



Conference Call Minutes

Aquatic Settlement Work Group

To: Aquatic SWG Parties

Date: June 8, 2022

From: John Ferguson, Chair, Anchor QEA, LLC

Re: Final Minutes of the May 11, 2022, Aquatic SWG Conference Call

The Aquatic Settlement Work Group (SWG) met by conference call on Wednesday, May 11, 2022, from 10:00 a.m. to 11:30 a.m. Attendees are listed in Attachment A of these conference call minutes.

I. Summary of Action Items

1. Washington Department of Fish and Wildlife (WDFW) will distribute the web link to access the WDFW Fish and Shellfish Carcass Reporting Form, for Aquatic SWG use, review, and feedback regarding reporting White Sturgeon mortalities (Item VI-1).
2. WDFW will distribute a printable poster containing the quick response code to access the WDFW Fish and Shellfish Carcass Reporting Form, to post at local public river access areas (Item VI-1).
3. Anchor QEA, LLC, will distribute the U.S. Fish and Wildlife Service (USFWS) Aquatic SWG representation designation letter, update the Aquatic SWG email distribution lists, and coordinate Aquatic SWG extranet access for the new USFWS Aquatic SWG Technical and Policy representatives (Item VI-2). *(Note: The letter was distributed, and email lists were updated following the Aquatic SWG conference call on May 11, 2022, and granting extranet access is in process.)*
4. Douglas PUD will draft a Statement of Agreement (SOA) that supports White Sturgeon spontaneous autopolyploidy (SAP) screening for the Wells White Sturgeon Supplementation Program, aligns with the current White Sturgeon stocking SOA (325 fish and expires in 2026),¹ and acknowledges the Priest Rapids Fish Forum (PRFF) and Rocky Reach Fish Forum (RRFF) document titled *Guidance for Evaluating Spontaneous Autopolyploidy in White Sturgeon Supplementation Programs* (White Sturgeon SAP Guidance Document), for review and further discussion (Item VI-6). *(Note: Andrew Gingerich provided this draft SOA, as discussed, on June 3, 2022, which Kristi Geris distributed to the Aquatic SWG that same day.)*

¹ Wells Reservoir White Sturgeon Supplementation 2023–2026, approved by the Aquatic SWG on March 9, 2022.

5. The Confederated Tribes of the Colville Reservation (CTCR) and Douglas PUD will coordinate on next steps regarding White Sturgeon SAP screening of brood year (BY) 2021 Wells White Sturgeon prior to release in June 2022 (Item VI-6). *(Note: Because the CTCR's Coulter counter broke, SAP screening of BY 2021 Wells White Sturgeon was not carried out. White Sturgeon were released on May 25, 2022.)*
6. The Aquatic SWG meeting on June 8, 2022, will be held by conference call (Item VII-1).

II. Summary of Decisions

1. Aquatic SWG members present approved the *Annual Report Calendar Year 2021 Activities Under the Aquatic Settlement Agreement* (2021 Aquatic Settlement Agreement Annual Report), as revised, and appended *2021 Annual Report White Sturgeon Management Plan* (2021 White Sturgeon Management Plan Annual Report), as revised, *2021 Bull Trout Management Plan and Incidental Take Annual Report*, as revised, *2021 Annual Report Water Quality Management Plan* (2021 Water Quality Management Plan Annual Report), and appended *2021 Water Temperature Annual Report*, *Pacific Lamprey Management Plan 2021 Annual Report* (2021 Pacific Lamprey Management Plan Annual Report), as revised, *Aquatic Nuisance Species Management Plan 2021 Annual Report* (2021 Aquatic Nuisance Species Management Plan Annual Report), as revised, and *Resident Fish Management Plan 2021 Annual Report* (2021 Resident Fish Management Plan Annual Report), as revised. USFWS abstained because the newly designated USFWS Aquatic SWG Technical Representative (RD Nelle) had not reviewed these reports nor had the former representative provided comments (Item VI-4).
2. Aquatic SWG members present approved the study plan, *Wells Reservoir White Sturgeon Reproduction Assessment* (2022 White Sturgeon Reproduction Assessment Study Plan), as revised (Item VI-5).

