



Conference Call Minutes

Aquatic Settlement Work Group

To: Aquatic SWG Parties

Date: October 14, 2021

From: John Ferguson, Chair, Anchor QEA, LLC

Re: Final Minutes of the September 8, 2021, Aquatic SWG Conference Call

The Aquatic Settlement Work Group (SWG) met by conference call on Wednesday, September 8, 2021, from 10:00 a.m. to 11:00 a.m. Attendees are listed in Attachment A of these conference call minutes.

I. Summary of Action Items

1. Aquatic SWG members will provide to Douglas PUD any new documents members wish to include in the juvenile and adult Pacific Lamprey literature reviews, and Douglas PUD will add these documents to the respective document libraries (Item VI-1).
2. Anchor QEA, LLC, will review past meeting minutes to confirm what is entailed in the action item for Douglas PUD to obtain from Grant PUD catch rate data from Pacific Lamprey trapping efforts at Priest Rapids Dam to date, for distribution to the Aquatic SWG (Item VI-1). *(Note: Grant PUD catch rate data from Pacific Lamprey trapping efforts at Priest Rapids Dam to date were distributed to the Aquatic SWG by Kristi Geris on September 24, 2021.)*
3. The Yakama Nation (YN) will coordinate with Columbia River Inter-Tribal Fish Commission (CRITFC) and provide notification of any adjustments to the current 8% tribal allocation at Bonneville Dam for Pacific Lamprey translocation beginning as early as 2022 (Item VI-1).
4. The following topics will be added to the agenda for the Aquatic SWG conference call on October 13, 2021: 1) 2022 Adult Pacific Lamprey Study Plan; 2) 2022 Bull Trout Passive Integrated Transponder (PIT) Tag Study; 3) Wells Fish Hatchery White Sturgeon Stocking Considerations; and 4) White Sturgeon Adult Reproductive Assessment (Item VI-7). *(Note: Kristi Geris added these items to the agenda, as discussed.)*
5. Anchor QEA will add White Sturgeon Mortalities Related to High Water Temperatures and Regional Coordination to the agenda for the Aquatic SWG conference call on April 13, 2022 (Item VI-1). *(Note: Kristi Geris added this item to the agenda, as discussed.)*

6. Douglas PUD will provide a summary of the proportion of catch for the two setline configurations used during 2021 Wells Project White Sturgeon monitoring and evaluation (M&E) via email and in future Wells Project White Sturgeon M&E Updates (Item VI-5).
(Note: Andrew Gingerich provided this summary [Attachment B] to Kristi Geris following the Aquatic SWG conference call on September 8, 2021, which Geris distributed to the Aquatic SWG that same day.)
7. Anchor QEA will request from U.S. Fish and Wildlife Service (USFWS) a status update on the Bull Trout radio telemetry study letter to the Federal Energy Regulatory Commission (FERC) (Item VI-7). *(Note: Steve Lewis provided a status update via email on September 9, 2021, as requested.)*
8. The Aquatic SWG meeting on October 13, 2021, will be held by conference call (Item VII-1).

II. Summary of Decisions

1. There were no decisions approved during today's conference call.

III. Agreements

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

IV. Review Items

1. There are no items that are currently available for review.

V. Documents Finalized

1. There are no documents that have been recently finalized.

VI. Summary of Discussions

1. Welcome, Review Agenda, Meeting Minutes Approval, and Review of Action Items (John Ferguson):

John Ferguson welcomed the Aquatic SWG members (attendees listed in Attachment A). Ferguson asked for any additions or changes to the agenda. The following revisions were requested:

- Andrew Gingerich recalled that Douglas PUD maintains a Pacific Lamprey literature review database and Douglas PUD has a reoccurring agenda item to annually remind the Aquatic SWG to provide Chas Kyger with any additional papers members want added to the database. Aquatic SWG members will provide to Douglas PUD any new documents

members wish to include in the juvenile and adult Pacific Lamprey literature reviews and Douglas PUD will add these documents to the respective document libraries.

