

Final Conference Call Minutes



Aquatic Settlement Work Group

To: Aquatic SWG Parties **Date:** August 18, 2014
From: Michael Schiewe, Chair (Anchor QEA, LLC)
Re: Final Minutes of the July 9, 2014 Aquatic SWG Conference Call

The Aquatic Settlement Work Group (SWG) met by conference call on Wednesday, July 9, 2014, from 10:00 a.m. to 11:30 a.m. Attendees are listed in Attachment A of these meeting minutes.

I. Summary of Action Items

1. Mike Schiewe will contact Bob Rose and Donella Miller to obtain the Yakima Nation's (YN's) approval of the Aquatic SWG White Sturgeon Collection and Stocking: Brood Years (BY) 2014-2017 document (Item VI-2).
2. Andrew Gingerich will develop and maintain a running table of passive integrated transponder (PIT)-tag detections by location of BY 2013 white sturgeon released in the Wells Pool (Item VI-4).
3. Douglas PUD staff will contact Steve Hemstrom (Chelan PUD) and Mike Clement (Grant PUD) to discuss releases of PIT-tagged lamprey trapped at Priest Rapids, Wanapum, and Rock Island dams (Item VI-6).
4. The Aquatic SWG will review the Final 2013 Lamprey Passage and Enumeration Study Report that was distributed to the Aquatic SWG by Kristi Geris on July 7, 2014, and will provide Douglas PUD with any additional comments no later than August 7, 2014 (Item VI-7).

II. Summary of Decisions

1. The Aquatic SWG members present approved the revised draft Aquatic SWG White Sturgeon Collection and Stocking: BYs 2014-2017 document (Item VI-2).

III. Agreements

1. No agreements were discussed during today's conference call.

IV. Review Items

1. The Final 2013 Lamprey Passage and Enumeration Study Report that was distributed to the Aquatic SWG by Kristi Geris on July 7, 2014, is available for review with comments due to Douglas PUD no later than August 7, 2014 (Item VI-7).

V. Documents Finalized

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

VI. Summary of Discussions

1. **Welcome, Review Agenda and Action Items, and Meeting Minutes Approval** (Mike Schiewe): Mike Schiewe welcomed the Aquatic SWG members (attendees are listed in Attachment A) and opened the meeting. Schiewe reviewed the agenda and asked for additions or other changes to the agenda. Andrew Gingerich added discussions on: 1) final sturgeon breeding and spawning at Marion Drain; and 2) BY 2013 sturgeon releases.

The revised draft June 11, 2014 conference call minutes were reviewed. Mike Schiewe said that all comments and revisions received from members of the Aquatic SWG were incorporated in the revised minutes, and that there were no outstanding edits or questions to discuss. Aquatic SWG members present approved the June 11, 2014 conference call minutes, as revised.

2. **DECISION: White Sturgeon Collection and Stocking: BYs 2014-2017** (Andrew Gingerich): Andrew Gingerich said that useful feedback was received from Aquatic SWG members on the draft Aquatic SWG White Sturgeon Collection and Stocking: BYs 2014-2017 document, which was distributed to the Aquatic SWG by Kristi Geris on May 13, 2014. Gingerich said that a revised draft document (Attachment B) was distributed to the Aquatic SWG by Geris on July 2, 2014, which incorporated comments received from the Aquatic SWG. He recalled that many comments focused on how to meet program requirements in the event that an insufficient number of larvae are collected. He said that the second draft was revised to note that if no larvae are available and less than 18 half-sibling crosses are produced, the Aquatic SWG will meet to discuss alternatives and revised schedules.

Gingerich requested Aquatic SWG approval of the revised draft Aquatic SWG White Sturgeon Collection and Stocking: BYs 2014-2017 document, and also welcomed any additional feedback from Aquatic SWG members. Patrick Verhey noted that the final Washington Department of Fish and Wildlife (WDFW) White Sturgeon Fish Health Plan, which is cited under Stocking and Collection Prioritization Rule #7 of Attachment B, became available in May 2014. Jason McLellan requested one minor edit to Stocking and Collection Prioritization Rule #4 of Attachment B, to reword the first sentence to

include “if 18 half-sibling crosses are produced.” Gingerich said that he will incorporate McLellan’s edit, and will also note the date of the final WDFW White Sturgeon Fish Health Plan as noted by Verhey. The Aquatic SWG members present approved the Aquatic SWG White Sturgeon Collection and Stocking: BYs 2014-2017 document, with the inclusion of the two edits discussed.