III. Agreements

1. Aquatic SWG members present supported the CTCR offer to conduct White Sturgeon SAP screening of BY 2021 Wells White Sturgeon prior to release in June 2022, and release all fish regardless of ploidy, and have Douglas PUD remove any 12N fish (i.e., 12 copies of each chromosome or irregular fish) from the BY 2021 releases that are subsequently encountered during White Sturgeon monitoring and evaluation (M&E) sampling conducted in the Wells Reservoir (Item VI-6). *(Note: Because the CTCR's Coulter counter broke, SAP screening of BY 2021 Wells White Sturgeon was not carried out. White Sturgeon were released on May 25, 2022.)*

IV. Review Items

1. The draft *Statement of Agreement Regarding Wells Reservoir White Sturgeon Supplementation 2023-2026* was distributed to the Aquatic SWG by Kristi Geris on June 3, 2022 (Item VI-6).

V. Documents Finalized

1. The final 2021 Aquatic Settlement Agreement Annual Report and appended 2021 White Sturgeon Management Plan Annual Report, *2021 Bull Trout Management Plan and Incidental Take Annual Report*, 2021 Water Quality Management Plan Annual Report and appended *2021 Water Temperature Annual Report*, 2021 Pacific Lamprey Management Plan Annual Report, 2021 Aquatic Nuisance Species Management Plan Annual Report, and 2021 Resident Fish Management Plan Annual Report, were filed with the Federal Energy Regulatory Commission on May 17, 2022, as distributed to the Aquatic SWG by Kristi Geris that same day (Item VI-4).

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 (Attachment A). Ferguson asked for any additions or changes to the agenda. No additions or changes were requested.

The revised draft April 13, 2022, conference call minutes were reviewed. Kristi Geris said the revised minutes were distributed on May 3, 2022, and a second revised minutes were distributed on May 9, 2022. The second revision includes edits from the CTCR on the White Sturgeon SAP discussion and distribution of revised review items, all of which are shown in redlines. The Aquatic SWG reviewed these redlines. Geris said all other edits and comments received from members of the Aquatic SWG were incorporated into the revised minutes. Aquatic SWG members present approved the April 13, 2022, conference call minutes, as revised.

Action items from the Aquatic SWG conference call on April 13, 2022, are as follows (*Note: The following italicized item numbers correspond to agenda items from the April 13, 2022, meeting*):

- *Anchor QEA will redistribute the PRFF and RRF White Sturgeon SAP Guidance Document for Aquatic SWG review and further discussion (Item VI-2).*

Kristi Geris redistributed this document following the Aquatic SWG conference call on April 13, 2022.

- *WDFW will distribute the web link to access the WDFW Fish and Shellfish Carcass Reporting Form, for Aquatic SWG use, review, and feedback regarding reporting White Sturgeon mortalities (Item VI-4).*

Laura Heironimus said a draft is under internal review and will be finalized soon. This action item will be carried forward.

- *WDFW will distribute a printable poster containing the quick response code to access the WDFW Fish and Shellfish Carcass Reporting Form, to post at local public river access areas (Item VI-4).*

Laura Heironimus said a draft is under internal review and will be finalized soon. This action item will be carried forward.

- *The CTCR will distribute upper Columbia White Sturgeon mortality protocols (Item VI-4).*
Jason McLellan provided two documents on April 18, 2022, which Kristi Geris distributed to the Aquatic SWG that same day.

