

Memorandum

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

Date: February 28, 2017

From: John Ferguson, HCP Coordinating Committees Chairman

cc: Kristi Geris

Re: Final Minutes of the January 24, 2017, HCP Coordinating Committees Meeting

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans (HCPs) Coordinating Committees met at the Grant PUD Office in Wenatchee, Washington, on Tuesday January 24, 2017, from 10:00 a.m. to 12:45 p.m. Attendees are listed in Attachment A to these meeting minutes.

Action Item Summary

- Alene Underwood (Chelan PUD Fish and Wildlife Program Manager) will provide Chelan PUD's comments on the Federal Columbia River Power System (FCRPS) National Environmental Policy Act (NEPA) Scoping Process to Kristi Geris for distribution to the Coordinating Committees (Item II-B).
- Lance Keller will revise the draft Statement of Agreement (SOA), "Acknowledgement of Rock Island Powerhouse 1 Units B1-B4 Consultation," as discussed, and will provide the revised draft SOA to Kristi Geris for distribution to the Coordinating Committees (Item II-C). *(Note: the revised draft SOA was distributed following the meeting on January 24, 2017, and is available for a 10-day review with vote via email due to Keller by Friday, February 3, 2017.)*
- Lance Keller will revise the Draft 2017 Rock Island and Rocky Reach HCP Action Plan, as discussed, and will provide the revised draft plan to Kristi Geris for distribution to the Coordinating Committees (Item II-D). *(Note: the revised draft plan was distributed following the meeting on January 24, 2017, and is available for review with edits and comments due to Keller by Wednesday, February 22, 2017.)*
- Lance Keller will provide fish rescue numbers from the 2016/2017 Rock Island and Rocky Reach dams adult fish ladder maintenance periods to Kristi Geris for distribution to the Coordinating Committees (Item II-E). *(Note: Keller provided fish rescue numbers [Attachment B] to Geris on February 16, 2017, which Geris distributed to the Coordinating Committees on February 17, 2017.)*
- Lance Keller will notify the Rocky Reach HCP Coordinating Committee when the Rocky Reach Dam adult fish ladder is brought back online from the 2016/2017 Rocky Reach Dam adult fish ladder maintenance period (Item II-E). *(Note: Keller provided notification that the Rocky Reach Dam adult fishway was returned to service on February 14, 2017, which was distributed to the Coordinating Committees by Kristi Geris that same day.)*

- Tom Kahler will provide fish passage count data for winter months at Wells Dam for review regarding timing of winter maintenance at Wells Dam to Kristi Geris for distribution to the Coordinating Committees (Item III-A).
- Tom Kahler will notify the Wells HCP Coordinating Committee when the Wells Dam west fishway is brought back online from the 2016/2017 Wells Dam fishway maintenance period (Item III-A). *(Note: Kahler provided this notification to Kristi Geris on February 21, 2017, which Geris distributed to the Coordinating Committees that same day.)*
- Tracy Hillman (HCP Tributary Committees Chairman) will provide U.S. Fish and Wildlife Service's (USFWS's) presentation on the Silver Side-Channel Rehabilitation Project to Kristi Geris for distribution to the Coordinating Committees (Item IV-A). *(Note: the presentation was posted to the Coordinating Committees HCP Extranet Site [file was too large to email], and the Coordinating Committees were notified by Geris following the meeting on January 24, 2017.)*
- John Ferguson will follow up with Michelle Rub (National Marine Fisheries Service [NMFS]) regarding possibly presenting an update on her presentation, "Estimation of Survival and Run Timing of Adult Spring/Summer Chinook from the Columbia River Estuary to Bonneville Dam," to the Coordinating Committees during a future meeting (Item V-E).
- **The Coordinating Committees meeting on February 28, 2017, will be held in-person at the Grant PUD office in Wenatchee, Washington (Item V-E).**

Decision Summary

- Rock Island HCP Coordinating Committee representatives approved the SOA, "Acknowledgement of Rock Island Powerhouse 1 Units B1-B4 Consultation," via email as follows: Chelan PUD approved on January 24, 2017; the Colville Confederated Tribes (CCT) approved on January 25, 2017; NMFS and USFWS approved on January 26, 2017; Washington Department of Fish and Wildlife (WDFW) approved on February 1, 2017; and the Yakama Nation (YN) approved on February 3, 2017 (Item II-C).
- Wells HCP Coordinating Committee representatives approved the 2017 Wells Dam Gas Abatement Plan and Bypass Operating Plan (GAP and BOP), as revised, via email as follows: Douglas PUD approved on February 7, 2017; NMFS approved on February 8, 2017; USFWS approved on February 10, 2017; and WDFW, CCT, and the YN approved on February 14, 2017 (Item III-B).

Agreements

- Rock Island HCP Coordinating Committee representatives present agreed to a 10-day review period (initiated when the revised SOA is distributed) and a vote via email on the revised draft SOA, "Acknowledgement of Rock Island Powerhouse 1 Units B1-B4 Consultation," (Item II-C).

- Rock Island and Rocky Reach HCP Coordinating Committees representatives present agreed Chelan PUD does not need to provide an annual fish passage plan for Coordinating Committees review. The plan will be removed from the annual Rock Island and Rocky Reach HCP Action Plan (Item II-D).

Review Items

- Kristi Geris sent an email to the Coordinating Committees on December 15, 2016, notifying them the Draft 2015 Douglas PUD Pikeminnow Program Annual Report is available for a 60-day review period, with edits and comments due to Tom Kahler by Monday, February 13, 2017.
- Kristi Geris sent an email to the Coordinating Committees on January 5, 2017, notifying them the Draft 2017 Wells Dam GAP and BOP is available for a 30-day review period, with edits and comments due to Tom Kahler by Monday, February 6, 2017 (Item III-B). *(Note: USFWS provided comments on the draft plan on February 2, 2017, which Douglas PUD incorporated into the plan, and a Revised Draft 2017 Wells Dam GAP and BOP was distributed to the Coordinating Committees by Geris on February 7, 2017, with a vote via email due by Tuesday, February 14, 2017; see Decision Summary.)*
- Kristi Geris sent an email to the Coordinating Committees on January 23, 2017, notifying them that six Chelan PUD documents are available for a 30-day review, including: the Draft 2016 Rock Island Smolt Monitoring Program and Gas Bubble Trauma (SMP and GBT) Report; the Draft 2016 Rocky Reach Juvenile Fish Bypass System (RRJFBS) Report; the Draft 2016 Rock Island and Rocky Reach Pikeminnow Control Program Summary Report; the Draft 2017 Rock Island Bypass Monitoring Plan; the Draft 2017 Rock Island and Rocky Reach HCP Action Plan; and the Draft 2017 Rocky Reach Juvenile Sampling Facility (RRJSF) Protocol. Edits and comments on these documents are due to Lance Keller by Wednesday, February 22, 2017 (Item II-D). *(Note: a Revised Draft 2017 Rock Island and Rocky Reach HCP Action Plan was distributed for review on January 24, 2017. The Draft 2017 RRJFBS Operations Plan was distributed for a 30-day review period on February 17, 2017 [comments due Monday, March 20, 2017], replacing the Draft 2017 RRJSF Protocol, which was mistakenly distributed instead of the RRJFBS Operations Plan.)*
- Kristi Geris sent an email to the Coordinating Committees on January 24, 2017, notifying them the revised draft SOA, "Acknowledgement of Rock Island Powerhouse 1 Units B1-B4 Consultation," is available for a 10-day review with votes via email due to Lance Keller by Friday, February 3, 2017 (Item II-C).
- Kristi Geris sent an email to the Coordinating Committees on February 8, 2017, notifying them the Draft 2016 Wells HCP Annual Report is available for a 30-day review with edits and comments due to Geris by Friday, March 10, 2017 (Item V-D).