Gingerich said that although the YN representative to the Aquatic SWG was not present on today’s conference call, Douglas PUD would still like to obtain approval from the YN; Mike Schiewe agreed to contact Bob Rose and Donella Miller to obtain the YN’s approval of the Aquatic SWG White Sturgeon Collection and Stocking: BYs 2014-2017 document.

- 3. Final White Sturgeon Breeding and Spawning at Marion Drain:** Andrew Gingerich said that last week, Douglas PUD and the YN completed the final white sturgeon spawning at Marion Drain. He said that eggs from two females and milt from five males were successfully harvested, which when added to the previously achieved five-by-five (5x5) factorial cross, resulted in 10 half-sibling family crosses. He added that these 10 half-sibling crosses combined with the 25 half-sibling crosses from the first spawn results in at least 35 half-sibling crosses that are now available. He said, however, that Wells Hatchery is currently only holding 30 of the 35 half-sibling crosses due to limited space. He added that there are also approximately 200,000 eggs hatching at Wells Hatchery, and noted that it has been a successful spawning year.

Jason McLellan asked if the 30 half-sibling crosses were being incubated separately or if they had been mixed. Gingerich replied that the number of jars per family group had increased, and that only a 3x3 factorial cross was initially anticipated; however, a 5x5 factorial cross was ultimately achieved. He said that due to the increased volume of eggs, there was some mixing of family groups in jars. He added that as the eggs hatch, they mingle with other family groups, and he noted that the number of eggs per family group was tracked to help understand the mixes. McLellan asked for further clarification, asking if the maternal families were separated. Gingerich confirmed that the maternal families are separate, explaining that some jars contain eggs from an individual female, but the eggs may have been fertilized by different males. He added that normally, the family groups would not be mixed until hatching is complete, but reiterated that a 5x5 factorial cross had not been expected.

Pat Irle asked if families from Chelan Falls Hatchery were potentially available. Gingerich replied that he did not know yet, but that he assumed that similar to previous years, there would be some exchange of fish and family groups as needed, following the appropriate transport and fish health protocols.

4. **Sturgeon BY 2013 Releases:** Andrew Gingerich said that all larval-origin and direct gamete-origin fish have been released above Wells Dam at the Washburn Island release location. He said that on July 12, 2014, the larval-origin fish were released, and since then, one larval-origin fish and two direct-gamete fish have been detected at the Rocky Reach fish bypass. He said that one larval-origin fish and five direct gamete-origin fish have also been detected 14 river miles up the Okanagan River, and that one fish was netted by a Colville Confederated Tribes purse seiner incidental to collecting salmon broodstock and tribal harvest fish. He said that the fish was PIT-tagged, but the boat did not have a PIT-tag reader on board. Jason McLellan speculated that it was probably a direct gamete-origin fish.

Gingerich said that he will develop and maintain a running table of PIT-tag detections by location of BY 2013 white sturgeon released in the Wells Pool.

5. **Water Quality Update** (Andrew Gingerich): Andrew Gingerich reviewed the Wells Dam Mid-Season Water Quality Update (Attachment C) that was distributed to the Aquatic SWG by Kristi Geris prior to the conference call on July 9, 2014. Gingerich said that the update describes conditions from May 9, 2014 to present. He said that Figure 1 depicts 5 days of 12-C high violations in the Wells Tailrace for the 120% water quality standard (WQS). He said that 2 days recorded instantaneous values of 125% or higher. He noted that both the 120% and 125% violations resulted from NERC (North American Electric Reliability Corporation) requests to reduce loads as a direct result of the Malaga, Washington wildfire. He said that reduced load constraints required 106 hours of spill volumes that averaged 54,300 cubic feet per second (54.3 kcfs) and a maximum hourly mean spill of 95 kcfs. He said that aside from violations endured in response to the Malaga, Washington wildfire, Wells Dam has been in 100% compliance for the 120% and 125% standards. He said Figure 2 shows that during 30 days of the spill season, the Rocky Reach forebay total dissolved gas concentrations have exceeded the 115% 12-C high standard. He said that this has been the hardest standard to achieve historically, since Wells Dam often receives water that is already above the 115%, or is approaching it very closely. He added that since Douglas PUD is required to spill at least 10 kcfs for fish bypass and survival, Wells Dam often adds 1 to 2% total dissolved gas causing 115% violations in the Rocky Reach forebay.

Mike Schiewe asked if the fish at Rocky Reach Dam had been monitored for gas bubble trauma (GBT). Gingerich confirmed that the fish at Rocky Reach Dam had been monitored, and that the fish examined exhibited no signs of GBT.

