryer would provide WDFW with PIT tags, and WDFW would tag the fish while conducting their assessment, so there will be no additional trap operations. Ferguson asked if there are any issues from WDFW's standpoint. Jeff Korth said he has no concerns. Kahler also clarified that Fryer has already coordinated with Charlie Snow (WDFW), and any additional costs will be handled via the M&E contract.

Kirk Truscott asked if Fryer could just reapportion the 800 fish instead of tagging an additional 200 fish. Truscott suggested monitoring Priest Rapids and Rocky Reach dams run timing to reapportion the tagging, as needed. He added that it seems if 200 fish are tagged late in season, the distribution of the sample will be more heavily loaded on the back end. Kahler said he believes this request was simply an afterthought that Fryer tacked onto the original request, and the intention was not to redo the whole assessment. Kahler said he also is not sure how Truscott's suggestion would affect tagging crews. He said another concern may be that in the past, tagging efforts were affected by river temperature conditions. He said late August has the highest river temperatures. Truscott also asked if Fryer plans on using MS-222. Kahler said he believes so. He added that the electronarcosis system will also be available; however, he is not sure Fryer would want to use the system because that method would be different than past years. Kahler said Fryer may also use AQUI-S. Kahler added that Fryer also floy tags the fish, so people know not to consume them. Truscott said he prefers AQUI-S. Kahler asked if AQUI-S is used, would the CCT approve tagging the additional 200 fish. Truscott said the CCT would approve.

Kahler said he will discuss with Fryer the Coordinating Committees' contingencies for approving CRITFC's annual request to tag sockeye salmon at Wells Dam in 2016, including: 1) using AQUI-S to anesthetize any fish tagged in excess of the 800 specified in the CRITFC request letter, and tagging no more than 1,000 fish throughout the entire run; or 2) using MS-222 to anesthetize the fish and tagging no more than 800 fish throughout the entire run. The Wells HCP Coordinating Committee representatives present agreed to consider approval of CRITFC's annual request to tag sockeye salmon at Wells Dam in 2016, via email, after Douglas PUD receives additional information from Fryer. *(Note: Kahler discussed this with Fryer, as requested.)*

Wells HCP Coordinating Committee representatives approved CRITFC's annual request to tag sockeye salmon at Wells Dam in 2016, via email, as follows: Douglas PUD and NMFS approved April 29, 2016; USFWS, WDFW, and the CCT approved May 2, 2016; and the YN approved May 9, 2016.

B. Wells Dam Bypass PIT-Tag Detection System (Tom Kahler)

Tom Kahler said Biomark installed the new PIT-tag antennas in the top frame section of Bypass Bay 2 on April 7, 2016, and that routine bypass operations at Wells Dam started at 0000 hours on April 9, 2016. Kahler said, however, Biomark did not provide to the Wells electricians the full layout of conduit runs needed, so when Biomark arrived onsite to install the system, one of the necessary conduits had not yet been installed. He said this installation involves accessing an area below the intake deck that requires a barge, and at the time, a barge was not available for service. He said Douglas PUD had hoped to have the new system fully operational in time for the releases of fish from hatcheries upstream of Wells Dam; however, this was ultimately not accomplished. He said in this temporary state, data are being collected and downloaded to a flash drive instead of directly to the PIT-tag Information System database. He said, once a barge is available for service, the conduit will be installed. He added that there are still additional tagged fish planned for release upstream of Wells Dam; however, now there are not as many fish available to test the new system as he had hoped. He said he will still likely lobby to install PIT-tag detection in all the openings in the top two sections of Bypass Bay 2 at Wells Dam. Kirk Truscott said he believes Chief Joseph Dam will be releasing about 5,000 to 6,000 PIT-tagged subyearling Chinook salmon during the first week of June 2016. Kahler said, in the past, those fish have been observed in beach seine catches for about 2 weeks following release.

C. DECISION: Wells Dam West Fish Ladder Trapping Request (Tom Kahler)

Tom Kahler said he just provided to Kristi Geris a request from Charles Frady to conduct real-time trapping at the Wells Dam west fish ladder during the second half of May 2016 (Attachment D), and Geris distributed the request to the Wells HCP Coordinating Committee during the meeting on April 28, 2016. Kahler explained that Frady, who leads WDFW's stock assessment each year at Wells Dam, is concerned about obtaining enough spring Chinook salmon broodstock with the west fish ladder trap out of service. Kahler also said, that based on historical data, there is concern that a large proportion of the spring Chinook salmon run will be missed for broodstock collection and stock assessment because those fish seem to favor passing Wells Dam via the west fish ladder. Kahler said Frady is requesting real-time trapping at the west fish ladder even though the conveyance pipe from the trap to the new Adult Handling Facility will be disconnected. Kahler said the plan is to divert fish into the return-to-ladder chute, collect them from that chute, transport target fish

via a boot, and anesthetize and process the fish on the west fish deck; then non-broodstock fish will be recovered in fresh water prior to being released back into the west fish ladder. He said this proposed real-time trapping will occur during regularly scheduled trapping operations.