- Kristi Geris sent an email to the Coordinating Committees on February 16, 2017, notifying them the Draft 2016 Rock Island and Rocky Reach HCP Annual Reports are available for a 30-day review with edits and comments due to Geris by Monday, March 20, 2017 (Item V-D).
- Kristi Geris sent an email to the Coordinating Committees on February 22, 2017, notifying them the Draft 2017 Rock Island and Rocky Reach Fish Spill Plan is available for a 30-day review with edits and comments due to Lance Keller by Friday, March 24, 2017.
- Kristi Geris sent an email to the Coordinating Committees on February 23, 2017, notifying them the Draft 2017 Wells HCP Action Plan is available for review. Douglas PUD will request approval of the plan during the Coordinating Committees meeting on March 28, 2017 (Item III-C).

Finalized Documents

- The final SOA, "Acknowledgement of Rock Island Powerhouse 1 Units B1-B4 Consultation," was distributed to the Coordinating Committees by Kristi Geris on February 13, 2017 (Item II-C).
- The Final 2017 Wells Dam GAP and BOP was filed with FERC on February 27, 2017, and was distributed to the Coordinating Committees by Kristi Geris that same day (Item III-B).

I. Welcome

A. Review Agenda (John Ferguson)

John Ferguson welcomed the Coordinating Committees and reviewed the agenda. Ferguson asked for any additions or changes to the agenda, and the following revisions were requested:

- Lance Keller and Alene Underwood added a notification of Chelan PUD's intent to comment on the FCRPS NEPA Scoping Process.
- Ferguson added two updates under HCP Administration: 1) Coordinating Committees email distribution; and 2) Draft 2017 HCP Annual Reports.

B. Meeting Minutes Approval (John Ferguson)

The Coordinating Committees reviewed the revised draft November 15, 2016, meeting minutes. Kristi Geris noted that the Draft 2017 Wells Dam GAP and BOP and Douglas PUD's Draft 2015 Douglas PUD Pikeminnow Program Annual Report were added under the review items. She said those documents are available for review, with edits and comments due to Tom Kahler by February 6 and February 13, 2017, respectively. Geris also said the Final Wells Post-Season Bypass Report and Passage-Dates Analysis was added under the finalized documents. She said the report was finalized following a 60-day review period, which ended on December 5, 2016, and was distributed to the Coordinating Committees on December 28, 2016. She said, as noted in the email, the edits discussed

and requested by the Coordinating Committees were incorporated into the final passage-dates analysis, and the post-season bypass report was updated accordingly. Geris said all other comments and revisions received from members of the Committees were incorporated into the revised minutes. Coordinating Committees members present approved the November 15, 2016, meeting minutes, as revised. The CCT abstained, because a CCT representative was not present during the November 15, 2016, meeting.

C. Last Meeting Action Items (John Ferguson)

Action items from the Coordinating Committees meeting on November 15, 2016, and follow-up discussions, were as follows. (*Note: italicized text corresponds to agenda items from the meeting on November 15, 2016*):

- *Lance Keller will confirm the appropriate title for Alene Underwood (Chelan PUD), for the administrative record, regarding her participation in the Coordinating Committees meeting on October 25, 2016 (Item I-B).*

Keller confirmed Underwood's title, Chelan PUD Fish and Wildlife Program Manager, on November 18, 2016.

- *Bob Rose will provide a list of Yakama Nation (YN) concerns regarding datasets used for estimating coho salmon survival, which will be used in future discussions of the Rock Island and Rocky Reach Coho Salmon Phase Designation, prior to the Coordinating Committees meeting on December 13, 2016 (Item III-A).*

This will be discussed during today's meeting.

- *Chelan PUD and the YN will convene to discuss concerns regarding datasets used for estimating coho salmon survival, prior to the Coordinating Committees meeting on December 13, 2016 (Item III-A).*

Chelan PUD and the YN plan to meet after the meeting today.

- *Rock Island and Rocky Reach Coho Salmon Phase Designation will be discussed during the Coordinating Committees meeting on December 13, 2016 (Item III-A).*

This will be discussed during today's meeting.

- *Chelan PUD will provide a Rock Island Powerhouse 1 Maintenance Update during the Coordinating Committees meeting on December 13, 2016, including discussing the Draft Federal Energy Regulatory Commission (FERC) Notification Letter for Rock Island B1-B4 Maintenance (Item III-B).*

This will be discussed during today's meeting.

- *John Ferguson will coordinate with Denny Rohr (Priest Rapids Coordinating Committee [PRCC] Facilitator) regarding scheduling a joint HCP/PRCC meeting soon to discuss estimating the survival of subyearling Chinook salmon passing Mid-Columbia dams (Item V-A).*

Ferguson recalled that the Coordinating Committees agreed to convene quarterly, joint HCP/PRCC sessions to continue discussions regarding subyearling Chinook salmon passage studies; however, the joint meetings have not occurred to date. Ferguson said he spoke with Rohr who indicated the PRCC still intends to convene joint HCP/PRCC sessions; however, the PRCC is discussing this topic and several other issues and is not ready for joint sessions at this time.