2. U.S. Fish and Wildlife Service Representation (John Ferguson):

John Ferguson said Steve Lewis took a new position with the Bureau of Indian Affairs. USFWS provided a USFWS Aquatic SWG representation letter designating Sonja Kokos (USFWS Supervisory Fish and Wildlife Biologist, Wenatchee, Washington) as the new Policy Representative, Bill Gale (USFWS Project Leader, Leavenworth, Washington) as the new Policy Alternate, RD Nelle (USFWS Supervisory Fish Biologist, Leavenworth, Washington) as the new Technical Representative, and Judy Neibauer (USFWS Fish and Wildlife Biologist, Wenatchee, Washington) as the new Technical Alternate. Ferguson said Anchor QEA will distribute the USFWS Aquatic SWG representation designation letter, update the Aquatic SWG email distribution lists, and coordinate Aquatic SWG extranet access for the new USFWS Aquatic SWG Technical and Policy representatives. *(Note: The letter was distributed, and email lists were updated following the Aquatic SWG conference call on May 11, 2022, and granting extranet access is in process.)*

Andrew Gingerich welcomed Nelle to the Aquatic SWG, officially, as Nelle has been providing technical input and support to the Aquatic SWG over the past several years.

3. Coronavirus Disease 2019 Updates (John Ferguson):

John Ferguson asked if Aquatic SWG members had any new updates to share regarding coronavirus disease 2019. No new updates were shared.

4. DECISION: 2021 Aquatic Settlement Agreement Annual Report (John Ferguson, John Rohrback, and Chas Kyer):

John Ferguson said Anchor QEA authored the 2021 Aquatic Settlement Agreement Annual Report and led responses to comments, which were received from the CTCR and the Yakama

Nation (YN). Douglas PUD authored the six resource management plan annual reports and led responses to comments, which were received from the CTCR, the YN, and WDFW. All revised reports with redlines were distributed to the Aquatic SWG last week on May 4, 2022. Ferguson suggested that Anchor QEA and Douglas PUD provide a high-level characterization of comments, responses, and revisions, and then have one vote to approve all documents at the end.

2021 Aquatic Settlement Agreement Annual Report

Kristi Geris said comments and edits were received from the CTCR and the YN, which were addressed and incorporated. The only substantive changes were updating the existing Pacific Lamprey translocation "Last Seen" table and creating a second "Last Seen" table to compare detections to date with detections in the first fall per release year, per a comment from Ralph Lampman. Douglas PUD provided updated tables, which Lampman already reviewed and approved.

White Sturgeon Management Plan Annual Report

Chas Kyger said comments and edits were received from the CTCR, which were addressed and incorporated. There were no substantive changes.

Bull Trout Management Plan Annual Report

Kyger said comments and edits were received from the CTCR, which were addressed and incorporated. There were no substantive changes.

Pacific Lamprey Management Plan Annual Report

John Rohrback said comments and edits were received from the CTCR and the YN, which were similar in nature and were addressed and incorporated. There was one substantive edit in Section 3.2.4.1, per comments from Jason McLellan and Lampman to incorporate more information about Pacific Lamprey encounters at the Lower Methow River smolt trap. More detailed language and two figures were added. Most encounters were larval Pacific Lamprey with a small proportion of juvenile Pacific Lamprey, which were generally larger in size as time went by. Most encounters occurred during the first week in May 2022, and there were few subsequent detections.

Ferguson asked where these fish were originally tagged. Rohrback said at the Methow River Smolt Trap at McFarland Creek Bridge, which is operated by WDFW. Ferguson asked if tagging would continue this year, and Rohrback said yes.

Lampman said in the Snake River, Pacific Lamprey collected in screw traps are occasionally detected at a dam (e.g., Lower Granite Dam) 2 years later. Sometimes there is lag time before these fish reach the mainstem dams, mainly for larvae. Juveniles outmigrate in the same year.

Andrew Gingerich said it will be interesting to see, in future years, if this is a true accounting of what is coming out of the river or if this histogram is more a reflection of trap efficiency or river flow out of the Methow River. As river flow increases, the trap efficiency decreases, and he is not certain this is a true depiction of fish moving through the system. Lampman said this is a good point.

