

Final Conference Call Minutes



Aquatic Settlement Work Group

To: Aquatic SWG Parties **Date:** January 13, 2016
From: John Ferguson, Chair (Anchor QEA, LLC)
Re: Final Minutes of the December 9, 2015 Aquatic SWG Conference Call

The Aquatic Settlement Work Group (SWG) met by conference call on Wednesday, December 9, 2015, from 10:00 a.m. to 12:00 p.m. Attendees are listed in Attachment A of these meeting minutes.

I. Summary of Action Items

1. Bob Rose will provide the Draft Yakama Nation (YN) Pacific Lamprey Supplementation and Monitoring Frameworks to Kristi Geris for distribution to the Aquatic SWG (Item VI-1).
2. Bob Rose will discuss internally the Colville Confederated Tribes' (CCT's) proposed criteria for culling juvenile white sturgeon and report back to the Aquatic SWG during the conference call on January 13, 2016 (Item VI-1).
3. Bob Rose will provide details on the recent YN lamprey translocation releases in the Methow Basin, including details regarding monitoring and evaluation (M&E) planning, during the Aquatic SWG conference call on January 13, 2016 (Item VI-1).
4. Douglas PUD will provide the Draft 2015 Wells Dam Gas Abatement Plan (GAP) and Total Dissolved Gas (TDG) Report and Draft 2016 Wells Dam GAP and Bypass Operating Plan (BOP) to Kristi Geris by January 8, 2016, for distribution to the Aquatic SWG, for a 30-day review, with approval of the documents scheduled for the Aquatic SWG meeting on February 10, 2016 (Item VI-2). *(Note: Andrew Gingerich provided the draft 2015 report and draft 2016 study plan to Geris on January 5, 2016, which Geris distributed to the Aquatic SWG that same day.)*
5. Douglas PUD will provide the Draft 2016-2017 Bull Trout Passage and Take Monitoring at Wells Dam and Twisp River Weir Study Plan to Kristi Geris by January 8, 2016, for distribution to the Aquatic SWG, for a 30-day review, with approval of the plan scheduled for the Aquatic SWG meeting on February 10, 2016 (Item VI-3). *(Note: Andrew Gingerich provided the draft study plan to Geris on January 5, 2016, which Geris distributed to the Aquatic SWG that same day.)*
6. Steve Lewis will investigate what actions are required of agencies conducting Pacific lamprey translocation activities in the Mid-Columbia Basin, with regard to a Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS; Item VI-4).

7. Discussion on potential lamprey translocation and tagging opportunities will continue during the Aquatic SWG conference call on January 13, 2016 (Item VI-4).
8. The Revised Draft 2016 Lamprey Approach, Passage, and Enumeration Study Plan will be discussed during the Aquatic SWG conference call on January 13, 2016 (Item VI-4).
9. **The Aquatic SWG meeting on January 13, 2016, will be held by conference call, and a date for the next in-person meeting will be discussed at that time (Item VII-1).**

II. Summary of Decisions

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

III. Agreements

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

IV. Review Items

1. Kristi Geris sent an email to the Aquatic SWG on December 4, 2015, notifying them that the Draft 2015 Juvenile Lamprey Habitat Evaluation Study Report is available for a 45-day review period, with edits and comments due to Chas Kyger by Tuesday, January 19, 2016.
2. Kristi Geris sent an email to the Aquatic SWG on December 4, 2015, notifying them that the Revised Draft 2016 Lamprey Approach, Passage, and Enumeration Study Plan is available for a 45-day review period, with edits and comments due to Chas Kyger by Tuesday, January 19, 2016 (Item VI-4).
3. Kristi Geris sent an email to the Aquatic SWG on January 5, 2016, notifying them that the Draft 2016-2017 Bull Trout Passage and Take Monitoring at Wells Dam and Twisp River Weir Study Plan is available for a 30-day review period, with edits and comments due to Andrew Gingerich by Monday, February 8, 2016 (Item VI-3).
4. Kristi Geris sent an email to the Aquatic SWG on January 5, 2016, notifying them that the Draft 2015 Wells Dam GAP and TDG Report and Draft 2016 Wells Dam GAP and BOP were available for a 30-day review period, with edits and comments due to Andrew Gingerich by Monday, February 8, 2016 (Item VI-2).
5. Kristi Geris sent an email to the Aquatic SWG on January 12, 2016, notifying them that the Draft 2016 Aquatic Settlement Agreement Action Plan is available for a 30-day review period, with edits and comments due to Andrew Gingerich by Wednesday, February 10, 2016.