John Ferguson asked what dates the proposed real-time trapping would occur. Kahler said most spring Chinook salmon pass Wells Dam in May, and the west fish ladder modifications are scheduled to be complete and operational by June 1, 2016; therefore, the proposed real-time trapping will likely start May 14, 2016, and end May 31, 2016. He said, during this window, trapping will occur on both fish ladders, and after May 31, 2016, trapping will revert back to regular operations. Jeff Korth asked about the proportion of total broodstock collected during this time. Kahler said he did not currently have this information; however, he can inquire about it. Kirk Truscott said the CCT does not have concerns about operating both traps during the proposed time period; however, his concern is about handling the fish. Jim Craig asked if there will be a gate operator to ensure handling will be conducted one fish at a time. Kahler explained that fish will enter a flume where it will be held or let to pass back into the fish ladder. He added that he has not observed fish ever piling up in the flume. Craig said it still is not clear to him how this will work.

Kahler asked that the Wells HCP Coordinating Committee review the email request from Frady for clarification, which was distributed to them by Geris during this discussion. Kahler said Douglas PUD will need approval of this request by next week in order to schedule staff for the effort. The Coordinating Committees took a moment to review the email request from Frady.

Wells HCP Coordinating Committee representatives present approved the request from Frady to conduct real-time trapping at the Wells Dam west fish ladder during the second half of May 2016.

IV. Chelan PUD

A. Proposed Rocky Reach Orifice Gate Closure (Lance Keller, Thad Mosey, Chris Nystrom)

Lance Keller said a proposal to close OGs in the Rocky Reach Dam fishway during the late

summer and fall of 2016 (Attachment E), as well as two photographs of the OG structures (Attachments F and G), were provided to Kristi Geris on April 25, 2016, which Geris distributed to the Coordinating Committees on April 26, 2016. Keller said this is just a discussion item at this time; however, Chelan PUD will likely request approval of the request in a couple of months. Thad Mosey (Chelan PUD Biologist and Spill Coordinator) introduced Chris Nystrom (Chelan PUD Fishway Operator). Mosey said Nystrom has been employed with Chelan PUD for more than 20 years and has a wealth of knowledge about operations at Chelan PUD facilities.

Mosey said the reason for this request is to improve hydraulic conditions throughout the powerhouse collection channel at Rocky Reach Dam. He explained that Rocky Reach Dam operates 6 of 22 OGs across the downstream face of the powerhouse, in addition to three main entrances for adult fish passage. He said three OGs are operated on the north end of the powerhouse near the left powerhouse entrance (LPE), and three are operated on the south end of the powerhouse near the right powerhouse entrance (RPE). He further reviewed the layout of the Rocky Reach fishway in Photograph 2 of Attachment E.

Mosey said the issue is regarding two pairs of rotary gates installed immediately inside of the RPE slots. He said the purpose of the gates in the original design was to provide velocity regulation of attraction water discharged through the entrances; however, in 1971, an agreement was reached to permanently position the rotary gates to maintain at least a 3-foot opening. He said this change in gate operation removed any regulation capability at the six OGs. He explained that the designed flow requirement for each OG is 64 cfs, or 384 cfs total flow out all six OGs. He said, when river flow is high, tailwater elevations are high, so there is a sufficient auxiliary water supply (AWS) flow to maintain the 1-foot differential criterion at the three main entrances and also the 384 cfs required for the OGs. He said the issues arise when tailwater elevations decline with declining river flow. He said less AWS water is required to maintain the differential at the fishway entrances; however, the flow requirement at the OGs remains at 384 cfs.

Mosey said Attachment E outlines three options to compensate for this lack of water at the RPE. He said Option 1 is to restrict flow through the rotary gates at the RPE; however, this

option is not realistic because operation of the rotary gates has already been restricted. He said Option 2 is to restrict flow to the LPE and middle spillway entrance using wing gates. He said Option 3 is to introduce additional water through sluice gates in diffuser chambers along the collection channel; however, this will slow the water velocity through the collection channel due to the upwelling of water from individual diffusion chambers located along the entire length of the channel, which may affect fish passage. Mosey said Nystrom has been using the wing gates option (Option 2) opposed to altering fishway operations.

