

# Final Meeting Minutes

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## *Aquatic Settlement Work Group*

**To:** Aquatic SWG Parties **Date:** April 9, 2014  
**From:** Michael Schiewe, Chair (Anchor QEA, LLC)  
**Re:** Final Minutes of the March 12, 2014 Aquatic SWG Meeting

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The Aquatic Settlement Work Group (SWG) met in person at the Wells Dam Hydroelectric Project on Wednesday, March 12, 2014, from 11:00 a.m. to 3:00 p.m. Attendees are listed in Attachment A of these meeting minutes.

## **I. Summary of Action Items**

1. Douglas PUD will coordinate with U.S. Fish and Wildlife Service (USFWS) to finalize the draft 2013 Methow Basin Bull Trout Passive Integrated Transponder (PIT) Tag Summary (Item VI-1).
2. Douglas PUD will discuss with USFWS the Wells White Sturgeon Stocking Plan for implementation in 2014 that was approved by Aquatic SWG members present (Item VI-3). *(Note: Steve Lewis provided USFWS's approval of the Wells White Sturgeon Stocking Plan for implementation in 2014 via email on March 19, 2014.)*
3. Douglas PUD will develop a list of considerations for the future of sturgeon stocking, including future sources, prioritization, and genetics (Item VI-3).
4. Douglas PUD will develop a summary outlining the objectives of their white sturgeon public outreach efforts (Item VI-4).
5. Aquatic SWG members will submit comments to Douglas PUD regarding ideas for Douglas PUD's white sturgeon public outreach efforts (Item VI-4).
6. Aquatic SWG members will submit comments on Washington Department of Fish and Wildlife's (WDFW's) draft standardized White Sturgeon Fish Health Protocol, to WDFW (with a copy to Kristi Geris) prior to the next Aquatic SWG meeting on April 9, 2014 (Item VI-7).

## **II. Summary of Decisions**

1. The Aquatic SWG members present approved the 2013 Aquatic Nuisance Species Management Plan Annual Report (Item VI-2).

2. The Aquatic SWG members present approved the following Wells White Sturgeon Stocking Plan for implementation in 2014: 1) all stocked fish will be asymptomatic of disease; 2) all larvae-source fish available at the Wells Fish Hatchery (approximately 2,200) will be stocked at a target size of at least 146 to 272 grams (g) (280 to 352 millimeters [mm]); and 3) the balance of the 5,000 fish target will be stocked using direct gamete-source fish from 12 families (half-sibling) and be stocked at a target mean size of 111 to 146 g (256 to 280 mm) (Item VI-3). *(Note: Steve Lewis provided USFWS's approval of the Wells White Sturgeon Stocking Plan for implementation in 2014 via email on March 19, 2014.)*

### III. Agreements

1. Douglas PUD agreed to update the introductory information in the Aquatic Nuisance Species Management Plan (ANSMP) Annual Report in future years (Item VI-2).

### IV. Review Items

1. Kristi Geris sent an email to the Aquatic SWG on March 11, 2014, notifying them that WDFW's draft standardized White Sturgeon Fish Health Protocol is available for review. Comments on the draft protocol are due to WDFW (with a copy to Geris) prior to the Aquatic SWG meeting on April 9, 2014 (Item VI-7).

### V. Documents Finalized

1. The final 2013 Aquatic Nuisance Species Management Plan Annual Report was distributed to the Aquatic SWG by Kristi Geris on March 14, 2014 (Item VI-2).

### VI. Summary of Discussions

1. **Welcome, Agenda Review, and Meeting Minutes Review** (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. Pat Irle requested an update on the situation at Wanapum Dam including impacts, if any, to Douglas PUD.

The revised draft February 12, 2014 conference call minutes were reviewed. Kristi Geris said that all comments and revisions received from members of the Aquatic SWG were incorporated into the revised minutes, and that there were no outstanding edits or questions to discuss. Aquatic SWG members present approved the February 12, 2014 conference call minutes, as revised.