II. Chelan PUD

A. Rock Island and Rocky Reach Coho Salmon Phase Designation (Steve Hemstrom, Lance Keller, Alene Underwood, and Catherine Willard)

Steve Hemstrom recalled the SOA, "Regarding District's Coho Obligation" (approved by the Rock Island and Rocky Reach HCP Coordinating Committees on June 26, 2007), which designated coho salmon in the Rock Island and Rocky Reach reservoirs as in Phase III Additional Juvenile Studies. Hemstrom recalled the 2007 SOA assumed an interim juvenile dam-passage survival value of 93%, unless compelling evidence indicated otherwise, in which survival studies would be conducted. Hemstrom said in 2010, installation of the Rocky Reach Dam juvenile salmon bypass passive integrated transponder (PIT)-tag detector provided key infrastructure needed to estimate survival rates of PIT-tagged juvenile coho salmon, yearling spring Chinook salmon, and steelhead released in the Methow River basin. He said new data are now available, and Chelan PUD is reassessing coho salmon survival.

Hemstrom said Chelan PUD asked John Skalski (Skalski Statistical Services) and Rich Townsend (Columbia Basin Research) to complete an analysis of hydrosystem survival estimates for PIT-tagged juvenile coho salmon, yearling spring Chinook salmon, and steelhead released from the Methow River basin through two reaches: 1) from Rocky Reach Dam to McNary Dam; and 2) from McNary Dam to John Day Dam. Hemstrom said the most recent analysis also includes statistical analyses based on PIT tags detected at the corner collector located at Bonneville Dam, as well as an additional year of data for all analyses (distributed September 22, 2016). He said there are now PIT-tag data from 2010 to 2016, providing a robust dataset. He said these data indicate coho salmon and yearling spring Chinook salmon survive most similarly from Rocky Reach Dam to McNary Dam and McNary Dam to John Day Dam. He added that the difference in estimated survival between the two species is not statistically significant.

Casey Baldwin asked about the standard errors on the estimates. Hemstrom said the reach survival estimates based on PIT tags had standard errors of approximately 8% for coho and Chinook salmon, whereas the standard errors associated with the dam-passage survival estimates based on acoustic tags were less than 2.5% (which meets the HCP requirements for standard error). Hemstrom added

that it is important to remember this analysis is using a comparison. John Ferguson asked if the passage timing is similar, and Catherine Willard (Chelan PUD HCP Hatchery Committees Alternate) said passage timing of coho and Chinook salmon occurs within approximately 1 or 2 weeks of each other. Hemstrom also noted that the analysis uses the harmonic mean for travel times. Ferguson asked when an updated report from Skalski and Townsend will be available for review, and Alene Underwood replied, likely within the next couple of weeks. Hemstrom added that Chelan PUD also plans to distribute an SOA for discussion at the next Coordinating Committees meeting on February 28, 2017.

Hemstrom said the ultimate goal is to estimate coho salmon survival through the Rock Island and Rocky Reach reservoirs based on comparisons of the species's hydrosystem survival. He explained this calculation as being in the form of the following ratio:

$$\frac{\text{Coho salmon survival from Rocky Reach Dam to McNary Dam}}{\text{Yearling Chinook salmon survival from Rocky Reach Dam to McNary Dam}} = \text{Survival ratio}$$

He added, for example, that if coho salmon were to survive twice as well as yearling Chinook salmon the survival ratio would be 2, and if half as well it would be 0.5. Ferguson asked about the range of calculated survival ratios among the years, and Hemstrom said they ranged from less than 1.0 to about 1.3 to 1.4. Hemstrom added that the average ratio is 1.0024 based on PIT-tag data. Baldwin noted that a mean and the standard error associated with the mean are important information to have when interpreting significance, and when the mean is converted to a ratio, the variance is lost. Hemstrom said a standard error on the ratio was calculated, as well and is in the report. He explained when the individual survival of two species is compared, both species include a standard error; therefore, variance is already captured in the individual survival. He added that the ratios would be used to adjust the available dam-passage survival estimates for each project and species, based on the more precise acoustic telemetry data. He also said the exact values are in the report and recalled that adjusting the dam-passage estimates by the ratios resulted in estimates of 92.94% and 93.98% survival for coho salmon passing Rocky Reach Dam and Rock Island Dam, respectively.

Baldwin asked about fish-size comparisons between hatchery and wild coho salmon (i.e., how well are hatchery coho salmon surrogates for wild coho salmon). Willard said, overall, the two are similar with little variation. She added that occasionally, hatchery coho salmon are released a little earlier than the wild coho salmon outmigration. Lance Keller agreed he does not recall a significant discrepancy. Underwood said hatchery coho salmon are typically released when fish size is about 14.8 to 20 fish per pound. Jim Craig noted that hatchery fish are often times larger than wild fish; however, data on wild coho salmon are not substantial enough to confirm such a comparison.

Hemstrom said analyzing the survival ratios of 7 years of PIT-tag data, including a range of river environments and water years, incorporates all available data into the analysis, providing the most

robust dataset available to date. He said Chelan PUD would like to achieve Phase III (Standard Achieved) for juvenile coho salmon through this analysis. Underwood also reiterated that the 2007 SOA stipulates:

“Juvenile coho [salmon] survival studies will not be performed unless there is compelling¹ information that demonstrates hydro project operations have an impact of greater than 7% mortality on coho [salmon].”

She said, additionally, a survival study does not seem feasible at this time, based on fish counts in the river and juvenile collector at Rocky Reach Dam. Hemstrom noted that upward of 1,000 acoustically-tagged fish would be needed to obtain a standard error of 2.5%. Underwood said Chelan PUD intends to request (Standard Achieved) for juvenile coho salmon for the life of the license. She said a re-evaluation will coincide with the 10-year check-in. Baldwin asked how re-evaluation works, and Keller read from the Rock Island and Rocky Reach HCPs:

“...the District shall re-evaluate survival under the applicable standard every 10 years. Representative species shall be picked by the Coordinating Committee. This re-evaluation will occur over one year and be included in the pertinent average for that particular species. If the survival standard is met, then Phase III (Standard Achieved) status will remain. If the survival standard is not met, then an additional year of testing will occur. If the survival standard remains unmet over three years of re-evaluation, then Phase II designation will take affect for the representative species, and the Coordinating Committee shall re-evaluate the survival of other Plan Species, as appropriate.”—Rock Island HCP (page 12); Rocky Reach HCP (page 13)

Ferguson asked about timing of the next 10-year check-in. Keller said the next check-in is scheduled for 2020 for the Rock Island HCP and 2021 for the Rocky Reach HCP.

¹ “Compelling” evidence could relate to information collected as part of the hatchery monitoring and evaluation program. For example, smolt-to-adult survivals for coho [salmon] that are significantly lower than other species in the same geographical area may be compelling evidence that coho [salmon] are experiencing differential mortality rates at project passage. In all cases the evidence should be empirical and related to Project survival.