- John Ferguson added a notification about the designation of a new Washington Department of Fish and Wildlife (WDFW) Aquatic SWG Policy Representative.

The revised draft August 11, 2021, conference call minutes were reviewed, as follows:

- Under the *Brood Year 2021 White Sturgeon Larval Collection (Item VI-4)* discussion, Andrew Gingerich and Jason McLellan made the following edits to a statement made by McLellan: *McLellan noted that catch rates in 2021 were the lowest relative to previous years to date based on observations throughout the effort.*
- Under the *2021 Wells Project White Sturgeon Monitoring and Evaluation Update (Item VI-5)* discussion, Andrew Gingerich noted an edit he made to his statement: *Gingerich said 1,900 grams is correct and is a testament to how large these fish grew in-hatchery.*
- Under the *Douglas PUD Pacific Lamprey Translocation and Second 4-Week Period (Item VI-7)* discussion, Andrew Gingerich noted that he confirmed with Mike Clement (Grant PUD) that fish trapped at Priest Rapids Dam are not included in the Priest Rapids Dam window counts and therefore need to be added to count window numbers.
- Under the *White Sturgeon Mortalities Associated with Current Water Temperatures (Item VI-10)* discussion, Laura Heironimus made the following edit to a statement she made: *Laura Heironimus indicated that WDFW just received reports from CRITFC concerning a large White Sturgeon die-off (approximately 420 adults) near The Dalles Marina, likely associated with the current (high) water temperatures.*

Aquatic SWG members present approved the August 11, 2021, conference call minutes, as revised.

Action items from the Aquatic SWG conference call on August 11, 2021, are as follows (Note: the following italicized item numbers correspond to agenda items from the August 11, 2021, meeting):

- *Douglas PUD will obtain from Grant PUD catch rate data from Pacific Lamprey trapping efforts at Priest Rapids Dam to date, for distribution to the Aquatic SWG (Item VI-1).* John Ferguson said Douglas PUD has been providing catch rate data to the Aquatic SWG each week. Kristi Geris said she thinks this action item was also asking for historic data, but she will review the meeting minutes to confirm. (Note: Grant PUD catch rate data from Pacific Lamprey trapping efforts at Priest Rapids Dam to date were distributed to the Aquatic SWG by Geris on September 24, 2021.)

- *The YN will coordinate with CRITFC and provide notification of any adjustments to the current 8% tribal allocation at Bonneville Dam for Pacific Lamprey translocation beginning as early as 2022 (Item VI-1).*

This action item will be carried forward.

- *Douglas PUD will develop a draft adult Pacific Lamprey study plan for implementation in 2022 that considers potential methodologies, release locations, and sample size requirements, for discussion in fall 2021 (Item VI-1).*

This topic will be added to the agenda for the Aquatic SWG conference call on October 13, 2021.

- *Aquatic SWG members will consider possible objectives for a Bull Trout PIT tag study for implementation in 2022, for discussion in October 2021 (Item VI-1).*

This topic will be added to the agenda for the Aquatic SWG conference call on October 13, 2021.

- *Douglas PUD will add Wells Fish Hatchery White Sturgeon stocking considerations to a future Aquatic SWG meeting agenda, this fall, after a technical subgroup is able to further discuss this topic and data from the 2021 White Sturgeon monitoring and evaluation (M&E) effort are available for review (Item VI-1).*

This topic will be added to the agenda for the Aquatic SWG conference call on October 13, 2021.

- *Douglas PUD will assist the Colville Confederated Tribes (CCT) in uploading brood year (BY) 2020 White Sturgeon PIT tag files to the PIT Tag Information System (PTAGIS) for 612 fish released into Rufus Woods, to help inform the ongoing 2021 Wells Project White Sturgeon M&E effort (Item VI-4).*

Andrew Gingerich said he discussed this with Jason McLellan and the CCT decided to address this internally but would reach out for assistance if needed. McLellan said most everything is set up—he is just waiting on information technology assistance—and that he will reach out to Pacific States Marine Fisheries Commission to set up location data for the releases.