Action items from the last Aquatic SWG conference call on February 12, 2014, and follow-up discussions were as follows: (*Note: italicized item numbers below correspond to agenda items from the February 12, 2014 conference call.*)

1. *Douglas PUD will obtain Washington State Department of Ecology comments and/or approval of the 2013 Gas Abatement Plan and Total Dissolved Gas Report, which will be provided to Kristi Geris for distribution to the Aquatic SWG (Item VI-3).*

Andrew Gingerich said that comments were received and the final report was filed with the Federal Energy Regulatory Commission (FERC).

2. *Aquatic SWG members will submit edits and comments on the draft 2013 Methow Basin Bull Trout PIT Tag Summary to Douglas PUD no later than Friday, February 21, 2014 (Item VI-6).*

Andrew Gingerich said that no additional comments were received; however, because this summary is not a FERC requirement (no deadline), Douglas PUD will coordinate with USFWS before finalizing the draft 2013 Methow Basin Bull Trout PIT Tag Summary.

3. *Douglas PUD will provide a draft 2014 Sturgeon Stocking Proposal for Aquatic SWG review no later than Friday, February 14, 2014 (Item VI-7).*

Andrew Gingerich said that a draft proposal was distributed to the Aquatic SWG by Kristi Geris on February 18, 2014, which will be discussed during today's meeting.

4. *Aquatic SWG members will submit edits and comments on the draft 2013 Aquatic Nuisance Species Management Plan Annual Report to Douglas PUD no later than Tuesday, March 11, 2014; Douglas PUD will be requesting approval of the draft report at the Aquatic SWG in-person meeting on March 12, 2014 (Item VI-8).*

Chas Kyger said that comments were received, which will be discussed during today's meeting.

5. *WDFW will coordinate with the Yakama Nation (YN) and the Colville Confederated Tribes (CCT) to finalize a draft standardized White Sturgeon Fish Health Protocol to be presented at the Aquatic SWG in-person meeting on March 12, 2014 (Item VI-10).*

Chad Jackson said that John Kerwin completed his review of the draft standardized protocol, and on March 6, 2014, the draft protocol was distributed to the Spokane Tribe of Indians, the CCT, and the YN, for review. He said no comments have been received on the draft protocol.

2. **DECISION: 2013 Aquatic Nuisance Species Management Plan Annual Report** (Chas Kyger): Chas Kyger said that Kristi Geris sent an email to the Aquatic SWG on February 10, 2014, notifying them that the draft 2013 ANSMP Annual Report was out for a 30-day review period, with comments due to Douglas PUD no later than Tuesday, March 11, 2014. He said that comments were received on the draft report, including comments

from WDFW regarding possible edits to the original language of the ANSMP that is included in the annual report. He said that, this year, Douglas PUD plans to keep the original ANSMP language in the annual report, and that next year, they will consider how that information is incorporated into the report. Kyger said that all other comments that were received were incorporated into the revised draft report. Pat Irle noted that certain background information included in the report has been accurate in the past; however, in future years, that information may not be accurate. She suggested noting this distinction in the annual report. Kyger said that Douglas PUD will update the introductory information in the ANSMP Annual Report in future years and will make a note in this year's report that those changes will be made in future reports; however, this year further updates to the annual report are not feasible due to the FERC deadline.

The Aquatic SWG members present approved the 2013 ANSMP Annual Report and the final report was distributed to the Aquatic SWG by Geris on March 14, 2014 (Attachment B).

3. **Sturgeon Stocking Proposal** (Andrew Gingerich): Andrew Gingerich said that a 2014 Wells White Sturgeon Stocking Plan (Attachment C) was distributed to the Aquatic SWG by Kristi Geris on February 18, 2014. He said that both direct gamete-source and larvae-source white sturgeon on station will be tagged in the next few weeks, and that larvae will be monitored to make sure they remain asymptomatic for White Sturgeon Iridovirus (WSIV). He reviewed the details of the stocking plan, as follows:
  - All stocked fish will be asymptomatic of disease.
  - All larvae-source fish available at the Wells Fish Hatchery (approximately 2,200) will be stocked at a target size of at least 146 to 272 g (280 to 352 mm).
  - The balance of the 5,000 fish target will be stocked using direct gamete-source fish from 12 families (half-sibling) and be stocked at a target mean size of 111 to 146 g (256 to 280 mm).

