



Conference Call Minutes

Aquatic Settlement Work Group

To: Aquatic SWG Parties

Date: July 12, 2023

From: John Ferguson, Chair, Anchor QEA, LLC

Re: Final Minutes of the June 14, 2023, Aquatic SWG Conference Call

The Aquatic Settlement Work Group (SWG) met by conference call on Wednesday, June 14, 2023, from 10:00 a.m. to 11:30 a.m. Attendees are listed in Attachment A of these conference call minutes.

Summary of Action Items

1. The Confederated Tribes of the Coville Reservation (CTCR) will discuss internally the feasibility of passive integrated transponder (PIT)-tagging and collecting genetic samples from adult Pacific Lamprey picked up from Priest Rapids Dam for translocation into the Okanogan River basin in 2023 (Item II-A).
2. Anchor QEA, LLC, will coordinate with Tracy Hillman (Priest Rapids and Rocky Reach Fish Forums [PRFF and RRF] Chairman) regarding convening a joint Juvenile Pacific Lamprey Studies Subgroup meeting in late summer to early fall 2023 (Item II-B). *(Note: On Monday, August 21, 2023, Aquatic SWG representatives are invited to join a virtual meeting, hosted by the PRFF, of the PRFF and RRF Pacific Lamprey Subgroups to discuss models and assumptions of models used to estimate juvenile survival and behavior. This will also include a discussion about juvenile studies to be conducted in the lower Columbia River.)*
3. Douglas PUD will provide a ramp down profile for the recent "Methow Flush and Wells Project Draft" for distribution to the Aquatic SWG (Item II-H). *(Note: Andrew Gingerich provided these data following the Aquatic SWG conference call on June 14, 2023, which Kristi Geris distributed that same day.)*
4. The Yakama Nation (YN) will share a white paper on ramp down rates and impacts to lamprey for distribution to the Aquatic SWG (Item II-H). *(Note: Ralph Lampman distributed a link to the document, Best Management Guidelines for Native Lampreys, following the Aquatic SWG conference call on June 14, 2023.)*
5. The YN will share literature on restoration and habitat modeling on lake sturgeon for distribution to the Aquatic SWG (Item II-I). *(Note: Ralph Lampman provided this literature following the Aquatic SWG conference call on June 14, 2023, which Kristi Geris distributed that same day.)*
6. The Aquatic SWG meeting on July 12, 2023, will be held by conference call (Item III-A).

Summary of Decisions

1. Aquatic SWG members present approved the Statement of Agreement (SOA), *To Translocate Adult Pacific Lamprey from Priest Rapids Dam to Areas Within or Upstream of the Wells Project 2023–2024* (2023–2024 Adult Pacific Lamprey Translocation SOA), as revised (Item II-A).

Agreements

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

Review Items

1. The draft *White Sturgeon Supplementation and Management Plan Implementation in the Wells Reservoir, 2022* (2022 White Sturgeon M&E Report) and draft *Wells Reservoir, 2022 White Sturgeon Reproduction Assessment* (2022 White Sturgeon Reproduction Assessment Study Report) were distributed to the Aquatic SWG by Kristi Geris on May 17, 2023, and are available for a 45-day review with edits and comments due to Chas Kyger by July 1, 2023 (Item II-D). The revised reports for approval were distributed on July 10, 2023.

Documents Finalized

1. The final memorandum, *Wells Hydroelectric Project No. 2149, Low Pool Elevation Bull Trout Survey – License Article 402* (Bull Trout Stranding Survey Memorandum), was distributed to the Aquatic SWG by Kristi Geris on June 12, 2023 (Item II-H).
2. The final 2023–2024 Adult Pacific Lamprey Translocation SOA was distributed to the Aquatic SWG by Kristi Geris on June 15, 2023 (Item II-A).