- *Douglas PUD will notify WDFW of the path forward that Aquatic SWG members agreed upon for translocating Pacific Lamprey upstream of Wells Dam during the second 4-week trapping period at Priest Rapids Dam (Item VI-7).*

Andrew Gingerich said he connected with Laura Heironimus and Patrick Verhey, as discussed.

- *The YN requested that Aquatic SWG members contact Ralph Lampman to discuss the available data before objecting to continuing to translocate Pacific Lamprey upstream of Wells Dam during the second 4-week trapping period (Item VI-7).*

Interested members contacted Lampman, as requested.

- *USFWS will provide a draft letter to Douglas PUD to submit to FERC for review, explaining USFWS' support for postponing the Year-10 Bull Trout passage and survival study at*

Wells Dam and the Twisp Weir using radio telemetry and why no further Endangered Species Act (ESA) consultation with USFWS is necessary (Item VI-9).

Steve Lewis provided this draft letter to Douglas PUD on August 12, 2021, and Douglas PUD provided edits back to Lewis on August 17, 2021. A final letter was submitted to FERC by USFWS on September 16, 2021, as distributed to the Aquatic SWG by Kristi Geris on September 17, 2021.

- *WDFW requested that Aquatic SWG members provide updates, if any, on White Sturgeon mortalities associated with current water temperatures occurring in the Mid-Columbia River to Upper Columbia River, as was recently observed near The Dalles, Washington (Item VI-10).*

Jason McLellan said CCT fisheries staff encountered a 6-foot long White Sturgeon mortality with no scute marks or PIT tag, and it was difficult to determine the cause of death. John Ferguson asked if this type of mortality is unique. McLellan said there have only been two to three reports of White Sturgeon deaths in Rufus Woods Lake in the last decade. Ferguson asked about hook marks. McLellan said there were no obvious signs of impacts by anglers. Ferguson asked Laura Heironimus if she wants to keep this action item open. Heironimus said she thinks it is now past the critical period (of high temperatures), but she noted that WDFW is starting discussions with Oregon Department of Fish and Wildlife and CRITFC about developing a better tool for monitoring White Sturgeon mortalities associated with high water temperatures. This includes establishing an email address to send information to. She asked that Aquatic SWG members reach out to her with questions or comments. Ferguson asked if Heironimus wants an action item to address this topic next month. Heironimus said these discussions are only just starting. She developed a tool this summer for WDFW, but she is not sure how widely it was circulated. At least this can serve as a starting point to work with. She suggested revisiting this topic during a future meeting. Ferguson said Anchor QEA will add *White Sturgeon Mortalities Related to High Water Temperatures and Regional Coordination* to the agenda for the Aquatic SWG conference call on April 13, 2022.

(Note: Kristi Geris added this item to the agenda, as discussed.)

2. Washington Department of Fish and Wildlife Aquatic SWG Policy Representative Designation (John Ferguson):

John Ferguson said Patrick Verhey provided him with a letter on September 7, 2021, designating Brock Hoenes, the new WDFW Region 2 Director, as the WDFW Aquatic SWG Policy Representative. Ferguson said he also had a discussion with Hoenes welcoming him to the Aquatic SWG forum and providing background information. Ferguson said the representation designation letter also appointed Chad Jackson, WDFW Region 2 Fish Program Manager, as the WDFW Aquatic SWG Policy Alternate, and confirmed Verhey as the

WDFW Aquatic SWG Technical Representative and Laura Heironimus as the WDFW Aquatic SWG Technical Alternate.

3. Coronavirus Disease 2019 Updates (John Ferguson):

John Ferguson asked if Aquatic SWG members had any new updates to share regarding impacts of coronavirus disease 2019 (COVID-19) on Aquatic SWG-related M&E activities. The Aquatic SWG had no new COVID-19 updates to announce.