Aquatic Nuisance Species Management Plan Annual Report

Kyger said comments and edits were received from the CTCR and WDFW, which were addressed and incorporated. There were two substantive edits, including the addition of Table 2 that summarized Northern Pike electrofishing monitoring efforts, and appending aquatic nuisance species posters and flyers provided by WDFW.

Resident Fish Management Plan Annual Report

Kyger said comments and edits were received from the CTCR, which were addressed and incorporated. The one substantive edit was the addition of Table 1, which summarized bycatch during the 2021 Northern Pikeminnow Control Program.

Water Quality Management Plan Annual Report

Breean Zimmerman said Washington State Department of Ecology has a last-minute revision to language in the Water Quality Monitoring Plan, which references a water temperature standard that changed with the recent total dissolved gas rule change. She emailed edits to better reflect what the standard states in the new rule, which Geris projected on WebEx. Ferguson suggested voting, with these edits shown, and incorporating the edits following the call.

Decision

RD Nelle asked if Steve Lewis provided any comments, and Ferguson said no. Nelle said he has not reviewed these reports. Gingerich said abstaining is acceptable, and explained that the license requirement is for consultation, so as long as there are no objections, an abstention should be okay.

Aquatic SWG members present approved the 2021 Aquatic Settlement Agreement Annual Report, as revised, and appended 2021 White Sturgeon Management Plan Annual Report, as revised, 2021 Bull Trout Management Plan and Incidental Take Annual Report, as revised, 2021 Water Quality Management Plan Annual Report and appended 2021 Water Temperature Annual Report, 2021 Pacific Lamprey Management Plan Annual Report, as revised, 2021 Aquatic Nuisance Species Management Plan Annual Report, as revised, and 2021 Resident Fish Management Plan Annual Report, as revised. USFWS abstained because

the newly designated USFWS Aquatic SWG Technical Representative (Nelle) had not reviewed these reports nor had the former representative provided comments.

Gingerich said Douglas PUD appreciates everyone's review of these documents.

The final reports were filed with the Federal Energy Regulatory Commission on May 17, 2022, as distributed to the Aquatic SWG by Geris that same day.

5. DECISION: 2022 White Sturgeon Adult Reproductive Assessment Study Plan (Chas Kyger):

Chas Kyger said the draft 2022 White Sturgeon Reproduction Assessment Study Plan was distributed to the Aquatic SWG by Kristi Geris on April 13, 2022, for a 30-day review with edits and comments due to Kyger by Friday, May 13, 2022. A revised study plan was distributed on May 9, 2022, and a second revised study plan was distributed prior to the Aquatic SWG conference call on May 11, 2022.

Kyger said the first draft included acoustic mobile tracking and monitoring, but based on discussions with Jason McLellan, this was omitted in the first revision because the fine-scale resolution of these detections does not provide any more information than what is already provided with the acoustic arrays installed throughout the reservoir. Sonar was also discussed but was retained in the study plan. Sonar is indirectly related to documenting reproduction in that it is useful to detect adult White Sturgeon in spawning areas. The main priority is the second objective, which is egg mat and larval drift net monitoring.

Kyger said the second revision added specificity to monitoring dates.

Laura Heironimus appreciates the feedback provided by McLellan. She reviewed the study plan and believes it is a really good approach.

John Ferguson asked about when field work begins. Kyger said in June 2022. Crews will set the egg mats when the water temperature approaches 14°C.

Aquatic SWG members present approved the 2022 White Sturgeon Reproduction Assessment Study Plan, as revised.

6. Adoption of the White Sturgeon Spontaneous Autopolyploidy Guidance Document (Laura Heironimus):

Laura Heironimus recalled originally sharing with the Aquatic SWG in June 2020, a White Sturgeon SAP Guidance Document that was developed by the PRFF and RRFF. Since that time, this topic seems to have dropped from the agenda. Heironimus touched base with Donella Miller (YN) and Jason McLellan regarding SAP testing in the Columbia River Basin,

and they agreed about wanting to work toward consistent monitoring and guidance throughout the basin. For the Aquatic SWG, WDFW is hoping for two things: 1) the 325 fish planned to be stocked this year be tested for SAP prior to stocking; and 2) consider adopting the White Sturgeon SAP Guidance Document.