I. Welcome

A. Review Agenda (John Ferguson)

John Ferguson welcomed the Aquatic SWG members (Attachment A) and reviewed the agenda. Ferguson asked for any additions or changes to the agenda. Prior to the meeting, Kristi Geris added a Bull Trout Stranding Survey Memorandum, per an email from Andrew Gingerich. No other additions were requested at this time.

The following revisions were added throughout the conference call:

- Laura Heironimus added the following: 1) Washington Department of Fish and Wildlife (WDFW) Coulter counter; and 2) White Sturgeon thiamine studies.
- Gingerich added Bull Trout and the Twisp Weir.
- Ralph Lampman added restoration and habitat modeling on lake sturgeon.

B. Meeting Minutes Approval (John Ferguson)

The revised draft May 10, 2023, conference call minutes were reviewed. Kristi Geris said the only edits received were from Ralph Lampman, which clarified comments about numbers of fish available for trapping under the Pacific Lamprey translocation discussion (Item II-C). These were incorporated into the revised minutes. Geris also added distribution of the following: 1) John Rohrback's table accounting for all Pacific Lamprey tagged and released at rotary screw trap locations within the Methow watershed, per his action item; and 2) Jason McLellan's edits to the 2023–2024 Adult Pacific Lamprey Translocation SOA, which will be discussed today. Lastly, Geris said Andrew Gingerich planned to review the revised minutes prior to today's meeting, and she asked if Gingerich had any last edits to the revised minutes. Gingerich said he has no further edits.

The Aquatic SWG members present approved the May 10, 2023, conference call minutes, as revised.

C. Review of Action Items (John Ferguson)

Action items from the Aquatic SWG conference call on May 10, 2023, are as follows (*Note: The following italicized item numbers correspond to agenda items from the May 10, 2023, meeting*):

1. *Anchor QEA will distribute the typo corrections to the final revised Pacific Lamprey Management Plan 2022 Annual Report (2022 Pacific Lamprey MP Annual Report) that were discussed during the Aquatic SWG conference call on May 10, 2023 (Item II-C).*

Kristi Geris distributed these corrections following the conference call on May 10, 2023.

2. *Douglas PUD will provide via email a comprehensive summary table (similar to the "Last Seen" table) showing the year that juvenile Pacific Lamprey were captured and PIT-tagged at the different smolt trap locations, including the PIT-tag size and type and their downstream detections, over the course of the entire tagging effort (2021 to 2022), and these data will also be incorporated into future Pacific Lamprey MP annual reports (Item II-A).*
John Rohrback provided this summary on June 12, 2023, which was distributed to the Aquatic SWG by Kristi Geris that same day. Ralph Lampman said this summary only enumerates detections immediately downstream, and he asked if it could show the individual detection arrays to better understand the general time frame of detections. Rohrback explained that all fish detected in the Methow were subsequently detected at LMR.¹ Nine of the 12 fish tagged in the Methow in 2021 were detected in 2021, and three fish were detected in 2022. All but one of the fish tagged in the Twisp were subsequently detected at TWR² in 2022. One fish tagged in the Twisp was subsequently detected at MRC³ on April 27, 2023. Rohrback said these are fish tagged at the rotary screw trap and released

¹ Lower Methow River PIT array.

² Lower Twisp River PIT array.

³ Methow River at Carlton PIT array.