4. Brood Year 2021 White Sturgeon Rearing Update (Andrew Gingerich):

Andrew Gingerich said the last 4 weeks have been a struggle for BY 2021 White Sturgeon rearing at Wells Fish Hatchery. Recall, Douglas PUD is rearing for both the Chelan PUD and Douglas PUD supplementation programs. Last month, Douglas PUD reported that rearing had hopefully turned a corner in terms of mortalities. Hatchery staff moved fish into deep tanks about 4 weeks ago to increase growth rates; however, this may have been a little early. These fish were not feeding well, and hatchery staff thought the feed might be falling to the drains too quickly, so staff reduced the velocities in the tanks; however, this still did not help increase feeding. Last week, staff transported fish back into the shallow troughs. Although, at this life stage, excessive handling creates even more stress, notably when fish are already starving. Fish mortalities are high. In the last week, there have been 40 fish mortalities each day. For context, last September 2020, there were 180 mortalities for the entire month, which decreased to 30 mortalities in October 2020. This year, Douglas PUD brought back fish in coordination with the CCT, probably in too conservative of numbers. Douglas PUD was hoping for 50% survival rates in-hatchery, based on last year. White Sturgeon rearing continues to be a learning curve. Now that fish are back in shallow troughs and back on smaller feed, hatchery staff are hopeful these changes will produce good results. Unfortunately, when fish stop feeding, it can be challenging to get fish back on feed. Hatchery staff are monitoring these fish daily with Dr. Betsy Bamberger (Douglas PUD Fish Health and Evaluation Specialist), who has not found anything pathologically wrong with these fish. Some of the fish mortalities were sent to the Washington Animal Disease Diagnostic Laboratory and preliminary results confirmed Bamberger's observations. These fish are just not eating. Gingerich estimated that approximately 1,000 fish are in relatively good health, whereas another 1,000 fish are skinny and may not survive. This puts Douglas PUD in a tight spot. Gingerich has been in close communication with Lance Keller (Chelan PUD Senior Fisheries Biologist). Hatchery staff also plan on calling Mitch Combs (Sherman Creek Fish Hatchery Manager) to ask about the potential of obtaining approval from managing authorities to receive surplus fish, if there are any. Gingerich said he thinks he will have a better sense of the situation in 2 to 4 weeks, in terms of mortalities, surplus fish, and a plan forward. The way the interlocal agreement with Chelan PUD is written, it prioritizes

Douglas PUD's 325 fish over Chelan PUD's program. Having said that, he thinks there will be an opportunity for conversations with regional managers about planting available fish where needed.

Jason McLellan said he has had conversations with Combs. This year, the CCT supplied Sherman Creek Fish Hatchery with a few hundred extra fish. Survival has been slightly below last year, but program targets will be met. If there are surplus fish, there will not be very many and Combs will not have final numbers until spring 2022. McLellan said Combs will not be willing to give up fish until it is clear he will meet program. McLellan noted that the situation at Sherman Creek Fish Hatchery is more challenging because this hatchery relies on reservoir water, which reached really high temperatures this year due to the hot summer.

McLellan also noted that there is a point of no return. Fish can go without food for a certain period of time depending on life stage or development, but then even if exposed to food the fish will not eat or cannot digest it. Gingerich agreed and said this is what hatchery staff are observing at Wells Fish Hatchery.