V. Documents Finalized

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

VI. Summary of Discussion

1. Welcome, Review Agenda, Meeting Minutes Approval, and Review of Action Items

(John Ferguson): John Ferguson welcomed the Aquatic SWG members (attendees are listed in Attachment A) and opened the meeting. Ferguson reviewed the agenda and asked for additions or other changes to the agenda. No additions or changes were requested by Aquatic SWG members present; however, Ferguson added the following administrative updates: 1) the 2015 Aquatic Settlement Agreement (ASA) Annual Report; 2) Washington State Department of Ecology (Ecology) representation; and 3) the Aquatic SWG email distribution list.

The revised draft November 12, 2015, conference call minutes were reviewed. Kristi Geris said she added the Draft 2015 Juvenile Lamprey Habitat Evaluation Study Report and Revised Draft 2016 Lamprey Approach, Passage, and Enumeration Study Plan under the review items. She said there is also one outstanding comment under the bull trout activities update (Item VI-4, Page 10) regarding a statement that Judy Neibauer (USFWS) made about the incidental take of bull trout. Geris read Neibauer's statement, and Geris said she wanted to confirm the statement is captured accurately, as written. Steve Lewis said he will coordinate with Neibauer on any necessary revisions and provide edits, if any, to Geris following the meeting. Lewis added that he may also provide edits to the white sturgeon section, pending further review.

Geris said all other comments and revisions received from members of the Aquatic SWG were incorporated into the revised minutes. Aquatic SWG members present approved the November 12, 2015, conference call minutes, as revised, on the condition that USFWS provides edits, if any, via email to the Aquatic SWG for the opportunity to comment, if necessary. Ecology abstained from voting on the minutes. *(Note: Lewis provided edits clarifying Neibauer's statement to Geris, as distributed to the Aquatic SWG following the meeting on December 9, 2015. Lewis had no additional edits on the white sturgeon discussions.)*

Ferguson reviewed action items from the last Aquatic SWG conference call on November 12, 2015, and follow-up discussions were as follows *(note: italicized item numbers below correspond to agenda items from the November 12, 2015, meeting)*:

- *Douglas PUD will prepare a draft letter to the Federal Energy Regulatory Commission (FERC) requesting permission to combine all ASA Annual Reports and deadlines into one submittal, and provide the draft letter to Kristi Geris for distribution to the Aquatic SWG. The Aquatic SWG will review and discuss the draft letter at a future meeting (Item VI-1).* Andrew Gingerich said the document is still under internal review. He said, because it is already December, Douglas PUD will file 2015 reporting with FERC as it has done in the past. He acknowledged this means there will be a lot to review and redundancies to address; however, he does not think it is feasible at this point in time to get the letter approved by the Aquatic SWG, send to FERC for review, and obtain FERC approval prior to the 2015 reporting deadlines. He said Douglas PUD can submit this request for 2016

reporting. He suggested removing this action item for now and revisiting the request in 2016.

- *Bob Rose will provide the draft YN Pacific Lamprey Supplementation and Monitoring Frameworks to Kristi Geris for distribution to the Aquatic SWG (Item VI-1).*
This action item will be carried forward.
- *Bob Rose will discuss internally the CCT's proposed criteria for culling juvenile white sturgeon and will report back to the Aquatic SWG during the conference call on December 9, 2015 (Item VI-1).*
This action item will be carried forward.
- *Discussion on potential lamprey translocation and tagging opportunities will continue during the Aquatic SWG conference call on December 9, 2015 (Item VI-1).*
This will be discussed during today's conference call.
- *Bob Rose will provide details on the recent YN lamprey translocation releases in the Methow Basin, including details regarding M&E planning, during the Aquatic SWG conference call on December 9, 2015 (Item VI-1).*
This action item will be carried forward.
- *Douglas PUD will provide Wells White Sturgeon passive integrated transponder (PIT)-tag detection histories to Kristi Geris for distribution to the Aquatic SWG (Item VI-2).*
Andrew Gingerich provided these data to Geris following the conference call on November 12, 2015, which Geris distributed to the Aquatic SWG that same day.
- *Steve Lewis will coordinate with Tracy Hillman (BioAnalysts), the Rocky Reach Fish Forum (RRFF) and Priest Rapids Fish Forum (PRFF) Chairperson, regarding possibly distributing meeting minutes from a recent RRFF and PRFF white sturgeon meeting (Item VI-2).*
Lewis provided the final notes to Kristi Geris on November 20, 2015, and Geris distributed the notes to the Aquatic SWG on November 23, 2015.
- *The CCT will keep the Aquatic SWG updated on the progress of internal discussions regarding potential lamprey translocation and tagging opportunities (Item VI-3).*
This will be discussed during today's conference call.
- *Douglas PUD will provide a modified draft 2016 Lamprey Passage Study Plan for review to Kristi Geris for distribution to the Aquatic SWG prior to the conference call on December 9, 2015 (Item VI-3).*
Chas Kyger provided the Revised Draft 2016 Lamprey Approach, Passage, and Enumeration Study Plan for a 45-day review to Geris on December 4, 2015, which Geris distributed to the Aquatic SWG that same day.
- *Steve Lewis will discuss internally the application, evaluation, and success of using Pacific lamprey pheromones in the Columbia Basin to assist with translocation efforts and will report back to the Aquatic SWG during the conference call on December 9, 2015 (Item VI-3).*
This will be discussed during today's conference call.