B. Chelan PUD Intent to Comment on FCRPS NEPA Scoping Process (Alene Underwood)

Alene Underwood notified the Coordinating Committees that Chelan PUD is preparing comments on the FCRPS NEPA Scoping Process documents, and plans to submit them by February 7, 2017. She said the comments are regarding maintaining the integrity of the HCPs and acknowledging the PUDs have certain protections under the HCPs. She said the comments focus on: 1) analyzing the potential effects of predation, specifically in the estuary; 2) acknowledging scientific uncertainties associated with Upper Columbia River spring-run Chinook salmon; and 3) climate change (as it relates to how to replace clean renewable energy sources if dams are removed). Underwood said she will provide Chelan PUD's comments on the FCRPS NEPA Scoping Process to Kristi Geris for distribution to the Coordinating Committees.

C. Rock Island Powerhouse 1 Maintenance Update (Lance Keller)

Lance Keller distributed hard copies of the draft SOA, "Acknowledgement of Rock Island Powerhouse 1 Units B1-B4 Consultation," which was distributed electronically to the Coordinating Committees by Kristi Geris on January 23, 2017. Keller recalled Rock Island Powerhouse 1 Units B1 to B4 were taken out of service for periodic maintenance, at which time staff noticed cracks in the turbine blades. He said, when cracks were discovered, the cracked areas were fixed, the blades were determined to be crack-free, and the units were put back into service. However, during follow-up inspections, staff discovered that additional cracks had formed. Keller said pieces of the blades were sent out for metallurgic analysis and results indicated the blades were at the end of their lifespan. He noted that these units are the original units installed at Rock Island Dam in 1933. He said Chelan PUD decided to perform maintenance on all four units. He said rehabilitation plans were reviewed at length with the Coordinating Committees, a draft notification letter to FERC about the proposed maintenance was provided to the Coordinating Committees for a 30-day review period, and no comments were received on the plans or letter. Keller said, because no comments were received, FERC has requested additional assurances the Rock Island HCP Coordinating Committee is indeed supportive of the proposed rehabilitation; therefore, Chelan PUD drafted this SOA.

Keller said Chelan PUD requested and received bids for the rehabilitation work in December 2016, including bids for repairing one unit at a time or two at a time. He said a company named Andritz Hydro (based in Austria, with a location in the United States) provided a bid for repairing three units all at once. Keller recalled the old maintenance schedule included the last unit returning to service in March 2020, which was an aggressive schedule that also had no room for slippage ahead of the 2020 10-year check-in scheduled for Rock Island Dam. He said, with the proposal from Andritz Hydro, the new schedule includes dewatering Unit B4 in June 2018, and Units B2 to B3 in July 2018 (three units at once). He said those units will be back online by the first quarter of 2019, and then Unit B1 will be dewatered and recommissioned by about November 2019. Keller said Chelan PUD held a Board of

Commissioners meeting on December 30, 2016, to accept the bid. Alene Underwood said Andritz Hydro will be handling the entire rehabilitation, and Chelan PUD is confident all units will be back to service in 2019.

Keller reiterated this SOA is simply a formal document FERC requested to demonstrate a clear paper trail that the Rock Island HCP Coordinating Committee supports this rehabilitation. Underwood said Chelan PUD hopes to keep this process moving and requested a vote take place today, via email, or during the next Coordinating Committees meeting on February 28, 2017. Keller also noted that he will revise the minor typos in the draft SOA and will provide a revised draft SOA to Geris for distribution to the Coordinating Committees.

Bob Rose asked if Chelan PUD knows, or rather anticipates, whether the proposed design changes will benefit fish. He recalled similar claims from Grant PUD during an overhaul of turbines at Priest Rapids Dam; however, the designs had errors. Rose asked if the language in the SOA background can be changed to reflect this uncertainty. Keller said Chelan PUD can state with a high level of confidence these design upgrades will benefit fish passage; however, he also agreed to modify the background language, as requested. Jim Craig requested a 10-day review and vote via email after the revised draft SOA is distributed.

Coordinating Committees representatives present agreed to a 10-day review period (initiated when the revised SOA is distributed) and vote via email on the revised draft SOA, "Acknowledgement of Rock Island Powerhouse 1 Units B1-B4 Consultation." (*Note: the revised draft SOA was distributed following the meeting on January 24, 2017, and is available for a 10-day review with vote via email due to Keller by Friday, February 3, 2017.*)

Rock Island HCP Coordinating Committee representatives approved the SOA, "Acknowledgement of Rock Island Powerhouse 1 Units B1-B4 Consultation," via email as follows: Chelan PUD approved on January 24, 2017; the CCT approved on January 25, 2017; NMFS and USFWS approved on January 26, 2017; WDFW approved on February 1, 2017; and the YN approved on February 3, 2017. The final SOA was distributed to the Coordinating Committees by Geris on February 13, 2017.

D. Draft 2017 Rock Island and Rocky Reach HCP Action Plan (Lance Keller)

Lance Keller distributed hard copies of the Draft 2017 Rock Island and Rocky Reach HCP Action Plan, which was distributed electronically to the Coordinating Committees by Kristi Geris on January 23, 2017. He said the draft plan was presented to the HCP Hatchery Committees during their meeting on January 18, 2017, and will be presented to the HCP Tributary Committees during their meeting on March 9, 2017. He said, once those committees approve their respective portions of the action plan, Chelan PUD will request Rock Island and Rocky Reach HCP Coordinating Committees approval of the entire plan.

Keller said the first four documents listed in the action plan (the Draft 2016 Rock Island SMP and GBT Report; the Draft 2016 RRJFBS Report; the Draft 2017 Rock Island Bypass Monitoring Plan; and the Draft 2017 RRJSF Protocol), as well as the Draft 2016 Rock Island and Rocky Reach Pikeminnow Control Program Summary Report, were distributed to the Coordinating Committees by Geris on January 23, 2017. These five documents and the draft action plan are available for a 30-day review, with edits and comments due to Keller by Wednesday, February 22, 2017. *(Note: the Draft 2017 RRJFBS Operations Plan was distributed for a 30-day review period on February 17, 2017 [comments due Friday, March 17, 2017], replacing the Draft 2017 RRJSF Protocol, which was mistakenly distributed instead of the RRJFBS Operations Plan.)*

Keller said the 2017 action plan is business as usual except for the coho salmon survival standards SOA. He said he also wanted to discuss the 2017 Rock Island and Rocky Reach Fish Passage Plan. He said this plan has been included in the Rock Island and Rocky Reach Action Plan for years; however, Chelan PUD has not distributed the plan to the Coordinating Committees since 2013, and he cannot recall why. He explained the fish passage plan document summarizes bypass operations, adult passage, and fish spill operations, all of which are already covered under other documents that the Coordinating Committees review. He said the fish passage plan is essentially a summary of other documents, and asked if the Coordinating Committees want to receive this plan in 2017. Rock Island and Rocky Reach HCP Coordinating Committees representatives present agreed Chelan PUD does not need to provide an annual fish passage plan for Coordinating Committees review. The plan will be removed from the annual Rock Island and Rocky Reach HCP Action Plan.