5. 2021 Wells Project White Sturgeon Monitoring and Evaluation Update (Andrew Gingerich):

Andrew Gingerich said a 2021 Wells Project White Sturgeon M&E Update (Attachment C) was distributed to the Aquatic SWG by Kristi Geris prior to the Aquatic SWG conference call on September 8, 2021. Gingerich said 2021 Wells Project White Sturgeon M&E sampling continues. To date, there have been 420 fish captured. One fish was missed on the PIT scan before release but was presumed to have an existing PIT-tag given the presence of an external scute mark. Among the 419 fish scanned, there have been 396 unique fish, including one fish that was captured three times. A full summary of the effort is provided in Attachment C. Currently, the effort is on pace to break 700 fish captured over 50 days of effort, which will continue through the end of September 2021. Table 1 in Attachment C is a preliminary summary of White Sturgeon captured to date. Yellow values are the number of fish captured, also shown is the age of the fish. For example, there have been 195 fish captured that were 8 years old (i.e., born in 2013, reared at Wells Fish Hatchery until 1 years old, and then released in 2014). Gingerich noted that duplicate fish have not been removed from Table 1 in Attachment C but will be in the draft report when calculating the average percentages detected and separated by group. He also noted that the initial 4 years of releases were 5,000-fish release groups and the most recent release years were 325-fish

(±5%) release groups¹. Of the total fish captured, approximately 4% were BY 2013 fish. In 2019, only 99 BY 2018 fish were released, yet 13.1% of these fish have been handled, which may suggest that size at release is an important factor for survival. To date, only two BY 2020 fish have been captured and 6.7% of fish captured have been BY 2019. Figure 1 in Attachment C shows the change in the order of magnitude of numbers released each year. The first Figure 2 in Attachment C shows the length weight relationship in centimeters versus kilograms and has a tight R^2 value of 0.9517. The second Figure 2 in Attachment C shows the length weight relationship in centimeters versus pounds. The largest fish handled was likely 80 pounds or larger—an 8-year-old—and maybe up to 165 centimeters; however, an official weight and length could not be collected before the fish was released. Gingerich guessed this fish may have been approaching reproductive maturity, because fish that are approximately 5 feet 2 inches in length are typically about the smallest size fish to reach reproductive maturity.

Jason McLellan asked if Douglas PUD has the approximate proportion of catch for the two setline configurations used. Gingerich said crews are fishing 12 setlines per day: six lines are equipped with 2- and 4-aught (2/0 and 4/0) hooks, and six lines are equipped with 14/0, 16/0, 18/0, and 20/0 hooks to target larger adult White Sturgeon. Douglas PUD is collecting hook data and compiling a database to evaluate which hooks are catching which fish. Qualitatively, crews are catching a good number of fish on both adult and juvenile gear. Gingerich said Douglas PUD will provide a summary of the proportion of catch for the two setline configurations used during 2021 Wells Project White Sturgeon M&E via email and in future Wells Project White Sturgeon M&E Updates. *(Note: Gingerich provided this summary [Attachment B] to Geris following the Aquatic SWG conference call on September 8, 2021, which Geris distributed to the Aquatic SWG that same day.)*

Laura Heironimus recalled Gingerich's comment that a fish size of 5 feet 2 inches is the minimum size to reach maturity. She clarified that while this is generally true, it is possible for White Sturgeon, mostly males, to reach maturity at smaller sizes. She has seen female White Sturgeon reach maturity at 1 meter but caveated that this was in California in warmer temperatures. McLellan agreed and said the CCT have maturity data for White Sturgeon in the Upper Columbia River, which show males reaching maturity at approximately 130 centimeters fork-length.

¹ Per the Statement of Agreement, *Wells Reservoir White Sturgeon Supplementation 2018-2022*, dated January 11, 2017, Douglas PUD will release 325 (±5%) White Sturgeon greater than or equal to 200 grams per fish into the Wells Reservoir annually between 2018 and 2022 to complete the supplementation requirement in Phase I of the White Sturgeon Management Plan.