at the site. He likes this summary table, as is. It is difficult to include an entire tag history in one table. Rohrback suggested querying the Columbia Basin PIT Tag Information System (PTAGIS) for additional information. Lampman said it would also be helpful to distinguish between larvae and juveniles, which need to be entered in PTAGIS as a comment or abbreviation. Rohrback said these data are collected and he can work with WDFW to make sure this information, and tag type as previously requested by Lampman, are entered into PTAGIS. Rohrback noted that these data are also included in the Pacific Lamprey Management Plan (MP) annual reports. John Ferguson commented that it seems the fish are tagged at the trap and are then detected at a downstream location but are not seen after that. He asked if this is abnormal. Lampman said it seems a little abnormal. Typically for fish tagged in the Yakima River, approximately 1% to 3% of these fish are subsequently detected at John Day Dam or Bonneville Dam. Lampman said information on recapture rates would also be helpful to understand overall numbers. Rohrback said he is unaware of any recaptures but can let Lampman know if he finds anything different. Ferguson said it seems juveniles should be released below the trap and not above. Lampman recalled discussing that juveniles are released above the trap because there is no information on how many fish are migrating through the system, and understanding recapture rates and trap efficiency will help inform the overall number of fish migrating in the river. RD Nelle asked if WDFW scans all Pacific Lamprey collected in the trap. Rohrback said yes. Andrew Gingerich said he has growing concerns about the scope creep evolving with this tagging exercise. Douglas PUD agreed to accommodate the initial PIT tagging request, but now the request has increased to include efficiency trials, all which have an associated effort and cost. He suggested tabling this topic until the Aquatic SWG is ready to have a more formal discussion about how these actions tie to obligations in the Pacific Lamprey MP. Lampman said he understands the requests seem to be growing and suggested that the YN take on the data portion of the request. He appreciates Douglas PUD's willingness to conduct this tagging effort, and the YN is willing to help so that Douglas PUD can continue this effort. Gingerich said he appreciates Lampman's offer. Ferguson asked if Douglas PUD plans to continue PIT-tagging fish in coordination with the contractor, or if this effort will be paused until further discussion can take place. Gingerich said Douglas PUD is supportive of continuing PIT-tagging of incidentally encountered juvenile Pacific Lamprey, with WDFW as a partner for the salmon obligation. This may change and evolve with any subsequent and new contracts. He suggested that Rohrback continue providing high level summaries as he has done. If the Aquatic SWG wants additional data or studies, this will require further discussions and possibly an SOA. Lampman said this sounds good. No other objections were expressed by Aquatic SWG members.

3. *Anchor QEA will add "Juvenile Pacific Lamprey Studies" to the Aquatic SWG agenda for June 14, 2023 (Item II-A).*
This has been added to the agenda.
4. *Anchor QEA will distribute the edits to the draft 2023–2024 Adult Pacific Lamprey Translocation SOA that were crafted during the Aquatic SWG conference call on May 10, 2023 (Item II-C).*
Kristi Geris distributed these edits following the conference call on May 10, 2023.
5. *Douglas PUD will coordinate with the YN and U.S. Fish and Wildlife Service (USFWS) on further edits to the draft 2023–2024 Adult Pacific Lamprey Translocation SOA for discussion and decision during the Aquatic SWG conference call on June 14, 2023 (Item II-C).*
This draft SOA was distributed to the Aquatic SWG by Kristi Geris on June 5, 2023.

II. Summary of Discussions

A. DECISION: 2023–2024 Adult Pacific Lamprey Translocation SOA (John Rohrback)

A draft 2023–2024 Adult Pacific Lamprey Translocation SOA was distributed to the Aquatic SWG by Kristi Geris prior to the conference call on May 10, 2023. An edited SOA was distributed after the conference call that same day. John Rohrback said that he, Ralph Lampman, and RD Nelle met and developed a revised SOA for approval, which was distributed on June 5, 2023. Rohrback said McLellan then provided additional comments on the revised SOA, which was distributed on June 9, 2023.

Rohrback said this SOA proposes to continue what has been done in the past, including capturing adult Pacific Lamprey at Priest Rapids Dam (PRD) and releasing PIT-tagged and fin clipped fish upstream of Wells Dam. Douglas PUD will endeavor to capture no fewer than 500 fish per year, understanding there is no control over the number of fish trapped or run size. Additionally, no more than 1,000 fish will be translocated within each year during the 8-week collection and tagging period.