Keller also noted that pikeminnow trapping activities will be removed from the action plan and will be added again if the activities are actually planned. Keller said he will revise the Draft 2017 Rock Island and Rocky Reach HCP Action Plan, as discussed, and will provide the revised draft plan to Geris for distribution to the Coordinating Committees. *(Note: the revised draft plan was distributed following the meeting on January 24, 2017, and is available for review with edits and comments due to Keller by Wednesday, February 22, 2017.)*

E. Rock Island and Rocky Reach Adult Fish Ladder Maintenance Update (Lance Keller)

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

Rock Island Dam

Keller recalled that at Rock Island Dam, one ladder remains operational for fish passage at all times, and up to two ladders can be offline for maintenance.

Middle Ladder

Keller said the middle ladder at Rock Island Dam was taken offline for annual winter maintenance on December 6, 2016. He said a fish rescue was conducted, and he reviewed the numbers. He added that he will provide fish rescue numbers from the 2016/2017 Rock Island and Rocky Reach dams adult fish ladder maintenance period, to Kristi Geris for distribution to the Coordinating Committees. *(Note: Keller provided fish rescue numbers [Attachment B] to Geris on February 16, 2017, which Geris distributed to the Coordinating Committees on February 17, 2017.)*

Keller said extensive (beyond general) maintenance activities conducted included: 1) replaced lower valves (gear stems wore out); 2) conducted grating inspection; and 3) evaluated concrete integrity. Keller said the middle ladder was returned to service on January 6, 2017.

Left Ladder

Keller said the left ladder at Rock Island Dam was taken offline for annual winter maintenance on December 21, 2016. He said a fish rescue was conducted, and he reviewed the numbers (Attachment B). He said extensive maintenance activities conducted included maintenance on the gates and valves. He said Chelan PUD contracts a consultant to clean the windows in the fish ladders, which still needs to be done. Keller said the left ladder is expected to return to service by the first week in February 2017.

Right Ladder

Keller said the right ladder at Rock Island Dam was taken offline for annual winter maintenance on January 9, 2017. He said a fish rescue was conducted on January 9 and 13, 2017, and he reviewed the numbers (Attachment B). John Ferguson asked if Pacific lamprey slipped through the grating this year as they have done in the past. Keller said yes, that 93 of 100 Pacific lamprey rescued came from the auxiliary water system (AWS) side of the diffuser grating, and 7 of 100 were rescued from the fish ladder side of the grating. He said the diffuser grating has 1-inch spacing and recalled having past issues with bowed veins. He said, Chelan PUD now conducts a "ping" test each year to determine the veins' integrity. He said veins that are bowing are repaired. He said, unfortunately, the grating cannot be replaced with smaller spaced grating as was done at Rocky Reach Dam because this would restrict flow too much. He further explained that the picket barrier is a wall several feet tall and wide, and reducing the spacing between the gratings will create hydraulic issues. He said this may still be something Chelan PUD further investigates in the future.

Keller said maintenance activities conducted on the right ladder were minimal, and the ladder is expected to return to service by the end of January 2017.

Rocky Reach Dam

Keller recalled that the Rocky Reach HCP Coordinating Committee agreed to Chelan PUD's request to begin the 2016/2017 Rocky Reach Dam adult fish ladder maintenance period 3 weeks early to allow more time to complete needed work on the AWS pumps. He said as agreed, the adult fish ladder at Rocky Reach Dam was taken offline for annual winter maintenance on December 12, 2016. He said a fish rescue was conducted in the upper ladder on December 12, 2016, while the lower ladder remained watered with entrances open. He said the lower ladder was then dewatered on December 23, 2016, and a fish rescue was conducted that same day.

Keller reviewed the fish rescue numbers (Attachment B), and noted that all mortalities were juveniles. He explained that when the upper ladder is dewatered, water can only get out through the orifice of the weir. He said, once the water reaches a certain level, a gate is dropped closing the orifice. He said, this year, when the gate was dropped, a carabiner prevented the gate from completely closing, and a few smaller fish exited through the orifice and slipped through the floor gratings. He said when the fish were discovered, they had already expired.

Keller also noted 169 adult Pacific lamprey were rescued. He recalled replacing the upper ladder 1-inch floor grating with 3/4-inch grating in the lower weir section of the adult ladder, and said the rescued Pacific lamprey did not descend until they reached the remaining 1-inch grating. He said Chelan PUD plans to replace this remaining 1-inch grating in the lower weir section of the adult ladder in 2017. He also noted the one rescued bull trout, which was found holding in the middle of the 169 adult Pacific lamprey.

Keller said all rescued fish were released in the Rocky Reach Dam forebay. Casey Baldwin asked why the Pacific lamprey were not released farther upstream to avoid potential fallback. Keller said the Pacific lamprey were released at the landing near the bypass, per usual. He said the river is fairly calm there and suitable habitat is nearby. Jim Craig agreed this is a safe release location for Pacific lamprey.

Keller recalled that Chelan PUD requested approval from the Rocky Reach HCP Coordinating Committee for an early outage of the ladder to rehabilitate the AWS pumps and, specifically, to refurbish the seal on one of the butterfly valves. He said, by the time Chelan PUD received the estimate from the contractor, there was not enough time to complete the repairs within the allotted maintenance work window. Keller apologized for the disorganization that resulted in not completing the intended repairs after the Rocky Reach HCP Coordinating Committee approved the extended outage. He said the fish ladder will be returned to service as soon as possible, which is expected by the week of February 20, 2017, and he added that he will notify the Rocky Reach HCP Coordinating Committee when this occurs. *(Note: Keller provided notification that the Rocky Reach Dam adult*

fishway was returned to service on February 14, 2017, which was distributed to the Coordinating Committees by Geris that same day.)

Keller said, regarding rehabilitating the AWS pumps, Chelan PUD investigated replacing the butterfly valves rather than repairing them, which turned out to be more cost-effective. He said Chelan PUD now plans to purchase the parts for all three pumps and replace the valves in each pump at a rate of one pump per year starting in 2017 (i.e., the 2017/2018 winter maintenance period). He added that by having the new parts onsite, this prevents the need to ship the valves offsite and will not require an early winter maintenance outage.