Mosey said, however, Chelan PUD is proposing to close the six OGs in the collection channel to provide additional flow to the RPE. He said annual fishway inspection reports from area hydroelectric projects during the early 2000s indicated the OGs were closed during this period, and there were positive results and no negative effects observed on fish passage. He said, based on these results, Chelan PUD would like to try the same operations at Rocky Reach Dam along with monitoring of fish counts. He said, if no issues are observed based on the count data, Chelan PUD would like to keep the gates closed. Nystrom added that the option Chelan PUD is exercising now (with the wing gates) is less desirable than what Chelan PUD ultimately prefers (i.e., to close the OGs).

Bob Rose recalled discussions about this during the early 2000s; however, he could not recall the details of those discussions. He said the discussions were captured in meeting notes, and suggested Chelan PUD review those discussions and concerns expressed. He said, for some reason, the decision was made to leave the gates open, and requested that Chelan PUD summarize those discussions for the Coordinating Committees to consider. Scott Carlon also asked if Chelan PUD has any historical radio telemetry data demonstrating use of the OGs for adult fish passage and said he will discuss this with Aaron Beavers (NMFS fish passage engineer). Mosey said those data are available, and that Chelan PUD will provide a summary of discussions held in the early-2000s regarding a request to close OGs at Rocky Reach Dam, including historical radio telemetry data demonstrating use of the OGs for adult fish passage.

B. Draft 2015 Rocky Reach and Rock Island Juvenile Fish Bypass Reports (Lance Keller)

Lance Keller said he will provide these draft reports for Coordinating Committees review by Friday, April 29, 2016. *(Note: Keller provided the Draft 2015 Rocky Reach Juvenile Fish Bypass*

Report to Kristi Geris on May 17, 2016, which Geris distributed to the Coordinating Committees on May 18, 2016.)

C. 10% Spring Spill Initiation at Rock Island Dam (Lance Keller)

Lance Keller said a notification of the initiation of spring fish spill at Rock Island Dam was distributed to the Coordinating Committees by Kristi Geris on April 11, 2016. Keller said spring spill at Rock Island Dam started at midnight on April 10, 2016. He said spill was initiated based on: 1) fish counts past Rock Island Dam (specifically the sockeye salmon count); 2) counts at the screw trap located on the Wenatchee River, indicating fish were migrating early; and 3) the Data Access in Real Time (DART) database. He said 4.6% passage of sockeye salmon on April 9, 2016, at Rock Island Dam initiated spill on April 10, 2016, at midnight. He said DART is estimating that April 10, 2016, was at about the 10.5% passage mark for sockeye salmon, but will continually adjust as the season progresses. He said daily counts have been in the 400 to 700 fish range, and it is earlier than normal to observe this number of fish counted. He said, however, based on available data and also that spill was initiated late last year, Chelan PUD was conservative and started spill earlier than normal.

D. Pacific Lamprey Passage at Tumwater (Lance Keller)

Lance Keller recalled Chelan PUD's action item from the March 22, 2016, meeting to discuss internally how to properly address Pacific lamprey passage at Tumwater Dam as it relates to HCP Plan Species broodstock collection. Keller said he and Alene Underwood (Chelan PUD HCP Hatchery Committees Representative) agreed the HCP Hatchery Committees have oversight regarding trapping for broodstock, and the Coordinating Committees have oversight regarding fish passage. Keller said these same principles apply to Pacific lamprey at Tumwater Dam when either collection of broodstock or adult passage of HCP Plan Species is of concern. He added that discussions will likely be presented to both Committees because they typically are interconnected.

Jim Craig said, irrespective of individual Committees' oversight, he believes everyone has a responsibility to resolve the passage impediment currently present at Tumwater Dam. He said he hopes everyone can collectively work together, especially with the YN, to assess passage issues at the entire dam, including the fishway. Bob Rose agreed and also stated that Chelan PUD's interpretation of Committee responsibilities was correct.

V. HCP Administration

A. 2016 Subyearling Chinook Salmon Workshop

John Ferguson said a draft Subyearling Chinook Salmon Workshop Agenda was distributed to the Coordinating Committees by Kristi Geris on April 21, 2016. Ferguson said the draft agenda was developed by a subgroup of PUDs representatives and Denny Rohr (Priest Rapids Coordinating Committee [PRCC] Facilitator). Ferguson said the workshop is scheduled for June 21, 2016. He noted that the workshop is structured as a full-day meeting; however, 2 hours are allocated for round-table discussion sessions. He said the intent of the workshop is to communicate information and bring everyone up to speed on the latest aspects of summer and fall Chinook salmon in the Mid-Columbia Basin. He said the workshop sponsors are all three PUDs (Chelan, Douglas, and Grant).