Adoption of the White Sturgeon Spontaneous Autopolyploidy Guidance Document

Andrew Gingerich asked if the Lower Columbia River, or Zone 6 (Bonneville to McNary Dam), is receiving supplementation mitigation stocking this year and if all those fish are being screened. Heironimus said there are no plans for stocking Zone 6 at this time. In the past, additional fish leftover from Marion Drain programs were tested and stocked, but this was prior to the White Sturgeon SAP Guidance Document. If the opportunity arises again, WDFW would seek consistent monitoring and guidance. The Columbia River Inter-Tribal Fish Commission Master Plan for stocking John Day does not include SAP testing, but Miller said there might be an opportunity in the future to revise this as more information becomes available. To note, the White Sturgeon SAP Guidance Document splits out guidance for fish of different origins.

Gingerich said he thought this topic was slated to be addressed next year when the White Sturgeon SAP Guidance Document might develop into a State of Washington policy. Heironimus recalled mentioning last month that, starting next year, she has been tasked with developing a statewide management plan for White Sturgeon. Currently, WDFW policy only covers White Sturgeon downstream of Bonneville Dam. This management plan will consider White Sturgeon in other parts of the state, especially the eastern side, and will also include policy language regarding hatchery production. Developing this plan will include public comments and meetings before finalizing.

Gingerich said, since the Aquatic SWG meeting last month, he has exchanged emails and phone calls with McLellan. From a technical perspective, Douglas PUD is concerned about the necessity for screening, but also understands where others are coming from under a "zero risk" approach. Members can agree to disagree here. In the interest of being productive, he thinks Douglas PUD can support SAP testing, with sideboards, through a formal SOA that could be available for review as early as next month. Douglas PUD is not concerned about screening 325 fish, so much as Douglas PUD's concern is making sure that what occurs in the wild justifies sampling, and that Douglas PUD is not signing up for "no end date" if science informs otherwise. The current SOA stipulates 325 fish be reared and released each year, but this could increase to 5,000 fish per year for the balance of the license. This is not a huge effort, but Douglas PUD would like a commitment that this burden stays low and is adjusted if needed based on technical information.

McLellan agreed with this summary of discussions. The CTCR are supportive of an SOA that provides guidelines for the next few years. He suggested aligning this SOA with the existing stocking SOA. He appreciates the phone call and clarification about Douglas PUD's concerns.

Heironimus agreed SAP testing could be adopted on a temporary basis to start. As testing continues, more will be learned about what the risks really are, which will better inform what testing needs to be done in the future.

John Ferguson said it seems there is general support for an SOA that aligns with the existing stocking SOA and contains sideboards establishing a timeline and offramp for SAP testing. Regarding adopting the PRFF and RRF White Sturgeon SAP Guidance Document, he suggested instead, either developing an Aquatic Settlement Agreement-specific document to adopt or acknowledging the PRFF and RRF document in the background of the SOA. McLellan agreed this is a reasonable approach. Gingerich, Heironimus, and Patrick Verhey also agreed with this approach.

