

FINAL MEMORANDUM

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

From: John Ferguson, HCP Coordinating Committees
Chairman

Cc: Kristi Geris

Re: Final Minutes of the October 25, 2016, HCP Coordinating Committees Meeting

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Coordinating Committees met at Douglas PUD Headquarters in East Wenatchee, Washington, on Tuesday October 25, 2016, from 9:30 to 11:30 a.m. Attendees are listed in Attachment A to these meeting minutes.

ACTION ITEM SUMMARY

- Chelan PUD will provide a Rock Island Powerhouse 1 Maintenance Update during the next Coordinating Committees meeting (Item I-C).
- Chelan PUD will provide a table and written explanation of the maintenance (upgrades) being proposed to the Federal Energy Regulatory Commission (FERC) for Rock Island Powerhouse 1 Units B1 to B4, including how the upgrades differ from current conditions, to Kristi Geris for distribution to the Coordinating Committees (Item I-C).
- Bob Rose will discuss data and calculations used to derive new Coho salmon phase designations during the Coordinating Committees meeting on November 15, 2016 (Item I-C).
- **The Coordinating Committees meeting on November 15, 2016, will be held at 10:00 a.m., in-person at the Grant PUD office in Wenatchee, Washington (Item IV-B).**

DECISION SUMMARY

- Rocky Reach and Rock Island HCP Coordinating Committees representatives present approved the 2016 Rocky Reach and Rock Island Spill Report, as revised (Item V-C).
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(Note: Jeff Korth provided Washington Department of Fish and Wildlife's [WDFW's] approval of the report via email on November 3, 2016, which Kristi Geris distributed to the Coordinating Committees that same day.)

AGREEMENTS

- Rocky Reach HCP Coordinating Committee representatives present agreed to Chelan PUD beginning the 2016/2017 adult fish ladder winter maintenance work period at Rocky Reach Dam 3 weeks early. Rather than beginning January 2, 2017, the new start would be December 12, 2016, to allow more time to complete an overhaul of one or two (of three) auxiliary water supply (AWS) pumps (Item V-B).
(Note: Jeff Korth provided WDFW's approval of the early outage via email on November 3, 2016, which Kristi Geris distributed to the Coordinating Committees that same day.)
- Coordinating Committees representatives present agreed that Coordinating Committees approval will be required to add non-HCP representatives and alternates to HCP email distribution lists, similar to approving Extranet access (the latter discussed February 25, 2014; Item VI-A).
- Coordinating Committees representatives present agreed to add Michael Humling (U.S. Fish and Wildlife Service [USFWS]) to the HCP Hatchery Committees email distribution list (Item VI-A).
- Coordinating Committees representatives present agreed to move the start time of the monthly Coordinating Committees from 9:30 to 10:00 a.m., to accommodate travel arrangements for attendees (Item VI-B).

REVIEW ITEMS

- Kristi Geris sent an email to the Coordinating Committees on September 6, 2016, notifying them a Wells Project Land-use Permit Application (Thomason) was available for a 60-day review period, with edits and comments due to Tom Kahler by Friday, November 4, 2016.
 - Kristi Geris sent an email to the Coordinating Committees on October 6, 2016, notifying them the Draft Wells Post-Season Bypass Report and Passage-Dates Analysis was available for a 60-day review period, with edits and comments due to
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Tom Kahler by Monday, December 5, 2016 (Item IV-A).

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. The following revisions were requested:

- Lance Keller postponed the Rocky Reach and Rock Island Coho Salmon Phase Designation discussion until the Coordinating Committees meeting on November 15, 2016, and added a decision on the 2016/2017 Rocky Reach Adult Ladder Winter Maintenance Outage.
- Ferguson added a discussion on HCP email distribution lists protocol.

B. Meeting Minutes Approval (John Ferguson)

The Coordinating Committees reviewed the revised draft September 27, 2016, conference call minutes. Kristi Geris said all comments and revisions received from members of the Committees were incorporated into the revised minutes. Coordinating Committees members present approved the September 27, 2016, conference call minutes, as revised.