Gingerich recalled that a small group of Wanapum fish were already tagged and released about 2 months ago, as agreed upon by the Aquatic SWG at their meeting on January 8, 2014. He also discussed the slightly different proposed fish sizes at release, noting that the larger larvae-source fish size is intended to improve the chances of survival. He said that although the direct gamete fish are released smaller, they are still within the range of white sturgeon fish sizes previously released in the Mid-Columbia by others. He said that fish sizes at release were selected based on a query in the PIT-Tag Information System (PITAGIS) of fish sizes at release for more than 16,000 white sturgeon released in the Mid-Columbia. He said that for the direct gamete fish, fish sizes in the range of the 50th to 75th percentile were chosen, and for the larval fish, in the range of the 75th to 99.5th percentile. He said that only one comment was received regarding this draft plan, from WDFW, who indicated that they were supportive of the

approach, but they would like to hear feedback from the Aquatic SWG. Gingerich said that Douglas PUD would like to reach resolution on this stocking plan because tagging is planned for the end of March. He added that the direct gamete fish are already close to the proposed fish size for release, and that Douglas PUD would like to release the direct gamete fish about 1 month from now. He said the larval fish will be held slightly longer to grow them to the proposed fish size. He said that Douglas PUD is optimistic that the target fish sizes at release will be reached; however, also noted the limited time that Wells Hatchery Staff will have to meet these sizes.

The Aquatic SWG members present approved the Wells White Sturgeon Stocking Plan for implementation in 2014, and Gingerich indicated that Douglas PUD will also discuss the approved plan with USFWS. *(Note: Steve Lewis provided USFWS's approval of the Wells White Sturgeon Stocking Plan for implementation in 2014 via email on March 19, 2014.)* Gingerich also noted that he will discuss internally whether a more formal document is needed (e.g., a Statement of Agreement) that would memorialize this approval.

Pat Irle suggested continuing discussions on white sturgeon genetics to help inform future planning. She also recommended that the Aquatic SWG consider inviting outside experts to be involved in discussions, as applicable. Jason McLellan agreed, noting that inviting additional expertise outside of the Aquatic SWG should be determined on a case-by-case basis (based on the type of expertise needed). Patrick Verhey also agreed. As requested by the Aquatic SWG, Gingerich said that Douglas PUD will develop a list of considerations for the future of sturgeon stocking, including future sources, prioritization, and genetics.

4. **White Sturgeon Outreach Items** (Andrew Gingerich): Andrew Gingerich said that as a part of the White Sturgeon Management Plan, Douglas PUD will facilitate white sturgeon public outreach efforts. He said that recently a group of high school students visited Wells Hatchery as part of a pre-college credit program. He said the event was successful, and that the students provided great questions and feedback. Gingerich said that he would have alerted the Aquatic SWG first; however, the opportunity came up with only 2-day notice. He stated that he hoped this activity could be part of Douglas PUD's outreach actions approved by the Aquatic SWG.

Gingerich said that Douglas PUD would like to formalize these types of public outreach efforts. He said, for example, that Douglas PUD was considering leading an outreach activity where local students are invited to participate in releasing white sturgeon into the river. He said that Douglas PUD was also considering upgrades to the Overlook Area at Wells Dam that would provide information on white sturgeon to public visitors. He said that Douglas PUD has also been approached by Fort Okanogan with a request for information on white sturgeon for a museum display. He said that logistically, this may

be difficult; however, Douglas PUD is still considering the request. He said that Douglas PUD has also considered developing short videos geared towards outreach.