- *USFWS and Douglas PUD will further discuss potential coordination of Bull Trout Studies and will report back to the Aquatic SWG during the conference call on December 9, 2015 (Item VI-4).*

This will be discussed during today's conference call.

- *Douglas PUD will provide an updated draft 2016 Bull Trout Study Plan for review to Kristi Geris for distribution to the Aquatic SWG prior to the conference call on December 9, 2015 (Item VI-4).*

This will be discussed during today's conference call.

Administrative Updates

2015 ASA Annual Report

John Ferguson notified the Aquatic SWG that drafting of the 2015 ASA Annual Report is underway. He said Douglas PUD arranged for an extended Aquatic SWG review period, per past discussions. He said instead of the usual 30-day review, the Draft 2015 ASA Annual Report will be available for a 47-day review period (45 days landed on a weekend, so the deadline was adjusted slightly). He said the Aquatic SWG review period will be from March 18 to May 4, 2016.

New Ecology Representation – Ecology Aquatic SWG Technical Representative

Ferguson introduced Anna Harris, the new Ecology Clean Water Act (CWA) Section 401/Hydroprojects Manager. Ferguson said Harris will replace Pat Irle as the Ecology Aquatic SWG Technical Representative. Harris said she has been with Ecology for about 6 years, working in the Water Quality Technical Unit doing national and state discharge permitting and compliance for hatchery permits in the region. She said she has worked with all of the hatcheries in the Central Washington region and in all of the watershed systems in the area. Ferguson said Harris is now on the Aquatic SWG email distribution list and has member access to the Aquatic SWG Extranet site.

New Ecology Representation – Ecology Watershed Unit Supervisor

Ferguson said Mark Peterschmidt is the new Ecology Watershed Unit Supervisor. Ferguson said Peterschmidt replaced Chris Coffin, who has retired. Ferguson said Charlie McKinney requested that Peterschmidt be added to the Aquatic SWG email distribution list, which has been done, as requested. Ferguson noted that McKinney will also remain on the Aquatic SWG email distribution list, because he is the Ecology Aquatic SWG Policy Representative. Ferguson said Peterschmidt also now has visitor access to the Aquatic SWG Extranet Site. Ferguson said Coffin has been removed from the email distribution list, and his Extranet account has been disabled.

Aquatic SWG Email Distribution List – Ralph Lampman

Ferguson said Ralph Lampman (YN) has been added to the Aquatic SWG email distribution list, per his request. Ferguson said Lampman serves as technical support for the YN, and his

expertise focuses on lamprey. Ferguson said Lampman does not have access to the Aquatic SWG Extranet Site; however, he can be given access if requested.

2. Draft 2015 Wells Dam GAP and TDG Report and Draft 2016 Wells Dam GAP and BOP

(Andrew Gingerich): Andrew Gingerich said, the 2015 Wells Dam GAP and TDG Report, and the 2016 Wells Dam GAP and BOP, are due to FERC the last day of February of each year. Gingerich explained that the Wells Dam GAP and TDG Report addresses water quality compliance throughout the past year, both during and outside the bypass season. He said the Wells Dam GAP and BOP describe project operations for the next year and need to be approved prior to the upcoming bypass season. He said he will provide the Draft 2015 Wells Dam GAP and TDG Report and Draft 2016 Wells Dam GAP and BOP to Kristi Geris by January 8, 2016, for distribution to the Aquatic SWG for a 30-day review, with approval of the documents scheduled for the Aquatic SWG meeting on February 10, 2016. Gingerich said, once the documents are approved by the Aquatic SWG, approval of the documents will also be requested from the Wells Habitat Conservation Plan (HCP) Coordinating Committee. He said Douglas PUD will begin developing the consultation record in mid-February, so once the documents are approved by the Wells HCP Coordinating Committee, everything should be about ready to file with FERC by the February 28, 2016, deadline. *(Note: Gingerich provided the draft 2015 report and draft 2016 study plan to Geris on January 5, 2016, which Geris distributed to the Aquatic SWG that same day.)*

John Ferguson asked if requesting Wells HCP Coordinating Committee approval during their regularly scheduled meeting on February 23, 2016, will allow adequate time for Douglas PUD to compile the package for FERC before the deadline. Gingerich said it should, and explained that everything should largely be ready to file by that time. He said the last piece will be the final HCP Coordinating Committees February 23, 2016, Action Items document, which shows Wells HCP Coordinating Committee approval of the documents.