C. Last Meeting Action Items (John Ferguson)

Action items from the Coordinating Committees meeting on September 27, 2016, and follow-up discussions, were as follows. (*Note: italicized text corresponds to agenda items from the meeting on September 27, 2016*):

- *Chelan PUD will provide a Rock Island Powerhouse 1 Maintenance Update during the next Coordinating Committees meeting (Item I-C).*
This will be discussed during today's meeting, and will also be carried forward.
 - *Chelan PUD will provide a table and written explanation of the maintenance (upgrades) being proposed to FERC for Rock Island Powerhouse 1 Units B1 to B4, including how the upgrades differ from current conditions, to Kristi Geris for distribution to the Coordinating Committees (Item I-C).*
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This action item will be carried forward.

- *Chelan PUD will: 1) add details explaining subyearling Chinook salmon cumulative passage at Rocky Reach Dam in the Draft 2016 Rocky Reach and Rock Island Spill Report; 2) provide a revised draft for review and comment; and 3) request approval of the report during the Coordinating Committees meeting on October 25, 2016 (Item III-A).*

Lance Keller provided a revised draft report for approval to Kristi Geris on October 24, 2016, which Geris distributed to the Coordinating Committees that same day.

- *Chelan PUD will incorporate edits received from the Yakama Nation (YN) and the Colville Confederated Tribes (CCT) into the Rocky Reach and Rock Island Subyearling Chinook Salmon Phase III Designation (Additional Juvenile Studies) Statement of Agreement (SOA), will distribute the revised SOA, and request email approval by Friday, September 30, 2016 (Item III-B).*

Lance Keller provided a revised SOA, as discussed, to Kristi Geris on September 28, 2016, which Geris distributed to the Coordinating Committees for approval that same day.

- *Bob Rose will discuss data and calculations used to derive new Coho salmon phase designations during the Coordinating Committees meeting on November 15, 2016 (Item III-C).*

This action item will be carried forward.

- *Chelan PUD will request approval during the Coordinating Committees meeting on October 25, 2016, to begin the 2016/2017 adult fish ladder winter maintenance work period at Rocky Reach Dam 3 weeks early; rather than beginning January 2, 2017, the new start would be December 12, 2016 to allow more time to complete an overhaul of one (of three) auxiliary water supply (AWS) pumps (Item III-E).*

This will be discussed during today's meeting.

- *Jim Craig will ask Greg Fraser (U.S. Fish and Wildlife Service [USFWS]) if he is available to share his presentation on Entiat River History and Impacts to Chinook Salmon during the Coordinating Committees in-person meeting on October 25, 2016 (Item IV-B).*

Craig contacted Fraser following the meeting on September 27, 2016, and Fraser

indicated he can present during the meeting on October 25, 2016.

II. HCP Tributary and Hatchery Committees Update

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

Tracy Hillman reported that the HCP Tributary Committees did not convene a meeting in October 2016; rather, some members of the Committees met to tour projects on the Okanagan River in Canada on October 12 and 13, 2016. Jeff Korth also participated in the tour. The tour included Conservancy Island, where Chris Fisher (CCT) explained current restoration efforts and results from monitoring and evaluation (M&E) studies conducted in side channels around the island. The HCP Tributary Committees also met with the Okanagan Nation Alliance (ONA), who provided an overview and results of past projects funded by the HCP Tributary Committees and the Priest Rapids Coordinating Committee Habitat Subcommittee. The tour also included viewing and discussing restoration activities and opportunities for streams that discharge into the Okanagan River, and viewing constructed spawning beds and side-channel reconnection options in the Penticton Channel. On the second day, the HCP Tributary Committees toured some major tributaries to Okanagan Lake, and ONA discussed limiting factors and plans to address them. The next meeting of the HCP Tributary Committees will be on November 10, 2016.

Hillman updated the Coordinating Committees on the following actions and discussions that occurred during the HCP Hatchery Committees meeting on October 19, 2016.