6. **Lamprey Discussion/Meeting** (Steve Lewis): Steve Lewis said that the lamprey study discussion tentatively scheduled for July 1, 2014, did not take place. However, he said that according to discussions that took place during the most recent Rocky Reach Fish Forum and Priest Rapids Fish Forum meetings, it appears that Grant PUD will be PIT-

tagging some lamprey and holding them at their facility. He said that it appears there will be sufficient numbers of tagged fish to conduct a PIT-tag lamprey study at Wells Dam. Lewis asked if Douglas PUD had any further correspondence with other PUDs about such a study, and Andrew Gingerich and Chas Kyger both said that they have not had any further communication with other PUDs. Pat Irle commented that her understanding was that Steve Hemstrom (Chelan PUD) had been talking directly with Mike Clement (Grant PUD), and suggested that Gingerich or Kyger contact Hemstrom and Clement to discuss their plans and move forward from that point. Gingerich and Kyger agreed to contact Hemstrom and Clement to discuss releases of PIT-tagged lamprey trapped by either Grant or Chelan PUDs.

- 7. Final 2013 Lamprey Passage and Enumeration Study Report (Chas Kyger):** Chas Kyger said that the Final 2013 Lamprey Passage and Enumeration Study Report, which was distributed to the Aquatic SWG by Kristi Geris on July 7, 2014, is now available for review. He said that the summary of results was previously presented and there are no significant changes; however, the document is available for a more detailed review of the underlying data. He said that the report will be filed with the Federal Regulatory Energy Commission this fall (2014).

Steve Lewis asked if the main issue in the 2013 lamprey study was that fish could not access the fishway entrances and would, therefore, bypass the area via the auxiliary water system. Kyger replied that this was identified as a potential issue and would be one focus of future studies. Lewis asked if there were any remedies in mind. Kyger responded that there would need to be further studies investigating the design of the auxiliary water system, including evaluating the grating in the system. He added that there would also have to be further analyses of alternate bypass routes while preserving the water system.

Andrew Gingerich said that the Final 2013 Lamprey Passage and Enumeration Study Report is a summary of where lamprey are located throughout the Wells Project and how they may be interacting with the Wells Dam auxiliary water system; as well as a tool to help inform improved lamprey passage at Wells Dam. Gingerich solicited feedback on the report, and Mike Schiewe suggested a 30-day review period starting from the distribution date of July 7, 2014. The Aquatic SWG agreed to review the Final 2013 Lamprey Passage and Enumeration Study Report, and provide Douglas PUD with any additional comments no later than August 7, 2014.

Lewis noted that historically, there have been issues with fish not being able to pass through the fishway entrances at Wells Dam, and asked if this could be related to fish size. Kyger responded that the study results did not suggest that passage was related to the size of fish, although the sample size was not large. Gingerich replied that the study design included a size criterion but the criteria could not be met, so the question is still unresolved. He added that lamprey are thought to be attracted to spawning and rearing

areas by pheromones released by ammocoetes rearing in sediments and perhaps other spawning adults; unlike salmon, which are expected to return to their natal streams with relatively high fidelity. He said that the apparent lack of homing instinct by adult lamprey complicates interpretation of lamprey passage studies at dams, since the intention of lamprey to move up past a dam is unknown, which is not a problematic assumption in anadromous salmonid studies.

VII. Next Meetings

1. **Upcoming meetings** (Mike Schiewe): Upcoming meetings are as follows: *August 13, 2014 (conference call); September 10, 2014 (conference call); October 8, 2014 (conference call).*

List of Attachments

Attachment A – List of Attendees

Attachment B – Revised Draft Aquatic SWG White Sturgeon Collection and Stocking: BYs 2014-2017

Attachment C – Wells Dam Mid-Season Water Quality Update

Attachment A List of Attendees

Name	Role	Organization
Mike Schiewe	SWG Chair	Anchor QEA, LLC
Brooke Baker	Administration/Technical Support	Anchor QEA, LLC
Andrew Gingerich	SWG Technical Representative	Douglas PUD
Chas Kyger	Technical Support	Douglas PUD
Patrick Verhey	SWG Technical Representative	Washington Department of Fish and Wildlife
Pat Irle	SWG Technical Representative	Washington State Department of Ecology
Jason McLellan	SWG Technical Representative	Colville Confederated Tribes
Steve Lewis	SWG Technical Representative	U.S. Fish and Wildlife Service