Rohrback noted that one of McLellan's comments is that he would like the meeting minutes to show that the CTCR would like 25% of the translocated Pacific Lamprey to be released in the Okanogan River basin. Douglas PUD is supportive of the CTCR picking up this allocation from Wells Dam for release into the Okanogan. McLellan said he appreciates Douglas PUD's willingness to support this.

John Ferguson asked about the release location of the other 75% of translocated fish. Rohrback said from his perspective, as long as these fish are released upstream of Wells Dam, this will be consistent with this SOA. That said, Douglas PUD plans to release fish at Starr Boat Launch.

Lampman said the YN is supportive of the CTCR picking up 25% of the fish for release into the Okanogan River basin. Regarding Starr Boat Launch, the YN just released fish at this location 1 week

ago, and the water temperature was 19°C. He asked if slack water in the area is causing the high temperature or are these high temperatures also in other parts of the Upper Columbia River. He is concerned about releasing fish in hot water. Rohrback asked if Lampman is confusing this location with the Methow Boat Launch, because water temperatures at Starr Boat Launch are similar to those at Wells Dam, which are typical Columbia River temperatures. Lampman confirmed he was at Starr Boat Launch. Rohrback said he is unaware of high temperatures in the area.

Lampman asked if it might be possible during the peak of the run to make two trips per week to try and boost translocation numbers. If target numbers are met, trapping might be reduced to 7 weeks instead of 8 weeks, which could be cost effective. Rohrback does not believe this is feasible given the nature of the agreement with Grant PUD, which stipulates one trip per week. Additionally, Douglas PUD staff have other commitments and forecasted work and cannot support two trips per week. Lampman said this makes sense.

Rohrback said that in the event more than 200 Pacific Lamprey are trapped for translocation in a given week, would the CTCR be interested in picking up the balance from PRD to translocate into the Okanogan River basin, as was done last year? McLellan said he would think so but needs to verify this internally. Lampman said if this occurs, the YN requests that the CTCR strive to maintain a PIT-tagging and fin clip rate close to 100%. McLellan said he understands the value here, but he does not supervise the staff conducting this work. He can discuss internally the feasibility of PIT-tagging and collecting genetic samples from adult Pacific Lamprey picked up from Priest Rapids Dam for translocation into the Okanogan River basin in 2023 and report back.

Rohrback said lastly, the final paragraph in the SOA was copied from the last translocation SOA,⁴ as requested by Lampman.

Ferguson asked for comments or questions before voting. Lampman said the YN was not supportive of the 1,000-fish upper limit but agreed to include it in the interest of moving this SOA forward. Gingerich said the last paragraph of the SOA is consistent with what Douglas PUD would do anyway and he does not believe it is needed, but he agreed to include it because the YN requested it.

Aquatic SWG members present approved the 2023–2024 Adult Pacific Lamprey Translocation SOA, as revised.

The final 2023–2024 Adult Pacific Lamprey Translocation SOA was distributed to the Aquatic SWG by Geris on June 15, 2023.

⁴ Titled, *To Translocate Adult Pacific Lamprey from Priest Rapids Dam to Areas Within or Upstream of the Wells Project and Postpone Passage Evaluations*, approved by the Aquatic SWG on June 13, 2018, and distributed by Kristi Geris on June 14, 2018.

B. Juvenile Pacific Lamprey Studies (Ralph Lampman)

Ralph Lampman said the PRFF and RRFF have discussed convening a joint meeting of the three regional fish forums to discuss a path forward for juvenile Pacific Lamprey studies in the Upper Columbia River, possibly in the August or September 2023 time frame. The impetus for this is that the U.S. Army Corps of Engineers is conducting an acoustic telemetry study in the Snake and lower Columbia rivers. The study is scheduled to cover McNary to John Day dams in 2024 and The Dalles to Bonneville Dam in 2025. This is a large-scale study and a good opportunity to conduct a coordinated study to look at overall passage and survival through the entire Columbia River system.