Jason McLellan said that in the Upper-Columbia River, there is a relatively extensive outreach program, including 1- to 2-hour fish curriculums and travel kits that are donated to classrooms, and also public participation in fish releases. He said there is also a "Track Your Sturgeon" program where students PIT-tag a fish, and can track the fish they PIT-tagged through an interactive tool. Gingerich asked how the program works around the complexities of PITAGIS and the likely chance that many tagged fish will go without detection for several years. McLellan explained that data are exported from PITAGIS and posted to a user-friendly website that can be easily queried. He said with regards to detecting fish, anecdotes are developed so that even if a particular fish is not detected, options to track and view other fish are still available. Pat Irlle asked if this information might be used by fishermen to identify the locations of sturgeon in the Wells pool (there was no response).

Gingerich said that Douglas PUD will develop a summary outlining the objectives of their white sturgeon public outreach efforts, and Aquatic SWG members agreed to submit comments to Douglas PUD regarding ideas for the white sturgeon public outreach efforts.

5. **Wanapum Update** (Andrew Gingerich): Andrew Gingerich reviewed that a 65-foot-long by 2-inch-wide horizontal crack was discovered in the Wanapum spillway monolith. He said that FERC advised Grant PUD to activate an Emergency Action Plan, and to draw down the reservoir water elevation to relieve pressure at the dam. This resulted in the monolith rebounding back upstream and almost closing the crack. He said the source of the crack is still unknown, but this is being investigated in order to find a solution. He said that the Mid-Columbia PUDs and the Bonneville Power Administration are in constant communication. He said that several issues are being addressed at once, including determining the cause of the crack, interim fish passage modifications, and potential public safety issues.

Gingerich said that, as for Wells Dam, there is heightened hourly coordination, and Douglas PUD is doing everything they can to help. He noted that Wells Dam is somewhat limited in how it can help because there is not much water storage capacity behind Wells Dam, given the run-of-the-river nature of Wells Dam. Mike Schiewe said that Chelan PUD and Grant PUD are also in close coordination with the Priest Rapids Coordinating Committee and the HCP Coordinating Committees, so updates regarding this situation will come from those two groups.

6. **Washington State Finfish Health Regulations, Policies, and Testing Requirements Presentation** (John Kerwin): John Kerwin said that the Washington State Finfish Health

Regulations, Policies, and Testing Requirements presentation (Attachment D) was distributed to the Aquatic SWG by Kristi Geris on March 11, 2014. Kerwin provided an overview of Washington State finfish health laws, rules, and policies for finfish aquaculture disease control and regulated finfish pathogens, including an overview of exotic pathogens and endemic pathogens, as listed in Attachment D. He also reviewed the Salmonid Disease Control Policy, which is a fish health management zone- and watershed-based policy. He said that this policy sets minimum fish health surveillance requirements including testing requirements for egg and fish transfers, broodstock, and egg and fish imports. He noted that Washington State now requires site visits, which result in more comprehensive fish health assessments. Lastly, Kerwin said that in 2014, fish health training sessions will be held for WDFW Eastern Washington Staff. He also briefly reviewed marine net pen requirements, including a brief description of an operational permit.

Mike Schiewe asked why bacterial pathogens are not included among the regulated finfish pathogens (Washington Administrative Code 220-77-020). Kerwin said the reason is because tools exist to address bacterial pathogens (e.g., antibiotics), whereas, there is no known treatment for exotic and endemic viral pathogens. Schiewe said that because transferring fish seems to be a concern, it would make sense to avoid transferring fish with a history of disease. Kerwin said that regulations do exist which prevent the movement of anadromous eggs and fish from a “dirty zone” (history of disease) to a “clean zone” (no known disease). He noted, however, that there are exemptions to these regulations, for example, for research purposes.

Schiewe asked between WDFW and USFWS, who trumps who in terms of fish health. Kerwin said that both agencies have their own policies, but ultimately, fish health is a cooperative effort.