Ferguson suggested that Anna Harris review the Final 2014 Wells Dam GAP and TDG Report and Final 2015 Wells Dam GAP and BOP to gain a better understanding of what to expect with the 2015 report and 2016 plan. Gingerich also suggested meeting with Harris to help bring Harris up to speed on Douglas PUD's water quality responsibilities and obligations. Harris agreed this is a good idea. Gingerich clarified that these documents need to be reviewed by all Aquatic SWG members, and that he is only speaking directly to Harris because these particular documents speak specifically to Ecology's CWA Section 401 Water Quality Certification for the Wells Project.

Steve Lewis asked if the recent high precipitation in the region has had any impacts on the Wells Project. He asked, for example, if have there been any issues of spill in excess of powerhouse capacity. Gingerich said he has no formal water quality update at this time; however, he said it seems the water year is off to a good start. He said there is a lot of snow in

the Cascade Mountains, and more importantly for the Wells Project, a lot of snow in Canada. He said in terms of TDG compliance, there have been no issues. He said he receives water quality email updates daily, and the Wells Project is well under TDG standards in the tailrace. He recalled that the TDG criterion in the Wells tailrace is 110% at current, and he said TDG levels in the tailrace are currently in the high 90s. He said he is not aware of any other issues related to the recent high level of precipitation.

3. Draft 2016-2017 Bull Trout Passage and Take Monitoring at Wells Dam and Twisp River Weir Study Plan

(Andrew Gingerich/Steve Lewis): Andrew Gingerich said on November 19, 2015, Douglas PUD, Chelan PUD, staff from the USFWS Mid-Columbia River Fishery Resource Office, Mark Nelson (USFWS), Judy Neibauer, and Steve Lewis met at the USFWS office to discuss the upcoming Bull Trout Passage and Take Monitoring at Wells Dam and Twisp River Weir Study. Gingerich said he believes the meeting was very productive. He said Nelson presented a summary of PIT-tagging efforts conducted by various agencies at various locations around the Mid-Columbia Basin. Gingerich said the group also discussed the goals and objectives of the upcoming study. He said, following the meeting, Lewis sent USFWS comments to Douglas PUD via email, Douglas PUD provided responses, and the correspondence was forwarded to the Aquatic SWG by Kristi Geris on December 8, 2015 (Attachment B). He said he will incorporate USFWS comments and provide the Draft 2016-2017 Bull Trout Passage and Take Monitoring at Wells Dam and Twisp River Weir Study Plan to Geris by January 8, 2016, for distribution to the Aquatic SWG for a 30-day review, with approval of the plan scheduled for the Aquatic SWG meeting on February 10, 2016. Gingerich said approval of the plan needs to take place no later than the February meeting to allow adequate time to get contracts in place. *(Note: Gingerich provided the draft study plan to Geris on January 5, 2016, which Geris distributed to the Aquatic SWG that same day.)*

Gingerich suggested reviewing USFWS comments (Attachment B) with the Aquatic SWG. USFWS comments were discussed as follows:

Numbers of Fish Tagged at Wells Dam and the Twisp Weir

Gingerich said the ASA Bull Trout Management Plan requires tagging only ten fish at Wells Dam and ten fish at the Twisp Weir. He said Douglas PUD and USFWS agreed this is insufficient, and USFWS recommended tagging 30 fish at Wells Dam and 30 fish at the Twisp Weir. Gingerich said this should result in an adequate sample size and will be included in the plan.

Gingerich said USFWS also recommended PIT tagging the fish. He agreed, and explained that if fish migrate to locations with no radio-telemetry detection, they can still be detected via PIT arrays. He said, additionally, once the radio tag expires, the fish can still be detected via the PIT tag. He said he has also been researching radio tags and found a tag that will last 3.75 years,

which eliminates tag life problems for the duration of the study. He said the tag also has a 5-second pulse rate, which reduces detection efficiency issues.

Gingerich said the question of monitoring sub-adults was also discussed again. He encouraged everyone to read the ASA Bull Trout Management Plan, specifically on how sub-adults are addressed in the Wells Project. He said the 2016-2017 Bull Trout Passage and Take Monitoring at Wells Dam and Twisp River Weir Study Plan is intended to address incidental take of adult bull trout at the Twisp Weir and Wells Dam. Gingerich said Douglas PUD does not want to move away from that objective. He said, as stated in the ASA Bull Trout Management Plan, if more than ten sub-adult bull trout per calendar year are observed passing Wells Dam, there will be an opportunity to address monitoring of sub-adults. He said he has begun reviewing available data to determine if that threshold has been met. He said based on PIT-tag data only, the threshold has not been met. He said he plans to review the window count and size estimation data soon. He said the ASA Bull Trout Management Plan also describes what actions will be taken if a sub-adult bull trout is encountered; however, specifics need to be discussed with USFWS when the time comes.