- *USFWS Bull Trout Consultation Update:* Bill Gale (USFWS HCP Hatchery Committees Representative and Coordinating Committees Alternate) reported that no update was available. He also stated that he was directed by USFWS regional staff to shift focus to other projects. Therefore, Matt Cooper will now become the USFWS HCP Hatchery Committees Representative, and Gale will become the Alternate (Gale will also remain the Coordinating Committees Alternate). This change may only be in effect for 6 months. Jim Craig provided a USFWS HCP Representation Designation Letter to Kristi Geris on October 21, 2016, which Geris distributed to the Coordinating Committees that same day (Attachment B). USFWS also requested to add Michael Humling to the HCP Hatchery Committees email distribution list, which will be further discussed during today's meeting.
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- *National Marine Fisheries Service (NMFS) Consultation Update*: NMFS is reviewing comments received from the applicants on the Methow Spring Chinook Salmon Draft Environmental Assessment.
- *Embryonic Imprinting*: The HCP Hatchery Committees are revisiting discussions regarding homing of Chewuch spring Chinook salmon. A subgroup is preparing a study plan to evaluate the use of adult outplanting in the Chewuch River. The Committees believe this approach will provide more useful information for future studies and is less costly than conducting an embryonic imprinting study. Pending the results of the outplanting study, the HCP Hatchery Committees may consider the more expensive embryonic or sequential imprinting study.
- *Genetic Sampling for HCP Program Species Timeline*: WDFW proposed conducting genetic analyses of HCP Program Species every 10 years. WDFW also discussed whether a power analysis should be run to verify how often genetic analyses are needed. This discussion is a part of Hatchery M&E Plan Objective 7. WDFW received comments from the HCP Hatchery Committees and will resubmit the proposal for approval.
- *Review Hatchery M&E Plan Draft Appendices*: The HCP Hatchery Committees further discussed Appendix 5 (stray rate objectives), in order to reach agreement on a definition for genetic and management strays. The Committees reviewed the language in the Hatchery M&E Plan and, once re-evaluated, decided it was not necessary to have an appendix because stray rates are adequately defined in the plan. Next month, the Committees will discuss possibly revising stray rates targets in the Hatchery M&E Plan. Tom Kahler explained, the idea is that hatchery stray rates should not be required to be lower than natural populations. Hillman said a paper by Mike Ford (NMFS) and others indicates a natural stray rate of up to 17.5% for Chinook salmon.¹ Hillman said currently the Hatchery M&E Plan calls for a stray rate of 10% within the basin, so the Committees may consider increasing the in-basin stray rate based on Ford's paper.

¹ Ford, M., A. Murdoch, M. Hughes, 2015. Using parentage analysis to estimate rates of straying and homing in Chinook salmon (*Oncorhynchus tshawytscha*). *Molecular Ecology* 24:1109-1121.

- *Draft Summary of Hatchery M&E Report Review:* The HCP Hatchery Committees want to document that responsibilities have been fulfilled with regard to review of the Hatchery M&E Report, as required by the HCP Hatchery Committees SOA “Evaluation of Hatchery Programs Funded by Douglas County PUD 5-Year Report 2006-2010” (approved March 27, 2015). Therefore, Chelan PUD drafted a document summarizing these efforts and will also include an executive summary, as recommended by the HCP Hatchery Committees, for Committees’ review.
- *Methow Steelhead Gene Flow:* Douglas PUD and USFWS are evaluating proportionate natural influence (PNI) and percent hatchery-origin spawners (pHOS) objectives using a four-population gene flow model developed by NMFS. All scenario results indicate that in order to reach the proposed pHOS and PNI objectives, adult removal rates would need to be 70% or greater. At this point, it appears NMFS will recommend a pHOS of 0.5 (rather than 0.3) for Methow steelhead. Hillman noted this seems appropriate, considering this is the same target used for the spring Chinook salmon population.
- *3-Year Hatchery Committees Chair Review Results:* The HCP Hatchery Committees elected to retain the Chairperson and support personnel for three more years.
- *Draft Methow M&E Implementation Plan 2017:* Douglas PUD submitted a draft plan to the HCP Hatchery Committees to review. The Committees agreed to a 30-day review instead of the normal 60-day review. Comments are due November 8, 2016, which will help facilitate contracting requirements before the end of 2016.
- *Next Steps:* The next meeting of the HCP Hatchery Committees will be on November 16, 2016, which means the HCP Hatchery Committee Chairperson will not provide an update of this meeting to the Coordinating Committees until the December 2016 meeting.

III. USFWS

A. *PRESENTATION: Entiat River History and Impacts to Chinook Salmon (Greg Fraser)*
Jim Craig introduced Greg Fraser, USFWS Fish Biologist. Craig said Fraser focuses most of his time on evaluation efforts associated with the Entiat National Fish Hatchery (NFH). Fraser said he will be presenting a talk titled “Entiat River History and Impacts to Chinook Salmon” (Attachment C), which was distributed to the Coordinating Committees by

Kristi Geris on September 28, 2016. The presentation included a brief history about the Entiat River and Entiat NFH, review of Entiat River survey data and results, and population trends from 1995 to 2015.