III. Douglas PUD

A. Wells Dam Fishway Maintenance Update (Tom Kahler)

Tom Kahler reviewed maintenance updates at Wells Dam, as follows:

East Fishway

Kahler said the east fishway at Wells Dam was taken offline for annual winter maintenance on December 7, 2016. He said a fish rescue was conducted, and a fish-salvage memorandum for the east fishway (Attachment C) was distributed to the Coordinating Committees by Kristi Geris on December 8, 2016. Kahler said routine maintenance was conducted, as well as maintenance on the fish pump (which was already completed in the west fishway). He said the east fishway was returned to service on January 9, 2017.

West Fishway

Kahler said the west fishway at Wells Dam was taken offline for annual winter maintenance on January 16, 2017. He said the upper ladder was dewatered on January 16, 2017, and a fish rescue was conducted that same day. He said the dewatering process in the lower ladder began on January 17, 2017; however, the gate motor that operates the leaf gates of the fishway collection gallery froze, and staff had to manually crank the gates closed. He said dewatering of the collection gallery was completed on January 19, 2017, and a fish rescue was conducted that same day. He said a fish-salvage memorandum for the west fishway (Attachment D) was distributed to the Coordinating Committees by Geris on January 19, 2017. Kahler said the west fishway is expected to return to service by the end of January 2017, and he added that he will notify the Wells HCP Coordinating Committee when this occurs. *(Note: Kahler provided this notification to Geris on February 21, 2017, which Geris distributed to the Coordinating Committees that same day.)*

Winter Maintenance Timing

Kahler said the Wells HCP contains no specific requirement for timing of winter maintenance; however, Douglas PUD has historically targeted December 1 to February 28 for completing necessary work. Kahler said the Mechanic Foreman at Wells Dam inquired about starting annual winter maintenance earlier, possibly by mid-November, in an effort to complete work before the coldest part of winter and freezing temperatures, which complicate maintenance activities. Kahler said, with this earlier schedule, maintenance could be completed as early as the end of December.

Kahler said he reviewed count data at Wells Dam and discovered there is more steelhead movement in February than December. He said fish counts are recorded via video during the winter months (offseason), and when fish counters return, the count video is immediately reviewed. The Wells HCP Coordinating Committee agreed to consider this further, and Kahler said he will provide fish passage count data for winter months at Wells Dam, to Geris for distribution to the Coordinating Committees for review.

B. Draft 2017 Wells Dam Gas Abatement Plan and Bypass Operating Plan (Tom Kahler)

Tom Kahler said Kristi Geris sent an email to the Coordinating Committees on January 5, 2017, notifying them the Draft 2017 Wells Dam GAP and BOP was available for a 30-day review period, with edits and comments due to Kahler by Monday, February 6, 2017. Kahler explained that Douglas PUD's FERC license, issued in 2012, required combining the GAP and BOP into one document (the BOP is now an appendix in the GAP). He said, per the license, Douglas PUD must provide the Wells HCP Coordinating Committee the opportunity to consult on both plans, but only requires Wells HCP Coordinating Committee approval of the BOP. He said the full document (2017 Wells Dam GAP and BOP) must ultimately be approved by the Washington State Department of Ecology and the Aquatic Settlement Work Group, prior to submitting the final document to FERC by February 28, 2017. *(Note: USFWS provided comments on the draft plan on February 2, 2017, which Douglas PUD incorporated into the plan, and a Revised Draft 2017 Wells Dam GAP and BOP was distributed to the Coordinating Committees by Geris on February 7, 2017, with a vote via email due by Tuesday, February 14, 2017.)*

Wells HCP Coordinating Committee representatives approved the 2017 Wells Dam GAP and BOP via email as follows: Douglas PUD approved on February 7, 2017; NMFS approved on February 8, 2017; USFWS approved on February 10, 2017; and WDFW, CCT, and the YN approved on February 14, 2017. The Final 2017 Wells Dam GAP and BOP was filed with FERC on February 27, 2017, and was distributed to the Coordinating Committees by Geris that same day.

C. Draft 2017 Wells HCP Action Plan (Tom Kahler)

Tom Kahler said the Draft 2017 Wells HCP Action Plan is not yet ready for distribution.

Kristi Geris sent an email to the Coordinating Committees on February 23, 2017, notifying them the Draft 2017 Wells HCP Action Plan is available for review. Douglas PUD will request approval of the plan during the Coordinating Committees meeting on March 28, 2017.

IV. 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 during the HCP Tributary Committees meeting on January 12, 2017:

- *ORRI Phase II Side Channel Reconnection Project*: The Okanagan Nation Alliance (ONA) recently contacted the HCP Tributary Committees requesting feedback on the Okanagan River Restoration Initiative (ORRI) Phase II Side Channel Reconnection Project. The project (implemented in 2013) reconnected a side channel to the mainstem Okanagan River, with the goal of maintaining side channel connectivity at all flows. Monitoring indicates there is a blockage issue, and river flow through the side channel is too low (to provide rearing habitat for native fish) during low flow conditions. ONA asked the HCP Tributary Committees to provide feedback about what can be done to preserve the reconnected channel as a permanent channel. The HCP Tributary Committees believed the channel could remain permanent by: 1) adding another riffle or expanding the existing riffle in the main channel; 2) excavating to design grade; 3) widening the approach channel; and 4) adding a high-flow return to the approach channel.
- *Beaver Fever Project Presentation*: Trout Unlimited and USFWS provided an update on the Beaver Fever: Restoring Ecosystem Function Project. The purpose of the project is to re-establish beavers and install beaver-dam analogs (BDAs) in tributaries of the Wenatchee and/or Entiat river basins. The Rock Island HCP Tributary Committee agreed to fund the installation of BDAs, but not the reintroduction of beavers. The sponsor used the Beaver Restoration Assessment Tool model and conducted site visits to help identify suitable locations for installing BDAs. So far, 10 different drainages have been evaluated, and potential areas have been identified for implementation. Trout Unlimited asked if BDAs should be concentrated within a single watershed or spread across several watersheds, and what information should be collected once the BDAs are installed. Trout Unlimited also asked whether they should explore partnerships with other entities (to help monitor the structures). The HCP Tributary Committees suggested focusing on one watershed (e.g., in Mission, Peshastin, or Roaring creeks). The HCP Tributary Committees would like to know the effects of

BDAs on water temperatures, stream flows, and salmonid abundance. The HCP Tributary Committees also suggested exploring additional relationships. Hillman recalled Jeff Korth discussing results from beaver reintroduction efforts in the Methow River Basin, specifically that there were difficulties getting beavers to colonize, resulting in not being able to collect certain data. Hillman said this is why the HCP Tributary Committees requested specific data to help inform actions in the future.