Tagged Fish Monitoring

Gingerich said USFWS recommended that Douglas PUD has an obligation to perform tracking of the tagged bull trout. Gingerich said Douglas PUD agrees, and plans to include installing fixed station receivers and conducting mobile and aerial tracking in the 2016-2017 Bull Trout Passage and Take Monitoring at Wells Dam and Twisp River Weir Study Plan. He said he thinks USFWS suggested tracking for 1.25 years; however, if standards are not achieved in the first year, there is the opportunity to conduct a second year of study. He said, with regard to tag life, because the study will employ a radio tag with a longer tag life, a second year of study will be feasible if required. He said if standards are met, there may be a reduction in the fish-tracking effort, which would be consistent with the ASA Bull Trout Management Plan. For example, Douglas PUD may reduce the effort to just mobile tracking after a full year of monitoring and demonstration of compliance with the passage criteria. He said he will incorporate these details in the study plan.

Bull Trout Genetic Samples

Gingerich said USFWS had a comment regarding genetics. He said he spoke with Lewis, and Douglas PUD plans to coordinate with USFWS to determine what genetic samples Douglas PUD currently has and how they can be analyzed. Gingerich said at least ten fish obtained from the Twisp Weir will also be sampled this year, and genetic analyses will be performed. He said USFWS also recommended involving the Washington Department of Fish and Wildlife (WDFW), which Douglas PUD plans to do. Gingerich said he believes Charlie Snow (WDFW) and his team will be involved, because they are familiar with the processes and can also secure land-owner permission in the area.

PIT Arrays

Gingerich said USFWS made a comment about installing additional PIT-tag detection arrays; however, for this study, Gingerich suggested this would be redundant compared to installing radio telemetry fixed station arrays. He recalled that Douglas PUD distributed a hyperlink to a PIT Tag Information Systems (PITAGIS) map (Attachment B), and Ralph Lampman also provided useful information (Attachments C and D) to the Aquatic SWG on December 10, 2015, which addresses the distribution of PIT-tag interrogation sites in the area. Gingerich said there is already great PIT-tag interrogation coverage in the Entiat, Okanogan, and Methow basins. Nelson said he understands there may be redundancy in installing additional PIT arrays; however, he noted the advantage of having redundancy, such as in the Entiat River. He also noted there are fewer PIT arrays in the Twisp River. He said he believes redundancy is a good thing in regard to PIT antennas.

Other comments

John Ferguson asked how size classes (adult versus sub-adult) will be determined and how fish sizes will be obtained. Gingerich said Nelson may have the best data on sub-adult measurements; however, for the purpose of this study, the ASA Bull Trout Management Plan describes adult bull trout as greater than 400 millimeters (mm). Gingerich said the ASA Bull Trout Management Plan does not distinguish between juveniles and sub-adults. He added that it is difficult to say with certainty what is a true adult or sub-adult. He said Nelson has data that show that fish can be larger than 400 mm and still be sub-adults. Gingerich added, however, that Douglas PUD will use the 400 mm (or 15.75 inches) threshold as outlined in the ASA Bull Trout Management Plan since it is an imperfect science and Douglas PUD is obligated to defer to the ASA Bull Trout Management Plan. He said, with regard to the second question, determining fish size in count windows at Wells Dam is somewhat difficult. He said a ruler is taped to the outside glass in the fish ladder count window so that fish counters can estimate fish size. He said, however, the swimming area in front of the count window has some depth to it, and fish swimming far away from the window are always underrepresented in size. He added that using the ruler seems to be the best option because the fish do not have to be captured and handled.

Gingerich said among the 93 bull trout counted at the Wells Dam count window this year, approximately ten fish were borderline with regard to being classified as adult versus sub-adult using the 400-mm length criterion. He said he is reviewing the video recording to confirm the size classifications made by the counters, but suspects the sub-adult threshold will not be met. He said the other data to consider are PIT-tag interrogations at Wells Dam. He said only two fish measuring less than 400 mm at the time of PIT tagging were detected at Wells Dam in 2015. He said one was tagged 2.5 years ago, and likely is no longer less than 400 mm. He said the other was about 320 mm at the time of tagging, and was detected at Wells Dam approximately 74

days later. He added that the latter could potentially be a sub-adult. He said these two methodologies are the only ways to estimate sub-adults at Wells Dam.