7. **White Sturgeon Iridovirus Detections in Washington State Presentation** (John Kerwin):  
John Kerwin said that the WSIV Detections in Washington State presentation (Attachment E) was distributed to the Aquatic SWG by Kristi Geris on March 11, 2014. Kerwin reviewed the history of WSIV, and then briefly reviewed historical fish health results for white sturgeon programs in Washington State, including: Wild Adult White Sturgeon Capture Programs, the Sherman Creek White Sturgeon Larval Capture Program, the Sherman Creek Sturgeon Fish Hatchery Wild Adult Capture Program, and the Wells Sturgeon Fish Hatchery White Sturgeon Larval Capture Program (as described in Attachment E). Historical fish health testing using cell cultures has resulted in “no evidence of virus” for each program when this test was used. Kerwin suggested that these results may reflect that the wrong tissue of a fish was sampled. He also suggested that climate change may eventually affect fish health testing results. With regards to using histology versus a polymerase chain reaction (PCR), Kerwin said that one study suggested that histology is a more reliable diagnostic test than PCR.

Kerwin said that WDFW's WSIV detection response steps include: strict adherence to biosecurity, additional testing, standardized testing, and development of a draft management plan. He said for biosecurity, separate rooms are preferred because of how easily transmittable WSIV can be; however, he also acknowledged that this may be difficult to obtain in many cases. He said for standardized testing, WDFW is leaning towards histology, but PCR is still being considered. He said that Chad Jackson has developed a fish health plan that establishes fish health standards and testing protocols, specifies a level of surveillance, and fosters communication among interested managers. He said WDFW supports releasing asymptomatic white sturgeon into the Wells Reservoir; he said this is based on WDFW's other entities experience with WSIV. He added that, ideally, he would like to test larval fish and somehow develop a baseline in the basin. He said that is not uncommon that fish are released with some level of disease. He said, for example, that with the testing available today, some level of bacterial kidney disease can be detected in almost all populations.

Jason McLellan asked if false positives are common in histology, and Kerwin said that there are in PCR, but not so much in histology. Mike Schiewe noted that some tests may be sensitive to either current or past presence of virus; and then he asked Kerwin if he thinks that cell cultures may be the best approach to testing for active infection. Kerwin said that it is his understanding that there is not yet a reliable cell culture test.

Andrew Gingerich asked what would happen if WSIV goes dormant and becomes more difficult to detect when the fish age. Kerwin said that he believes the virus will still be there. He added that, based on the literature, the virus may be found in other tissues and at different ages. Gingerich asked, then, if WDFW wanted to obtain baseline WSIV information in the Columbia River, how would it be determined that adequate data are being collected, and with what confidence. Kerwin said that those questions are still unanswerable. Patrick Verhey suggested testing whole larvae, and Kerwin said that option has been considered. He said, though, that fish would need to be kept separate and grow large enough to perform non-lethal testing. McLellan said he believes several agencies would be interested in this type of study, and may even be supportive of sacrificing a few fish to get at this issue. Gingerich asked if it is really possible, at this point in time, to obtain "baseline" data. He noted that many carriers of WSIV have already been released, and with returning fish, how does one know if the fish obtained the virus by contact, or in-hatchery. Kerwin acknowledged that while there is specificity, it is not exact.

8. **WDFW's Draft Standardized White Sturgeon Fish Health Protocol** (Chad Jackson): Chad Jackson said that WDFW's draft standardized White Sturgeon Fish Health Protocol (Attachment F) was distributed to the Aquatic SWG by Kristi Geris on March 11, 2014. He said that the draft protocol was also distributed to the Spokane Tribe of Indians, the



CCT, and the YN, for review, and that he also plans to review the draft protocol with Grant PUD and Chelan PUD.

Jackson reviewed the draft protocol, noting that the protocols only apply to WDFW owned and operated hatcheries. He said that #2 and #3 in Attachment F address coordination and reporting. He said that #4 and #5 address sampling protocols, noting that this protocol only addresses sampling for WSIV. He also explained why White Sturgeon Herpes virus will not be addressed. He said that #6 through #11 in Attachment F addresses testing protocols. He said that, as noted in #6, cell cultures have been currently found to be inaccurate, PCR testing is still relatively new, and histological testing seems to be the best option. He added that PCR samples may still be taken concurrently during histology sampling and archived for later use. He said that broodstock will no longer be sampled or tested for WSIV due to their large body size and the small amount of tissue used to detect the virus. He added that WDFW believes that this may be the reason why WSIV was not detected in the earlier testing at Wells Hatchery. Jackson explained how WDFW will sample and test unique lots of fish for WSIV (#9 in Attachment F). Jason McLellan suggesting sampling by paternal family group, and Jackson explained that, at some point, the fish get pooled together, so some paternal families will end up in the same tank. He added that if several samples are needed, they can be obtained from other tanks.