Lampman said Tracy Hillman planned to reach out to Anchor QEA about a possible joint meeting with the PRFF, RRFF, and Aquatic SWG. John Ferguson said Hillman has not yet reached out, and he asked if Douglas PUD or others were aware of these discussions or have questions or concerns about a joint meeting. Andrew Gingerich said Douglas PUD was unaware of these discussions but is supportive of this regional coordination. RD Nelle said USFWS is supportive of a joint meeting. No other comments were shared. Ferguson said Anchor QEA will coordinate with Hillman regarding convening a joint Juvenile Pacific Lamprey Studies Subgroup meeting in late summer to early fall 2023. *(Note: these planning discussions are underway.)*

C. Brood Year 2022 Wells White Sturgeon Release, Outreach, and Size Distribution (Chas Kyger)

Chas Kyger said on May 31, 2023, Douglas PUD released 328 brood year (BY) 2022 Wells White Sturgeon that averaged 541 grams each, and only two fish were below the 350-gram target size. As part of Douglas PUD's public outreach efforts, students from the Bridgeport High School Advanced Placement Biology class participated in this release, which included handling some of the fish. Wells Fish Hatchery staff are prepping the facility to receive BY 2023 larvae.

Jason McLellan said he is currently on the barge setting up for BY 2023 larval collection. His crew will deploy gear this week to start fishing next Monday or Tuesday, June 19 or June 20, 2023. In Canada, he knows at least one fish spawned because one free embryo was collected last week. River temperatures also reached 14°C last week.

D. Draft 2022 White Sturgeon M&E Report and Draft 2022 White Sturgeon Reproduction Assessment Study Report (Chas Kyger)

Chas Kyger said the draft 2022 White Sturgeon M&E Report and draft 2022 White Sturgeon Reproduction Assessment Study Report were distributed to the Aquatic SWG by Kristi Geris on May 17, 2023, and are available for a 45-day review. Kyger said comments on both reports have been received from Jason McLellan. John Ferguson said edits and comments are due to Kyger by July 1, 2023.

Ralph Lampman asked about the carrying capacity for White Sturgeon in the Wells Project. Andrew Gingerich recalled that the Aquatic SWG agreed on an estimate of carry capacity being 1,100 to 1,200 adults to help inform a stocking target. This was based on the Bonneville reservoir pool surface area, with the understanding there is some density dependence in the Bonneville Pool. The Bonneville estimate was extrapolated for the size of the Wells Reservoir.

E. WDFW Coulter Counter (Laura Heironimus)

Laura Heironimus said WDFW is currently purchasing a Coulter counter, which will be stationed at the Spokane Washington office, hopefully by the end of June 2023. In talking with Mitch Combs (WDFW, Sherman Creek Hatchery Manager), she discovered there is interest in coordinating with the CTCR, Spokane Tribe of Indians, and the YN on the methods and process for White Sturgeon spontaneous autopolyploidy (SAP) screening to make sure everyone is using the same techniques. With this coordination, if there is a shortage of counter availability at one location, there may be an opportunity to conduct SAP screening at another location.

F. White Sturgeon Thiamine Studies (Laura Heironimus)

Laura Heironimus said she was recently in Toppenish Washington and met Dr. Aimee Reed (Oregon Department of Fish and Wildlife, Fish Health Specialist), who is collecting unfertilized eggs from female White Sturgeon as these fish are being spawned. Dr. Reed is looking to evaluate baseline levels of thiamine in these eggs with a goal of understand whether this sex is suffering from thiamine deficiency. There is a concern that adults may have a thiamine deficiency that causes poor egg and larvae survival. This deficiency could be attributed to diet, such as feeding on shad. Shad have high thiaminase activity. The way thiamine deficiency is resolved in lake trout is to directly inject thiamine into adults or treat the eggs in-hatchery. In Oregon, thiamine deficiency has been documented in salmon and steelhead. It is unclear whether this is an issue in White Sturgeon, but this work is just getting started. Heironimus is trying to figure whether there are other ways to help collect information to support this preliminary work. It is her understanding there are no shad in the Wells Reservoir, and she is unsure of the opportunities available to collect unfertilized eggs. She thinks this might be limited. Heironimus said Jason McLellan provided her with potential contacts, and she asked that Aquatic SWG members let her know of any opportunities to help.