Gingerich said that although the ten sub-adult threshold has not been met, Douglas PUD and the contractors will likely be willing to PIT tag sub-adults if they are incidentally encountered, as long as the Aquatic SWG and USFWS is all right with handling these fish. Neibauer said USFWS is supportive of Douglas PUD PIT tagging sub-adult bull trout if they are incidentally encountered at the Wells Dam or the Twisp Weir. She added that the problem is actually getting a hold of these fish, so at least it will be known if they pass through the area if the fish are PIT-tagged. Gingerich noted that sub-adults PIT-tagged in the Methow Basin are not typically detected at Wells Dam for 1 to 3 years after tagging and are typically detected during their first adult migration. Ferguson asked where and when the opportunity to PIT tag sub-adults would occur. Gingerich said, for example, when Douglas PUD is trapping fish for the bull trout study, there may be an opportunity to trap a bull trout which measures less than 400 mm. He said USFWS is suggesting that these fish be PIT-tagged and released. He added that he cannot recall the last time he has seen a bull trout that small at Wells Dam, which may be because bull trout do not interact with the Wells Dam fish ladders until a certain size.

Lewis recalled a discussion about how long to PIT tag incidentally encountered sub-adult bull trout, and he suggested discontinuing this effort after the bull trout study is complete. Gingerich said Douglas PUD can comply with that request. Lewis added that PIT tagging incidentally encountered sub-adult bull trout after completion of the study can be further discussed at a later date.

Neibauer also suggested monitoring PIT-tagged sub-adults in the Twisp River. She said very few of those fish interact with Wells Dam and suggested incorporating some level of monitoring into the 2016-2017 Bull Trout Passage and Take Monitoring at Wells Dam and Twisp River Weir Study Plan. She also recalled that sub-adults may migrate upstream of Wells Dam and suggested figuring out how to detect those fish. Gingerich reiterated that this study plan is specific to adult bull trout active tagging per regulatory documents, and Douglas PUD has no intention to include sub-adults in this particular study plan. He said there is an opportunity to conduct sub-adult monitoring separate from this study; however, if funded by Douglas PUD, the sub-adult threshold outlined in the ASA Bull Trout Management Plan must be met. Lewis asked if sub-adult monitoring would be included in the 2016-2017 Bull Trout Passage and Take Monitoring at Wells Dam and Twisp River Weir Study Plan, if those borderline fish turn out to be sub-adults and the threshold is met. Gingerich said it is a possibility; however, he doubts the threshold will be met prior to conducting the study. Neibauer recommended that Douglas PUD consider the possibility the threshold could be met, because as recovery occurs, more fish could be moving through the system. She said she understands Douglas PUD has specific study objectives per its FERC License; however, she urged Douglas PUD to consider monitoring sub-adults with respect

to helping implement recovery. Gingerich agreed with Neibauer that as the population grows, sub-adult encounters at Wells Dam may increase.

Nelson noted that defining what is a sub-adult versus an adult bull trout seems to be an esoteric discussion. He added, as Gingerich said, it is not clear-cut. Nelson said, based on existing behavioral data, fish lengths of sub-adults can be greater than or less than 400 mm. He added that classifying sub-adults and adults by fish size is not necessarily accurate. He explained that researchers are finding that populations behave differently, and as Gingerich previously noted, bull trout may be interacting differently with Wells Dam based on fish size. He caveated that a lot of this information is incidental, and nothing rigorous has been conducted. He suggested that everyone remain adaptive because so much is still unknown.

4. Pacific Lamprey

Potential Lamprey Translocation and Tagging Opportunities – CCT Perspectives (Kirk Truscott): Kirk Truscott (CCT Aquatic SWG Technical Support) said the CCT believes using translocation as a component of mitigation to enhance lamprey in the Wells Project is a good idea. Truscott also recommended there be close coordination with Chelan and Grant PUDs, which are also considering translocation activities. He said, with regard to translocation efforts in the Methow and Okanogan basins, the CCT would like to conduct those translocation efforts. He also said a translocation plan needs to be developed that outlines specifics of the process.

John Ferguson asked if the CCT has discussed with Bob Rose the recent YN lamprey translocation releases in the Methow Basin. Truscott said, briefly, and said he conveyed to Rose the releases were a surprise to the CCT because the Methow Basin is traditional territory of the CCT. He added that he discovered there were also previous releases. He said there was a definite lack of communication from the YN to the CCT, and he suspects to other members of the Aquatic SWG, as well.

Steve Lewis said USFWS would like to provide input on a follow-up monitoring plan for the recent YN Methow Basin releases. He said the next actions should be clear and directed in the most efficient way possible. He added that currently, it is very vague to him how the YN plans to proceed. Truscott agreed and suggested further that an entire translocation plan be developed, including target trapping locations, timing information, tagging procedures, numbers of fish to be translocated to various subbasins, and translocation monitoring information, among other details. Andrew Gingerich recalled that the Aquatic SWG was headed down that path at one point, but stopped when the Aquatic SWG discovered translocation was already taking place.