Presentation

Historically, three dams blocked anadromous fish access to the Entiat River, extirpating any endemic fish runs. In 1948, a flood destroyed the dams and reopened the river to anadromous fish. Following 1948, a natural barrier, located in the lower Entiat River, still existed during low-flow conditions (summer and fall runs); however, it did not present a barrier to fish passage during high-flow conditions (spring run). In 1961, construction of Rocky Reach Dam inundated the natural barrier, and it is now passable to all Chinook salmon runs.

In 1941, Entiat NFH was constructed and initially used for research. In 1961, the hatchery was converted into a production facility and was reconstructed in 1979. Historically, the hatchery has produced spring and summer Chinook salmon, sockeye and coho salmon, and rainbow trout, sourced from multiple stocks. From 2009 to present day, Entiat NFH rears summer Chinook salmon only.

Fish surveys are conducted in the upper and lower Entiat River basin. Surveys are not conducted in the middle basin because of the steeper gradient, larger substrate, and overall poor spawning habitat. Based on spawning ground surveys conducted from 1995 to 2015, abundance trends include peaks and valleys each year for spring and summer Chinook salmon, but overall are generally increasing. Survey data indicate spatial and temporal separation between spring and summer Chinook salmon (springers tend to spawn in upper reaches, and summers spawn in lower reaches); however, the data also indicate some overlap. These data suggest some superimposition of summer Chinook salmon on spring Chinook salmon redds (as high as 60% at times), which has been a concern in the Entiat River. Genetic spatial distribution and carcass recovery data indicate the proportion of hatchery-origin fish is greater in the lower reaches of the river, and natural-origin fish proportions are greater in the upper reaches of the river. In some years, most hatchery-origin returns came from out-of-basin hatcheries (strays). This is especially true

for spring Chinook salmon, starting in 2010, and for summer Chinook salmon prior to 2014.

Questions

Craig asked about the increase in spring Chinook salmon abundance in 2015 and asked if it may be due to a temperature affect (warmer water in 2015, especially in the Snake River). Fraser said this may be so in 2015; however, he has not reviewed those data in prior years. Craig said the increase could be due to hatchery or environmental effects.

John Ferguson asked what the programmatic driver was behind the shift from springers to summers. Craig said it was a USFWS reform action to move away from Endangered Species Act-listed spring Chinook salmon. He said it was an easy change to rear a non-ESA-listed stock. Fraser added, these fish are produced for harvest.

Kirk Truscott asked about the proportion of strays compared to the overall spawning population. He cautioned this does not translate to fewer fish. He said, from a genetic integration standpoint, in order to evaluate the success of the Mid-Columbia Programs, the number of strays also needs to be considered, along with the proportion. Fraser said some fish return later, which seem to be a collection of hatchery fish from different areas. He said, among natural-origin returns, he is uncertain whether these are all from the Entiat River or whether they are strays from other systems. Truscott asked about detections of passive integrated transponder (PIT)-tagged natural-origin recruits in the Entiat River, and Fraser said most of those detected are from the Entiat River. Craig noted that PIT-tag array efficiency is low during the spring. Tom Kahler asked whether Entiat NFH releases are returning, and Fraser said yes.

Ferguson asked if the focus of the habitat restoration efforts in the basin is on springers, summers, or both. Fraser said the focus is on juvenile rearing. He added that USFWS is focusing on enhancing rearing habitat. Ferguson said it seems that all the effort is pushing toward summers. Kahler said the work is to benefit ESA-listed springers and steelhead, since most of the restoration money comes from federal programs intended to recover those species, and benefits to summers are incidental.

Truscott asked, based on scale samples during carcass-recovery efforts, whether the preponderance of natural-origin recruits of summer Chinook salmon were from true subyearlings, and Fraser said yes.