- *Nason Creek River Mile 4.6 Channel Reconnection Project:* In 2013, the Rock Island HCP Tributary Committee agreed to partially fund this project. The goal of this project is to provide high-flow refugia and rearing habitat for adult and juvenile salmonids in Nason Creek by reconnecting a 4.6-acre, high-flow channel to the mainstem near river mile 4.6. Because Chelan County was unable to secure a cost share, the proposal will be resubmitted. In 2013, the project cost was about \$525,000, and the Rock Island HCP Tributary Committee agreed to fund \$88,000 at that time. Chelan County met with the U.S. Forest Service (USFS), and USFS is unwilling to approve reconnecting the upper end of the side channel because water will be on both sides of the road, which will increase the likelihood of eroding the road prism. Chelan County spoke with the Washington State Department of Transportation (WSDOT), and WSDOT did not have the same concern; however, USFS indicated support for a downstream-only connection. The Rock Island HCP Tributary Committee said this is now a vastly different project, and requested that Chelan County resubmit a new proposal. The Rock Island HCP Tributary Committee recommended that Chelan County continue seeking approval from USFS to reconnect the upstream end. If USFS approves, funds from the Rock Island Plan Species Account can be used for the upstream connection. Hillman said he believes the sponsor will ask the Bonneville Power Administration to fund the downstream connection; however, Chelan County does not want to push the upstream connection with USFS at this time. Casey Baldwin said it seems the Rock Island HCP Tributary Committee put up 15% for the Salmon Recovery Funding Board (SRFB) to match, and he asked why the remainder did not get funded. Hillman explained that higher priority projects received the available SRFB funds in 2013.
- *Silver Side-Channel Rehabilitation Project Presentation:* A couple years ago, the Rocky Reach HCP Tributary Committee approved funding for the design of enhancement work implemented in the lower portion of the Silver Side Channel in the Methow River basin. The purpose of the project is to increase habitat quality and quantity for salmonids within the side channel and floodplain corridor. USFWS provided a lengthy presentation, including before and after photographs of the construction process, evidence of improved channel complexity, improved fish passage, and restored riparian and floodplain habitat, among other things. Hillman said he believes USFWS or WDFW will also conduct fish monitoring in the future. He said the presentation was quite interesting and suggested contacting Robes Parrish (USFWS)

about providing the presentation to the Coordinating Committees. Hillman said he will provide Parrish's presentation to Kristi Geris for distribution to the Coordinating Committees. *(Note: the presentation was posted to the Coordinating Committees HCP Extranet Site [file was too large to email], and the Coordinating Committees were notified by Geris following the meeting on January 24, 2017.)*

- *Meeting Schedule:* The HCP Tributary Committees will continue to meet on the second Thursday of each month.
- *Next Steps:* The next meeting of the HCP Tributary Committees will be on March 9, 2017.

Hillman updated the Coordinating Committees on the following actions and discussions that occurred during the HCP Hatchery Committees meeting on January 18, 2017:

- *Representative Changes and Distribution Lists:* Casey Baldwin is now the CCT HCP Hatchery Committees Alternate. Brett Farman has been designated the new NMFS HCP Hatchery Committees Representative, and Charlene Hurst has also been designated the new NMFS HCP Hatchery Committees Alternate.
- *DECISION: Twisp Hatchery-origin Steelhead Gametes:* Douglas PUD indicated that WDFW and Cramer Fish Sciences are proposing to conduct a steelhead egg-to-fry survival study in the Twisp River. The purpose of the study is to provide estimates of egg-to-fry survival within the Twisp River to support estimates of survival throughout the range of steelhead spawning, and also to examine survival across different habitat conditions. The proposed approach involves burying 100 fertilized eggs in substrate in 12 different locations within the Twisp River. To conduct the study, WDFW and Cramer Fish Sciences requested fertilized eggs from three female and three male Twisp River hatchery steelhead from the Methow Fish Hatchery. Hillman said the HCP Hatchery Committees approved this request, except for NMFS, who are still discussing the request internally. Hillman noted that this work has already been performed in other places, and the proposed study is just filling a data gap in the Methow River Basin. *(Note: NMFS approved the study proposal via email on January 27, 2017.)*
- *Twisp Steelhead Program Broodstock Issues:* WDFW expressed concern that operation of the Twisp River Steelhead Program may pose long-term genetic risks to the Twisp River steelhead population. Corrective actions discussed could potentially create programmatic issues with regard to Section 10 permitting and may create further genetic issues. WDFW suggested further discussing this topic with the Joint Fisheries Parties and during future HCP Hatchery Committees meetings.
- *Chelan Falls Broodstock Collection Canal Trap Pilot Study Results:* Chelan PUD implemented a pilot study to trap summer Chinook salmon in an effort to determine an easier method for collecting summer broodstock for the Chelan Falls program. The pilot study was conducted in 2016 and was successful in collecting 100 summer Chinook salmon, including 51 males and

49 females. Because the warm water temperatures of the Chelan River have the potential to affect gamete quality of fish collected at the Chelan Falls Canal Trap, Chelan PUD evaluated the potential effects of high water temperature on gamete quality compared to fish collected in other locations. Results indicated that fish collected at the Chelan Falls canal trap had a slightly higher eye-up rate compared to fish collected at the Eastbank Outfall and Entiat National Fish Hatchery (93% compared to 91%). Chelan PUD will repeat the study in 2017.

- *Draft 2017 Rock Island and Rocky Reach HCP Action Plan:* The Rock Island and Rocky Reach HCP Hatchery Committees will review the draft plan, provide comments, and likely approve the hatchery portion during the next HCP Hatchery Committees meeting on February 15, 2017. Douglas PUD will likely present the Draft 2017 Wells HCP Action Plan at that time.
- *Genetic Analysis for HCP Program Species:* The HCP Hatchery Committees continued discussing timing of genetic sampling for all stocks in the Mid-Columbia River Basin. The HCP Hatchery Committees are coordinating with WDFW to determine whether sampling needs to occur every 5 years or some other frequency. The HCP Hatchery Committees are awaiting feedback from a geneticist.
- *Monitoring and Evaluation (M&E) Report Scheduling:* The HCP Hatchery Committees are discussing timing of hatchery M&E reporting. The HCP Hatchery Committees are still proposing completing an annual report, with no changes. However, the HCP Hatchery Committees want to add a statistical report, generated every 5 years, to analyze all data using statistics identified in the Hatchery M&E Plan, which can be used to determine whether the Hatchery M&E Plan needs adjusting. The statistical report will not include recommendations. Recommendations will be included in the comprehensive report, which will be drafted every 10 years. This reporting schedule is consistent with the respective HCPs; it will just align better with other HCP processes and there will be more information developed along the way to help inform HCP actions. The PUDs are preparing an SOA for consideration during the next HCP Hatchery Committees meeting on February 15, 2017. Ferguson asked who will conduct the statistical analyses. Hillman said this was not discussed; however, this task will likely fall under the same groups who draft the reports (i.e., WDFW, BioAnalysts, etc.).
- *Stray Rate Targets:* During the last HCP Hatchery Committees meeting on October 19, 2016, Grant PUD discussed stray rate targets and the possible need to revise the brood year stray rate target. During the January meeting, Grant PUD provided a presentation on stray rate targets for within population, among population, and brood year. The HCP Hatchery Committees do not wish to change the within or among population stray rate targets because they are based on extinction risk and are included in the Recovery Plan. On the other hand, the Hatchery M&E Plan does allow brood year stray rate targets to change if the best available information suggests it is appropriate to do so. The HCP Hatchery Committees