Gingerich asked if there is a formal consultation required for translocation efforts, or if fish managers are supportive of moving forward without any sort of formality. He also noted that realistically, because these translocation efforts happened outside of the Wells Project area,

Douglas PUD will likely not have much to say about it. He said the disappointing part of this is that he thought the Aquatic SWG was headed down a path toward evaluating the value and risks of translocation. He asked again if a formal impact analysis needs to be completed with USFWS or another agency, specifically regarding the incidental take of other fish that are imperiled. Lewis said this is a gray area from an Endangered Species Act perspective. He said in the Biological Opinion (BiOp), translocation is mentioned in broad terms, so a separate BiOp would not be required for translocation activities alone. He added, however, that obtaining more information on the process details will help ensure USFWS has a good strategy to minimize impacts.

Gingerich said, that it is perhaps equally as important to note, the translocation actions that took place this year in the Methow Basin took place outside unanimous consent of the Aquatic SWG and ASA Pacific Lamprey Management Plan. He said Douglas PUD takes the position that if incidental take occurs as a result of these actions or similar future actions, the associated take falls outside the incidental take for the Wells Project and the action cannot be covered under Douglas PUD's formal consultation with USFWS or NMFS. He said this should be treated similar to how incidental take is assigned when agencies use the Wells Dam fish ladders for trapping (i.e., associated take is not assigned to Douglas PUD). He suggested USFWS should determine if the agency conducting the translocation actions has appropriate take coverage in place.

Ferguson recapped, that for lamprey management in the Mid-Columbia Basin, resource agencies need to develop a plan to present to Douglas PUD for discussion within the Aquatic SWG. He said, however, that contextually, the recent YN translocation actions are outside the jurisdiction of the Aquatic SWG. Ferguson asked what Douglas PUD and the Aquatic SWG need to do until a broader plan is developed. Lewis suggested that translocation efforts in the Methow Basin may still have impacts on the Wells Project, and he said he will investigate what actions are required of agencies conducting Pacific lamprey translocation activities in the Mid-Columbia Basin, with regard to Section 7 consultation with USFWS. RD Nelle (USFWS Aquatic SWG Technical Support) said the YN does have a restoration plan; however, Rose will need to explain it.

Discussion on potential lamprey translocation and tagging opportunities will continue during the Aquatic SWG conference call on January 13, 2016.

Revised Draft 2016 Lamprey Approach, Passage, and Enumeration Study Plan (Chas Kyger):

Chas Kyger said Kristi Geris sent an email to the Aquatic SWG on December 4, 2015, notifying them that the Revised Draft 2016 Lamprey Approach, Passage, and Enumeration Study Plan is available for a 45-day review period, with comments due to Kyger by Tuesday, January 19, 2016. Kyger recalled the revised draft plan shifted from using active radio telemetry to evaluate passage at Wells Dam to a broader lamprey approach study plan using acoustic and PIT tags. He

said Douglas PUD originally planned to use radio telemetry to evaluate new modifications installed at Wells Dam, including the low-level entrance and lamprey boxes, and lamprey enumeration structures in the count windows. He said these modifications are still planned to be installed; however, instead of using radio telemetry, Douglas PUD will only install acoustic and PIT-tag detection in the lamprey boxes and around the enumeration structure, and acoustic receivers in the tailrace area and downstream from the dam. He said video observations at the counting window are also still in the plan.

Kyger recalled that, this year, Grant PUD completed a preliminary acoustic telemetry study, and among the 100 fish released at Priest Rapids Dam, only two fish were detected within 5 miles downstream of Wells Dam, and both turned around and went back downstream. He also said that past studies have not focused on approach data. He said Douglas PUD has been operating on the assumption that fish will approach and pass Wells Dam; however, this may not be a valid assumption. He said, with the Revised Draft 2016 Lamprey Approach, Passage, and Enumeration Study Plan, the goal is to validate this assumption to determine how to appropriately evaluate passage at Wells Dam. He said the details are outlined in the revised draft plan, and he encouraged comments from Aquatic SWG members.