IV. Douglas PUD

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

Tom Kahler said Kristi Geris sent an email to the Coordinating Committees on October 6, 2016, notifying them the Draft Wells Post-Season Bypass Report and Passage-Dates Analysis (Attachment D) was available for a 60-day review period, with edits and comments due to Kahler by Monday, December 5, 2016. Kahler said he has received one comment to date, from Jim Craig. Kahler said Craig asked, considering the Coordinating Committees accepted that yearling Chinook salmon survival is a reasonable surrogate for yearling coho salmon survival, why in Table 1 of Attachment D are the estimated travel time for yearling coho salmon shown as being 2 days when it is 5 days (based on data) for yearling Chinook salmon. Kahler said he believes Craig is correct, that travel time for yearling coho salmon should be 5 days, similar to yearling Chinook salmon, and the adjustment will be made prior to finalizing the report. Kahler welcomed additional comments prior to the review deadline.

V. Chelan PUD

A. Rock Island Powerhouse 1 Maintenance Update (Lance Keller and Brett Bickford)

Lance Keller introduced Brett Bickford, Chelan PUD Engineering and Project Management Director. Bickford handed out a summary on the Rock Island Powerhouse 1 Units B1 to B4 Maintenance Project, 2017 to 2020 (Attachment E), which was electronically distributed to the Coordinating Committees by Kristi Geris on October 26, 2016. Bickford recalled that surface cracks were identified on the blades of Rock Island Powerhouse 1 Units B1 through B4. He said, following several months of blade repairs and continued cracking, Chelan PUD conducted a comprehensive review to determine whether to modernize or retire the turbine units. He said, based on this review, Chelan PUD decided there was an overall value to keeping the units and discussed with manufacturers options for replacing the blades only. He said the head covers are cast iron; if they crack, there is no easy way to fix them. So Chelan PUD decided the repairs will include up to the head covers. He said the hydraulic

capacity and generation output will not change, and the proposed improvements will incorporate fish-friendly features, as described in Attachment E.

Bickford reviewed the rest of Attachment E, and noted the schedule is fairly aggressive. He said, typically, Chelan PUD would prefer to address one unit at a time. However, he believes it will be valuable to complete all repairs prior to the HCP check-in in 2020. Keller reminded the Coordinating Committees that these repairs are considered as maintenance by FERC. Alene Underwood (Chelan PUD Fish and Wildlife Program Manager) said the next step for Chelan PUD, in concert with Bickford's process, is to draft a letter to FERC outlining the planned maintenance for the Rock Island Dam Powerhouse 1 units, and provide that draft letter to the Coordinating Committees for review. Underwood said Chelan PUD will request a 30-day review, and target submitting the final letter to FERC by December 31, 2016. John Ferguson suggested providing the draft letter for review by the Coordinating Committees prior to the next meeting on November 15, 2016.

B. DECISION: 2016/2017 Rocky Reach Adult Ladder Winter Maintenance Outage (Lance Keller)
Lance Keller recalled that Chelan PUD is requesting to begin the upcoming 2016/2017 annual adult fish ladder winter maintenance period at Rocky Reach Dam 3 weeks early to complete needed work, including an overhaul of one (of three) AWS pumps. Keller said Thad Mosey (Chelan PUD Fish Biologist) reminded him that a past Coordinating Committees concern regarded which fish are migrating past the project during the month of December. Keller said, to address this concern, Chelan PUD monitored count window passage using video from November 16 to December 31, 2012, which he used to review passage data from December 12 to 31, 2014 (the proposed early outage period). He said that, based on these data, fish passage during that time period included: zero Chinook salmon, seven natural-origin steelhead, ten hatchery-origin steelhead, four adult bull trout, three subadult bull trout, and one coho salmon. He said, this year, the steelhead run is even lower, but overall, he expects these numbers to be largely representative for 2016.

Keller reminded the Coordinating Committees that if the work is completed early, the ladders will be brought back online early. He also clarified that this request is for this year only, and next year's maintenance period will be based on the results of this year's efforts.

Rocky Reach HCP Coordinating Committee representatives present agreed to Chelan PUD beginning the 2016/2017 adult fish ladder winter maintenance work period at Rocky Reach Dam 3 weeks early. Rather than beginning on January 2, 2017, the new start would be December 12, 2016, to allow more time to complete an overhaul of one or two (of three) AWS pumps. *(Note: Jeff Korth provided WDFW's approval of the early outage via email on November 3, 2016, which Kristi Geris distributed to the Coordinating Committees that same day.)*

C. DECISION: 2016 Rocky Reach and Rock Island Spill Report (Lance Keller)

Lance Keller said a Revised Draft 2016 Rocky Reach and Rock Island Spill Report was distributed to the Coordinating Committees by Kristi Geris on October 24, 2016. Keller offered to postpone approval of the report, if needed, due to the late distribution of the revised report. He said revisions included: 1) corrected percent of run that passed under Rock Island spring spill for each species; and 2) added explanation under Rocky Reach summer spill describing how the 95% passage target was missed for subyearling Chinook salmon. John Ferguson asked if the added language will suffice for FERC reporting purposes, since missing the 95% objective will have to be described, and Keller said that combined with the meeting minutes, he believes it will.