Douglas PUD will draft an SOA that supports White Sturgeon SAP screening for the Wells White Sturgeon Supplementation Program and aligns with the current White Sturgeon stocking SOA (325 fish and expires in 2026),² and acknowledges the PRFF and RRF White Sturgeon SAP Guidance Document, for review and further discussion. *(Note: Gingerich provided this draft SOA, as discussed, on June 3, 2022, which Kristi Geris distributed to the Aquatic SWG that same day.)*

Spontaneous Autopolyploidy Screening of Brood Year 2021 Wells White Sturgeon

Gingerich said screening fish this year is not impossible, but it would be difficult from a logistical standpoint in terms of effort and activities at Wells Fish Hatchery. Hatchery staff are trying to move fish off-station approximately 1 week earlier than usual due to a water heater issue. The fish are doing well but need to move so crews can conduct maintenance and sanitize the facility before BY 2022 fish arrive in July 2022. Additionally, there are logistical concerns in executing a purchase order to conduct sampling and finding a crew to do the screening with such short notice. He does not feel a math exercise with the Aquatic SWG to calculate low risk would be useful considering the interest in zero risk, but ultimately believed the risk is quite low with the current population. Therefore, Douglas PUD is requesting Aquatic SWG understanding to focus on developing this SOA and forego screening this year.

McLellan asked if Douglas PUD is measuring these fish prior to release, and Gingerich said yes. McLellan asked, if the CTCR have staff available to collect samples and run collection at no charge, would Douglas PUD be amendable to this? Gingerich said this is a curious offer

² Wells Reservoir White Sturgeon Supplementation 2023–2026, approved by the Aquatic SWG on March 9, 2022.

but does simplify some aspects of Douglas PUD's concerns. Chas Kyger said the plan is to conduct the final weighing and measurement the week of May 23, 2022, a day or two before the fish are released. He believes Chelan PUD will be at the hatchery the week before for processing of Chelan PUD Program fish. The only constraint he sees is there might be a time crunch to get everything done in a few days and have fish out the door before June 1, 2022.

McLellan proposed that the CTCR collect and run the blood samples, which would not add time to measuring and weighing the fish. Understanding all the constraints with license requirements, if a 12N fish is detected, he suggested noting this in the database and releasing the fish in the interest of meeting stocking targets. Then, when Douglas PUD conducts M&E studies in the reservoir, if a BY 2021 12N fish is encountered, it will be removed. Gingerich said he was envisioning, as in future years, that Douglas PUD would collect and run the samples, which would be difficult to get together in the next week. However, if the CTCR are willing to collect the blood samples, this could potentially work. Kyger said he does not foresee any issues with this proposal. Gingerich said the only issue he can think of is if there is an issue with coordinating schedules.

John Rohrback asked about inconclusive fish that cannot be resampled, and if Aquatic SWG members can accept this risk. McLellan said CTCR staff have never experienced inconclusive samples, and this should not be an issue. Ferguson asked if this would be a 1-day event. Kyger said yes, it should only take one morning or afternoon. Fish are already scute-marked and passive integrated transponder-tagged. Aquatic SWG members thanked the CTCR for this offer.

Aquatic SWG members present supported the CTCR offer to conduct White Sturgeon SAP screening of BY 2021 Wells White Sturgeon prior to release in June 2022, and release all fish regardless of ploidy, and have Douglas PUD remove any 12N fish from the BY 2021 releases that are subsequently encountered during White Sturgeon M&E sampling conducted in the Wells Reservoir.

The CTCR and Douglas PUD will coordinate on next steps regarding White Sturgeon SAP screening of BY 2021 Wells White Sturgeon prior to release in June 2022.

Note: On Sunday, May 22, 2022, the day before screening was to take place at Wells Fish Hatchery, Douglas PUD was notified by CTCR staff that the pump on the testing equipment was not functioning and return-to-service was not until June 1, 2022. BY 2021 Wells White Sturgeon were weighed and measured on Monday, May 23, 2022, and released on Wednesday, May 25, 2022, without SAP screening.