6. Douglas PUD Pacific Lamprey Translocation Update (Chas Kyger):

Chas Kyger said weekly updates have been distributed each Friday during this 2021 translocation effort. As of last week, approximately 436 fish have been translocated upstream of Wells Dam, including 91 Pacific Lamprey to the Okanogan River Basin. This is a little short of the target of 25% to the Okanogan River and 75% to the Methow River (released below the mouth of the Methow River in the mainstem Columbia River). This week, collection numbers are lower and overall counts are declining. He estimated that approximately 20 to 30 fish will be available for translocation tomorrow. Kyger said regarding Ralph Lampman's request to put the remaining fish in the Okanogan River, Douglas PUD reached out to the CCT asking if there is interest in taking the rest of the fish to the Okanogan River Basin; however, he has not yet heard back. Kyger said if the CCT are willing and able to translocate the remaining fish to the Okanogan River Basin, this will be the plan.

Jason McLellan said he received an email from Kirk Truscott (CCT Anadromous Division Program Manager) indicating plans to take the remaining fish to the Okanogan River Basin, so McLellan suspects Truscott will reach out to Douglas PUD soon.

John Ferguson asked if any Aquatic SWG members are opposed to translocating the remaining fish to the Okanogan River Basin. No opposition was expressed.

Kyger said this last effort will wrap up translocation for this year. Ferguson said he appreciates the discussions and coordination with other fish forums and within the Aquatic SWG during this translocation season.

7. Bull Trout Passive Integrated Transponder Study and U.S. Fish and Wildlife Service Letter to the Federal Energy Regulatory Commission (Andrew Gingerich):

Andrew Gingerich said he and Steve Lewis exchanged emails a few weeks ago, including revisions to the USFWS letter to FERC. Gingerich said as discussed last month, Lewis added language to the letter indicating this decision will not necessitate consultation. FERC requested "no effect" language that USFWS cannot include. The last update Gingerich heard on this topic was that Lewis planned to obtain approval of this letter internally before submitting to FERC. John Ferguson said Anchor QEA will request from USFWS a status update on the Bull Trout radio telemetry study letter to FERC. *(Note: Lewis provided a status update via email on September 9, 2021, as requested, and a final letter was submitted to FERC by USFWS on September 16, 2021, as distributed to the Aquatic SWG by Kristi Geris on September 17, 2021.)*

Gingerich said Douglas PUD has not lost sight of a potential Bull Trout PIT tag study. There is still a lot of discussion that needs to be had about study objectives and goals. There are

several topics to address this fall and winter, including 1) 2022 Adult Pacific Lamprey Study Plan; 2) 2022 Bull Trout PIT Tag Study; 3) Wells Fish Hatchery White Sturgeon Stocking Considerations; and 4) White Sturgeon Adult Reproductive Assessment. Ferguson said this is a good reminder, and these topics will be added to the agenda for the Aquatic SWG conference call on October 13, 2021. *(Note: Geris added these items to the agenda, as discussed.)*

VII. Administration

1. Upcoming Meetings (John Ferguson):

The Aquatic SWG meeting on October 13, 2021, will be held by conference call.

Other upcoming meetings include November 10 and December 8, 2021 (location to be determined).

List of Attachments

Attachment A List of Attendees

Attachment B Summary of the proportion of catch for the two setline configurations used during 2021 Wells Project White Sturgeon M&E

Attachment C 2021 Wells Project White Sturgeon M&E Update

Attachment A - Attendees

Name	Role	Organization
John Ferguson	Aquatic SWG Chairman	Anchor QEA, LLC
Kristi Geris	Administration/Technical Support	Anchor QEA, LLC
Andrew Gingerich	Aquatic SWG Technical Representative	Douglas PUD
Chas Kyger	Aquatic SWG Technical Alternate	Douglas PUD
John Rohrback	Aquatic SWG Technical Support	Douglas PUD
Breean Zimmerman	Aquatic SWG Technical Representative	Washington State Department of Ecology
Patrick Verhey	Aquatic SWG Technical Representative	Washington Department of Fish and Wildlife
Laura Heironimus	Aquatic SWG Technical Alternate	Washington Department of Fish and Wildlife
Ralph Lampman	Aquatic SWG Technical Representative	Yakama Nation
Jason McLellan	Aquatic SWG Technical Representative	Colville Confederated Tribes