Ferguson said the workshop will start with him and Rohr introducing and reviewing roles. He said Dr. John Skalski will then present the current survival model, bringing everyone up to speed on the latest survival models developed by the University of Washington for application on subyearling Chinook salmon. Ferguson said Billy Connor (USFWS) will then review his research on Snake River life-history patterns. Ferguson said, following a break, the Mid-Columbia Basin will be discussed by five speakers. He said the workshop will then break for lunch (provided by Grant PUD), and reconvene to discuss availability of fish to meet model requirements (e.g., what is known about collecting fish at different facilities). Ferguson said, following another break, tagging effects will be discussed, including presentations by Rich Brown (Pacific Northwest National Laboratory) on barotrauma and Marty Liedtke (U.S. Geological Survey) on tagging effects and hardware. Ferguson said the final discussion is intended to provide Committees members an opportunity to ask questions of the speakers.

Ferguson said he would like to finalize the draft agenda during the Coordinating Committees meeting on May 24, 2016. Jim Craig asked if there will be a section addressing what tag technology will be available to conduct subyearling Chinook salmon studies. Ferguson said Liedtke will address that topic. Ferguson added that the planning subgroup chose not to invite vendors to avoid sales pitches; however, Liedtke plans to discuss what is working and

what is not, as well as other various hardware questions.

Ferguson noted that some speakers still need to be finalized, including WDFW speakers for the Mid-Columbia Basin section. Jeff Korth said he spoke with Andrew Murdoch about presenting for that item. Craig said USFWS is coordinating with Peter Graf (Grant PUD) about who will present Entiat River PIT-tagging efforts and will provide that name when it is available. Kirk Truscott said Casey Baldwin (CCT) will contact Tom Kahler to coordinate information on subyearling Chinook salmon upstream of Wells Dam. Kahler said he also plans to schedule a meeting with the CCT, WDFW, Grant PUD, Douglas PUD, and USFWS to confirm information is not being duplicated or overlooked. Ferguson also noted that Skalski was originally only available for the first hour, but now will be available all day.

B. Next Meetings

Jim Craig noted that the PRCC's meeting in May 2016 will be held in Eastern Washington. Lance Keller said he will be in Oregon; however, can attend an in-person meeting if needed. He said Chelan PUD will also agree to a conference call. Tom Kahler said Douglas PUD will likely have a light agenda. Scott Carlon said he will not be present for the Coordinating Committees meeting on May 24, 2016.

The next scheduled Coordinating Committees meeting is on May 24, 2016, to be held by conference call. The 2016 Subyearling Chinook Salmon Workshop will be held June 21, 2016, at the Red Lion Hotel in SeaTac, Washington, and the regularly scheduled Coordinating Committees meeting will be held June 22, 2016, at the usual Radisson Hotel location. The July 26, 2016, meeting will be held by conference call, or in-person at the Radisson Hotel in SeaTac, Washington, as is yet to be determined.

VI. List of Attachments

Attachment A	List of Attendees
Attachment B	CRITFC's Annual Request to Tag Sockeye Salmon at Wells Dam in 2016
Attachment C	Revision to CRITFC's Annual Request to Tag Sockeye Salmon at Wells Dam In 2016

- Attachment D Request from Charles Frady to Conduct Real Time Trapping at the Wells Dam West Fish Ladder during the second half of May 2016
- Attachment E Proposal to Close OGs in the Rocky Reach Dam Fishway during the Late Summer and Fall of 2016
- Attachment F Photograph of Rocky Reach OG Structure
- Attachment G Photograph of Rocky Reach OG Structure Close-up
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Attachment A
List of Attendees

Name	Organization
John Ferguson	Anchor QEA, LLC
Kristi Geris	Anchor QEA, LLC
Tracy Hillmant†	BioAnalysts
Lance Keller*	Chelan PUD
Alene Underwood†††	Chelan PUD
Chris Nystrom††	Chelan PUD
Thad Mosey††	Chelan PUD
Tom Kahler*	Douglas PUD
Scott Carlon*	National Marine Fisheries Service
Jim Craig*	U.S. Fish and Wildlife Service
Jeff Korth*	Washington Department of Fish and Wildlife
Bob Rose*	Yakama Nation
Kirk Truscott*	Colville Confederated Tribes

Notes:

- * Denotes Coordinating Committees member or alternate
 - † Joined for the HCP Tributary and Hatchery Committees Update
 - †† Joined for the Proposed Rocky Reach Orifice Gate Closure
 - ††† Joined for the Pacific Lamprey Passage at Tumwater
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