John Ferguson said this is an interesting topic and new to many folks. This topic was raised a few years ago in California, due to salmon in the ocean having a high proportion of anchovies in their diet. He has not heard anything related to White Sturgeon, and he appreciates the update.

Note: In the WebEx chat, Ralph Lampman said the YN is sending egg samples to Dr. Jacques Rinchard (State University of New York College Brockport) for lamprey thiamine baseline investigations.

G. Bull Trout and the Twisp Weir (Andrew Gingerich)

Andrew Gingerich said, typically, spring Chinook Salmon brood collection occurs at Wells Dam to meet Douglas PUD's spring Chinook Salmon mitigation obligation. As of last week, there had been no spring Chinook Salmon assigned to the Twisp; therefore, Douglas PUD started fishing the Twisp Weir. This was unanticipated but may present an opportunity to incidentally encounter Bull Trout. In the spirit of ongoing monitoring, if Bull Trout are encountered at the weir, Douglas PUD will collect lengths and weights and will PIT-tag these fish for inclusion in the 2022 Bull Trout PIT Study. There are no guarantees on numbers. The Twisp Weir still has a broken wing, which is currently in the down position. John Ferguson noted that the broken wing had a big effect in 2022. Gingerich agreed and said whether any Bull Trout will be encountered in 2023 is hard to predict.

H. Bull Trout Stranding Survey Memorandum (Andrew Gingerich)

Andrew Gingerich said that per the Wells Project Federal Energy Regulatory Commission (FERC) License and Bull Trout MP, Douglas PUD, in coordination with USFWS and the Aquatic SWG, developed a Bull Trout Stranding, Entrapment, and Take Study Plan (submitted to FERC in 2013). This plan required Douglas PUD to conduct stranding surveys within the first 5 years of the FERC license when the Wells Project is drawn down below 773 feet above sea level (msl). Douglas PUD has done this, which is summarized in past annual reports. During all of these surveys, no Bull Trout were encountered. This year, while project operators were looking at river flows, it was forecasted that river flow in the Methow River was expected to increase. When conditions are right, there may be a call to draw down the Wells Reservoir to facilitate scouring of fine sediments in the lower 1 mile of the Methow River, using four rock groins installed in the lower Methow River. Removing fine sediment in this area provides flood control for the City of Pateros. The last time Douglas PUD performed this "Methow Flush and Wells Project Draft" was in 2018. In mid-May, conditions set up nicely to do this and Douglas PUD notified residents and performed the drawdown. There was no requirement to conduct a Bull Trout stranding survey, but Douglas PUD felt it was prudent to do so. A Bull Trout Stranding Survey Memorandum was distributed to the Aquatic SWG by Kristi Geris on June 12, 2023. Gingerich said the memorandum includes the history on why the reservoir has been drawn down. The memorandum explains that the reservoir was drawn down below 773 feet msl, and the following day crews surveyed known stranding pool areas and no Bull Trout were encountered. The memorandum also describes the locations surveyed and effort utilized. The memorandum was sent to RD Nelle and forwarded to the Aquatic SWG.