7. Brood Year 2021 White Sturgeon Rearing and Tagging Update (Chas Kyger):

Chas Kyger summarized a BY 2021 White Sturgeon Rearing Update (Attachment B), which was distributed to the Aquatic SWG by Kristi Geris after the conference call on May 11, 2022. Kyger said fish will be planted on May 25 or May 26, 2022. Currently, Douglas PUD fish are in five tanks holding approximately 66 to 67 fish each. Most tanks have fish averaging over 500 grams each, some tanks have fish approaching 600 grams each, and one tank has fish averaging 488 grams each. All fish are well over the target size at release, in good shape, and are ready to be stocked out once the final weights and lengths are collected and fish are checked for passive integrated transponder tags. As Andrew Gingerich mentioned earlier, there is an issue with the water heater, so fish are on limited heated water, which is okay because the goal is to match the river temperature before release. Subsequently, fish likely will not grow much in next few weeks.

8. Pacific Lamprey Bile Acid and Environmental DNA (Ralph Lampman):

Ralph Lampman recalled the initial plan to collect samples in the spring and fall. The initial sampling took place in 2018. The second set of samples were collected last fall (October 2021), which included a test run with Pacific Lamprey bile acids. The bile acids have not yet been analyzed because funding would not be available until fiscal year 2022. Lampman announced that funding to analyze the bile acids will now be available in June 2022.

Lampman recalled last summer, comments from Aquatic SWG members included a request to sample during the peak adult migration, which is around early July at Bonneville Dam and in mid- to late August at Wells Dam. The goal is to collect bile acids samples during the peak of the run at each dam (i.e., Bonneville, McNary, Rocky Reach, and Wells dams).

Lampman said additionally, Environmental DNA (eDNA) monitoring is continuing at each dam and some sites in the Methow and Okanogan River basins. The YN is coordinating with the CTCR on the Okanogan River sites.

Lampman hopes to receive last year's results before sampling in July 2022 and hopes to get results after July 2022 sampling before the final fall sampling.

John Ferguson asked if sampling during the August 2022 timeframe includes bile acids, eDNA, or both. Lampman replied, both. RD Nelle asked when fall sampling will occur. Lampman said early October, preferably before the rains come and at the lowest river flow of the year. Nelle asked if this is to capture the end of the migration, and Lampman said yes. Additionally, this is the same timeframe as the 2018 sampling.

9. Pacific Lamprey Information Exchange Webinar Series Update (Ralph Lampman):

Ralph Lampman said the fifth and final 2022 Pacific Lamprey Information Exchange Webinar³ occurred yesterday, on May 10, 2022, and focused on supplementation and disease. The first speaker, Jon Hess (Columbia River Inter-Tribal Fish Commission), shared genetic analysis results on all things learned about the life cycle of translocated fish, from larvae to juveniles to adults. This summary focused on Snake River results and looked at how much time each life stage spent where, and what to expect in future years, based on modeling. There was a preference of Snake River fish to return to Bonneville Dam and not Willamette Falls (i.e., only a very small percentage returned to Willamette Falls). Pacific Lamprey are considered panmictic, but these results suggest some sort of homing preference. The second speakers were Mary Moser (National Marine Fisheries Service), on behalf of Aaron Jackson (Confederated Tribes of the Umatilla Indian Reservation), and Lampman who presented for the YN. This was a presentation on supplementation work and research using artificial propagation. The last speakers, from USFWS, spoke on disease surveillance in different areas of the mainstem Columbia and Snake rivers, including the latest on known diseases found in Pacific Lamprey adults, juveniles, and larvae, as well as what has not been found.

VII. Administration**1. Upcoming Meetings (John Ferguson):**

The Aquatic SWG meeting on June 8, 2022, will be held by conference call.

Other upcoming meetings include July 13 and August 10, 2022 (location to be determined).

List of Attachments

Attachment A List of Attendees

Attachment B Brood Year 2021 White Sturgeon Rearing Update

³ The Pacific Lamprey Conservation Initiative's 5th Annual Lamprey Information Exchange Webinar Series convenes on the second Tuesday of each month, from January to May 2022.

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
RD Nelle	Aquatic SWG Technical Representative	U.S. Fish and Wildlife Service
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	Confederated Tribes of the Colville Reservation

Note:

* Left the conference call after Item VI-7.