John Kerwin explained #10 in Attachment F, and said that WDFW's sampling protocols are based on existing literature and other studies. Kerwin then reviewed #11 in Attachment F, noting the importance of biannual sampling. He said that conclusions cannot be drawn from one data point; therefore, that second data point is very valuable.

Andrew Gingerich asked, regarding #11a(ii) in Attachment F, if WSIV is detected early in the life cycle, and it makes sense to separate them, should this bullet really say, "if epizootic, euthanize the fish." Kerwin said that handling the fish will cause stress, so it may be worse to move them. Kerwin suggested evaluating mortality curves on the different lots of fish, and basing decisions on a case-by-case basis. He added that authority to euthanize fish rests with WDFW Director, Phil Anderson—WDFW fish health staff only makes recommendations.

Mike Schiewe asked how this plan fits in with fish health policies. Kerwin said that policies require adoption by the agency, and added that WDFW will use this plan as a tool. Schiewe asked if this plan would be considered guidance from WDFW, or does the plan have some power of authority. Kerwin said that the first step is to obtain concurrence from the Co-Managers (pertinent tribes). He noted that if there is an outbreak, actions need to be taken quickly to contain the situation. Jackson added that WDFW is presenting this plan as their recommendation, and the goal is to obtain

general concurrence. He said, however, if there is a lack of consensus, WDFW may ultimately do what they determine is best. Schiewe asked, then, if the plan is a legal document that removes the Aquatic SWG from the decision-making. Kerwin said that once concurrence is obtained from the Co-Managers (pertinent tribes), WDFW would plan to take action, but would first attempt to inform the Aquatic SWG of these actions. However, informing the Aquatic SWG would not delay taking action, if necessary. Jackson said that ideally, WDFW would like this fish health protocol to be as collaborative as possible.

Aquatic SWG members agreed to submit comments on WDFW's draft standardized White Sturgeon Fish Health Protocol, to WDFW (with a copy to Geris) prior to the next Aquatic SWG meeting on April 9, 2014.

9. **Tour of Wells Sturgeon Hatchery Facility** (Interested Parties): Douglas PUD led a tour of the Wells Sturgeon Hatchery Facility.

## VII. Next Meetings

1. **Upcoming Meetings** (Mike Schiewe): Upcoming meetings are as follows: *April 9, 2014 (conference call); May 14, 2014 (conference call); June 11, 2014 (conference call).*

## List of Attachments

Attachment A – List of Attendees

Attachment B – Final 2013 Aquatic Nuisance Species Management Plan Annual Report

Attachment C – 2014 Wells White Sturgeon Stocking Plan

Attachment D – Washington State Finfish Health Regulations, Policies, and Testing Requirements  
Presentation

Attachment E – White Sturgeon Iridovirus Detections in Washington State Presentation

Attachment F – WDFW's Draft Standardized White Sturgeon Fish Health Protocol

## Attachment A List of Attendees

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<b>Name</b>	<b>Role</b>	<b>Organization</b>
Mike Schiewe	SWG Chair	Anchor QEA, LLC
Kristi Geris	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
Chad Jackson	Technical Support	Washington Department of Fish and Wildlife
John Kerwin	Technical Support	Washington Department of Fish and Wildlife
Bob Rogers	Technical Support	Washington Department of Fish and Wildlife
Pat Irle†	SWG Technical Representative	Washington State Department of Ecology
Jason McLellan	SWG Technical Representative	Colville Confederated Tribes
Donella Miller†	Technical Support	Yakama Nation

Notes

† Joined by phone