Rocky Reach and Rock Island HCP Coordinating Committees representatives present approved the 2016 Rocky Reach and Rock Island Spill Report, as revised. *(Note: Jeff Korth provided WDFW's approval of the report via email on November 3, 2016, which Geris distributed to the Coordinating Committees that same day.)*

VI. HCP Administration

A. HCP Email Distribution Lists Protocol (John Ferguson and Kristi Geris)

Kristi Geris recalled the Coordinating Committees revisiting the HCP email distribution lists in 2014, and discussing how to manage the lists so they remain meaningful and somewhat exclusive. She said this discussion was prompted because the lists had become large and included an assortment of members, including several retired staff. She also recalled Mike Schiewe's (former HCP Chairman, retired) interest in encouraging interagency coordination, as opposed to copying everyone on every email. *(Note: after the meeting, Geris*

recalled that the HCP email distribution lists were then reduced to representatives only, and the carbon copy list included alternates and select staff, as discussed and agreed upon with the PUDs.)

Geris said there was an agreement to require Coordinating Committees approval for non-HCP representatives and alternates for HCP Extranet access; however, a process was not specified for modifying the email distribution lists. She said, based on review of HCP Hatchery and Coordinating Committees minutes, people have been added to the email distribution lists with and without Coordinating Committees approval. Geris asked the Coordinating Committees what they prefer regarding protocol for modifying email lists. John Ferguson also noted that Michael Humling was recently added to the HCP Hatchery Committees email distribution list, and Ferguson wanted to verify the Coordinating Committees approved, if applicable. Tom Kahler explained that Humling is USFWS's point of contact for hatchery coordination in the Methow, much like Charlie Snow (WDFW) is for Douglas and Chelan PUDs, so being added to the email distribution seems reasonable.

Coordinating Committees representatives present agreed that Coordinating Committees approval will be required to add non-HCP representatives and alternates to HCP email distribution lists, similar to approving Extranet access (the latter discussed February 25, 2014). Coordinating Committees representatives present agreed to add Humling to the HCP Hatchery Committees email distribution list.

B. Next Meetings

The next scheduled Coordinating Committees meeting is on November 15, 2016, to be held in-person at the Grant PUD Wenatchee Office in Wenatchee, Washington. Tom Kahler said a room at Douglas PUD is typically available, if needed (similar to this month). Scott Carlon proposed moving the meeting start time to 10:00 a.m. to accommodate travel arrangements. Coordinating Committees representatives present agreed to move the start time of the monthly Coordinating Committees from 9:30 to 10:00 a.m., to accommodate travel arrangements for attendees.

The December 13, 2016, and January 24, 2017, meetings will be held by conference call, or in-person at the Grant PUD Wenatchee Office in Wenatchee, Washington, as is yet to be determined.

VII. List of Attachments

Attachment A	List of Attendees
Attachment B	USFWS HCP Representation Designation Letter
Attachment C	Entiat River History and Impacts to Chinook Salmon
Attachment D	Draft Wells Post-Season Bypass Report and Passage-Dates Analysis
Attachment E	Rock Island Powerhouse 1 Units B1 to B4 Maintenance Project, 2017 to 2020

**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
Brett Bickford+++	Chelan PUD
Tom Kahler*	Douglas PUD
Scott Carlon*	National Marine Fisheries Service
Jim Craig*	U.S. Fish and Wildlife Service
Greg Fraser++	U.S. Fish and Wildlife Service
Kirk Truscott*	Colville Confederated Tribes

Notes:

- * Denotes Coordinating Committees member or alternate
 - † Joined by phone for the HCP Tributary and Hatchery Committees Update
 - ++ Joined for USFWS presentation
 - +++ Joined for the Rock Island Powerhouse 1 Maintenance Update
-