Ralph Lampman asked what is involved in a stranding survey. Chas Kyger explained that there are areas throughout the reservoir that form pools when the reservoir elevation is drawn down. During these surveys, crews navigate to these known areas by boat and check each pool for stranded fish. If the pool is too deep to visually inspect it for fish, crews run a seine through the pool. During this

survey, only three-spined stickleback were encountered. Lampman asked if these areas are characterized as fine sediment. Kyger said this varies. Some areas are sandy silt, while others are more gravel and cobble. Lampman said the Wells Reservoir has a lot of fine sediment, which is ideal larval lamprey habitat. He asked in the future if the YN can be notified of these activities. Although, he is unsure how much can be done for larval monitoring. Kyger asked if Lampman's concern is about the mouth of the Methow River. Lampman said yes. Kyger clarified that there are no stranding pools in that area, just in the main reservoir. Ferguson asked if Lampman is interested in surveying for lamprey when Douglas PUD is surveying for Bull Trout. Lampman said yes, that there may not be anyone available, but it would be nice to try. Kyger said sometimes there is more advance notice ahead of these drawdowns, but sometimes when the conditions line up there is only a short window. In the future, if there is advance notice, Douglas PUD will notify the Aquatic SWG ahead of the drawdown.

Lampman asked if Douglas PUD calculated how much the water elevation changed during the ramping down. Gingerich said yes, the reservoir was drawn down about 6 feet in elevation over a period of approximately 36 hours, for a ramping rate of approximately 2 inches per hour. Ferguson asked if this worked well for the scour objective. Gingerich said yes, the landowners were quite pleased because their properties adjacent to the Methow River were getting silted in. Since 2017, there has been a lot of fire activity in the Methow Basin, which created a lot of fine sediment deposits. As water moves into the confluence, it slows, and fines build. Additionally, there are two elevation sensors that project operators monitor, and there is a fairly large difference in their readings due to fine sediment accumulation. These elevation sensors are reading more consistent with each other now. *(Note: Upon further review of the data, the actual ramping rate was approximately 2.5 inches per hour, as distributed to the Aquatic SWG in the data package noted below.)*

Lampman asked whether the ramp down rate was similar across the event or whether there were some fluctuations, as this is important in understanding the potential impacts. He asked if Douglas PUD can provide the ramp down profile for the drawdown for this reason. He said issues have been observed at 10 centimeters per hour, and 2 inches per hour is about half of this, so it is hard to say. Gingerich said Douglas PUD will provide a ramp down profile for the recent Methow Flush and Wells Project Draft for distribution to the Aquatic SWG. *(Note: Gingerich provided these data following the Aquatic SWG conference call on June 14, 2023, which Geris distributed that same day.)*

Gingerich said it would also be helpful to review any information Lampman has on this topic. Lampman said he will share a white paper on ramp down rates and impacts to lamprey for distribution to the Aquatic SWG. *(Note: Lampman distributed a link to the document, Best Management Guidelines for Native Lampreys, following the Aquatic SWG conference call on June 14, 2023.)*

I. Restoration and Habitat Modeling on Lake Sturgeon (Ralph Lampman)

Ralph Lampman said the other fish forums recently discussed new information on lake sturgeon, including artificial reef restoration and spawning habitat modeling. He forgot to forward this information to the Aquatic SWG, but he will. The RRFF and PRFF are interested in inviting presenters to highlight this work in July or August 2023, on the first Wednesday of the month, and he wanted to pass along this invitation to the Aquatic SWG, as well. *(Note: Lampman provided this literature following the Aquatic SWG conference call on June 14, 2023, which Kristi Geris distributed that same day.)*

III. Administration

A. Upcoming Meetings (John Ferguson)

The Aquatic SWG meeting on July 12, 2023, will be held by conference call.

Other upcoming meetings include August 9 and September 13, 2023 (conference call).

List of Attachments

Attachment A List of Attendees

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
Patrick Verhey	Aquatic SWG Technical Representative	Washington Department of Fish and Wildlife
Laura Heironimus	Aquatic SWG Technical Alternate	Washington Department of Fish and Wildlife
Jason McLellan*	Aquatic SWG Technical Representative	Confederated Tribes of the Colville Reservation
Ralph Lampman	Aquatic SWG Technical Representative	Yakama Nation

Notes:

- * Joined after Aquatic SWG members present approved the May 10, 2023, conference call minutes, as revised (Item I-B).