discussed a recently published paper (Ford et al. 2015)² showing stray rates in natural-origin spring Chinook salmon in the Wenatchee River basin. The paper indicates that stray rates can range from 1 to 100% depending on what spawning aggregate is considered. Hillman said Grant PUD plans to present a short white paper on brood year stray rates and the Committees will evaluate and determine if the brood year stray rate target needs adjusting. The current brood year stray rate target is 5%.

- *Next Steps:* The next meeting of the HCP Hatchery Committees will be on February 15, 2017.

V. HCP Administration

A. CCT HCP Alternate Representation (John Ferguson)

John Ferguson said a letter requesting Casey Baldwin be designated the CCT Alternate Representative for the HCP Hatchery Committees and Coordinating Committees was distributed to the Coordinating Committees by Kristi Geris on January 6, 2017. Ferguson clarified there is no approval process on designation of representatives; therefore, the letter serves as notification of the designation. *(Note: Baldwin has been added to the appropriate email distribution lists, has been given member access to the HCP Hatchery Committees and Coordinating Committees HCP Extranet Sites, and given visitor access to the HCP Tributary Extranet Site.)*

B. NMFS HCP-HC Representation (John Ferguson)

John Ferguson said a letter designating Brett Farman as the NMFS HCP Hatchery Committees Representative and Charlene Hurst as the NMFS HCP Hatchery Committees Alternate was distributed to the Coordinating Committees by Sarah Montgomery (HCP Hatchery Committees Support Staff) on December 23, 2016. Ferguson said the representation transition does not officially take effect until February 1, 2017. *(Note: Justin Yeager and Craig Busack [current NMFS HCP Hatchery Committees Representative and Alternate, respectively] will be removed from the HCP Hatchery Committees email distribution lists and have HCP Hatchery Committees HCP Extranet Site access deactivated on February 1, 2017.)*

² Ford, M.J., A. Murdoch, and M. Hughes, 2015. Using parentage analysis to estimate rates of straying and homing in Chinook salmon (*Oncorhynchus tshawytscha*). *Molecular Ecology* 24:1109-1121. Doi: 10.1111/mec.13091

C. Coordinating Committees Email Distribution – Sarah Montgomery (John Ferguson)

John Ferguson said Sarah Montgomery was added to the “final CC agenda only,” “draft CC minutes only,” and “final CC minutes only” email distribution lists (same as Tracy Hillman), to help with administration and support of the HCPs.

D. Draft 2016 HCP Annual Reports (John Ferguson)

John Ferguson recalled that the HCP annual reports summarize activities performed under each HCP during a given year. He said the Draft 2016 Wells HCP Annual Report will be distributed to the Coordinating Committees by Kristi Geris for a 30-day review by the Coordinating Committees on Wednesday, February 8, 2017. He said the Draft 2016 Rock Island and Rocky Reach HCP Annual Reports will be distributed for a 30-day review by the Coordinating Committees on Thursday, February 16, 2017. *(Note: please coordinate review of the reports with respective HCP Tributary and Hatchery Committees representatives, as needed.)*

Geris sent an email to the Coordinating Committees on February 8, 2017, notifying them the Draft 2016 Wells HCP Annual Report is available for a 30-day review with edits and comments due to Geris by Wednesday, March 8, 2017. Geris sent an email to the Coordinating Committees on February 16, 2017, notifying them the Draft 2016 Rock Island and Rocky Reach HCP Annual Reports are available for a 30-day review with edits and comments due to Geris by Thursday, March 16, 2017.

E. Next Meetings

John Ferguson said, in October 2016, Bob Rose began discussing with Brian Burke (NMFS) about possibly presenting to the Coordinating Committees an update on his “Blob” presentation (last presented to the Coordinating Committees in October 2015). Ferguson recalled the last correspondence suggested providing the presentation to the PRCC and Coordinating Committees in February 2017. Ferguson said he also contacted Michelle Rub about possibly presenting an update on her presentation about pinniped predation in the Columbia River Estuary (last presented to the Coordinating Committees in June 2015). Scott Carlon said Rub is providing a presentation during the PRCC meeting tomorrow, January 25, 2017. Carlon said he believes the presentation is regarding requesting No Net Impact funds to conduct research on trap designs to further study pinniped predation. He said this presentation may be separate from the one Rub last provided to the Coordinating Committees. Ferguson said Burke indicated he is available to present during the Coordinating Committees meeting on February 28, 2017, but Ferguson has not yet received a response from Rub. Ferguson said he will follow-up with Rub regarding possibly presenting during a future meeting.

The February 28, 2017, meeting will be held in-person at the Grant PUD Wenatchee Office in Wenatchee, Washington. The March 28, 2017, and April 25, 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.

F. List of Attachments

Attachment A List of Attendees

Attachment B 2016/2017 Rock Island and Rocky Reach Dams Adult Fish Ladder Maintenance
Period, Fish Rescue Numbers

Attachment C Wells Dam East Fishway Fish-Salvage Memorandum

Attachment D Wells Dam West Fishway Fish-Salvage Memorandum

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
Steve Hemstrom*††	Chelan PUD
Catherine Willard†††	Chelan PUD
Tom Kahler*	Douglas PUD
Scott Carlon*	National Marine Fisheries Service
Jim Craig*	U.S. Fish and Wildlife Service
Casey Baldwin*	Colville Confederated Tribes
Bob Rose*	Yakama Nation

Notes:

* Denotes Coordinating Committees member or alternate

† Joined by phone for the HCP Tributary and Hatchery Committees Update

†† Joined for select Chelan PUD items

††† Joined by phone for select Chelan PUD items