Steve Lewis asked how long the two lamprey from the Grant PUD study remained within 5 miles of Wells Dam before returning downstream. He also asked if those fish are still being tracked. Kyger said Grant PUD contracted Blue Leaf Environmental, Inc., to conduct the study and analyze those data. He said he is uncertain what downloads are available at this time, but added that he does know that shortly after those two fish were detected approaching Wells Dam, in less than 36 hours, they were detected again downstream at Duck Tail Rock. Kyger said Douglas PUD also downloaded data last week from a white sturgeon receiver located in the Wells tailrace and found zero lamprey detections. Andrew Gingerich said, additionally, Douglas PUD obtained a download in September 2015 from the receiver located near the Wells Hatchery Outfall, which included detections from June to August 2015, and no lamprey were detected at that location and time either. He noted that the Wells Hatchery Outfall receiver is located farther out in the main river channel. He said Douglas PUD conducted tag testing in the fall using an identical tag that Grant PUD used in their 2015 lamprey study and found that with these particular lamprey tags, there is not a complete tag detection efficiency across the river. He added that there is better tag detection efficiency with the tags Douglas PUD uses for white sturgeon; however, the lamprey tags are only detected at a distance of up to 350 meters. Kyger noted that one aspect of the 2016 Lamprey Approach, Passage, and Enumeration Study is to increase the coverage in the Wells tailrace (i.e., installation of additional receivers in the Wells tailrace).

John Ferguson asked where Lincoln Rock State Park is located in relation to Wells Dam. Kyger said Lincoln Rock State Park is located just upstream of Rocky Reach Dam and approximately

20 to 30 miles downstream of Wells Dam. He added that Duck Tail Rock is located approximately 15 miles downstream of Wells Dam. He said Grant PUD also has a receiver at Beebe Bridge, which provides an additional detection location upstream of Duck Tail Rock.

Ferguson asked, with regard to the proposed sample size of 50 fish, what is considered success (i.e., what outcome is Douglas PUD expecting to see). Kyger said this is somewhat open to interpretation. He said there is a 50% chance fish will approach the project (move upstream) and a 50% chance fish will not approach the project (move downstream). He said, in his mind, more than 50% approaching indicates something is motivating them to migrate upstream to Wells Dam. Gingerich also recalled a lamprey study conducted in 2004, where among the fish counted at Rocky Reach Dam, only about 30 to 40% of those fish were detected at Wells Dam. He said, keeping in mind that fish counts are not perfect, especially during that period when lamprey could more easily pass Wells Dam and avoid the count window, if only 30 to 40% of the study fish approached Wells Dam, this could also be considered success. He also noted that in Grant PUD's 2015 study, far less than 30% of the tagged fish approached Wells Dam. He said, depending on what occurs with the 2016 Lamprey Approach, Passage, and Enumeration Study, to evaluate passage at Wells Dam, Douglas PUD may need to conduct a virtual release with the understanding that some percent of the study fish will not interact with the project, so sample size would be reduced. He said, however, the initial step is to determine if fish want to pass Wells Dam; otherwise Douglas PUD is making modifications to the project when fish do appear to want to interact with the Project.

Ferguson asked if the low-level entrance and lamprey box modifications will be installed at both ladders, and Kyger said that is correct. Ferguson asked when Douglas PUD expects to have a final study plan. Kyger said Bob Rose requested an extended review period, so approval will likely be requested during the Aquatic SWG meeting on February 10, 2016. Kyger added, as mentioned in the email with the revised draft plan for review, Douglas PUD is hoping the Aquatic SWG can at least agree in concept during the meeting on January 13, 2016, so Douglas PUD can begin to move forward with planning.

The Revised Draft 2016 Lamprey Approach, Passage, and Enumeration Study Plan will be discussed during the Aquatic SWG conference call on January 13, 2016.

VII. Next Meetings

1. **Upcoming meetings** (John Ferguson): The Aquatic SWG meeting on January 13, 2016, will be held by conference call, and a date for the next in-person meeting will be discussed at that time.

Upcoming meetings are as follows: January 13, 2016 (conference call); February 10, 2016 (TBD); and March 9, 2016 (TBD).

List of Attachments

Attachment A – List of Attendees

Attachment B – Douglas PUD Wells Dam and Twisp Weir 2017 Bull Trout Passage Study – USFWS and Douglas PUD email correspondence

Attachment C – Douglas PUD Wells Dam and Twisp Weir 2017 Bull Trout Passage Study – YN email correspondence

Attachment D – List of Interrogation Sites in Upper Columbia Basin

Attachment A List of 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 | Technical Support | Douglas PUD |
| Steve Lewis | Aquatic SWG Technical Representative | U.S. Fish and Wildlife Service |
| RD Nelle | Technical Support | U.S. Fish and Wildlife Service |
| Mark Nelson | Technical Support | U.S. Fish and Wildlife Service |
| Judy Neibauer | Technical Support | U.S. Fish and Wildlife Service |
| Anna Harris | Aquatic SWG Technical Representative | Washington State Department of Ecology |
| Jason McLellan | Aquatic SWG Technical Representative | Colville Confederated Tribes |
| Kirk Truscott† | Technical Support | Colville Confederated Tribes |

† = Joined for the Pacific lamprey discussions