

Final Conference Call Minutes



Aquatic Settlement Work Group

To: Aquatic SWG Parties **Date:** October 12, 2016
From: John Ferguson, Chair (Anchor QEA, LLC)
Re: Final Minutes of the September 14, 2016 Aquatic SWG Conference Call

The Aquatic Settlement Work Group (SWG) met by conference call on Wednesday, September 14, 2016, from 10:00 a.m. to 12:00 p.m. Attendees are listed in Attachment A of these conference call minutes.

I. Summary of Action Items

1. Douglas PUD will: 1) provide a draft letter to the Federal Energy Regulatory Commission (FERC) to the Aquatic SWG for review, requesting permission from FERC to combine all Aquatic Settlement Agreement (ASA) Annual Reports and deadlines into one submittal; and 2) determine where and from whom the respective agency support letters should be sent (Item VI-1).
2. Douglas PUD will distribute a Doodle Poll to convene a second technical subgroup meeting to further discuss the future of the Douglas PUD White Sturgeon Program (Item VI-3). *(Note: Andrew Gingerich distributed a poll following the meeting on September 14, 2016.)*
3. Douglas PUD will provide a summary of Pacific lamprey monitoring and evaluation (M&E) acoustic data collected to date as soon as those data are downloaded (Item VI-4).
4. Douglas PUD will investigate the one bull trout acoustic tag located in the Columbia River near the Wenatchee River that has been sending a mortality signal after not moving for 2 days and will provide a summary of data once available (Item VI-5). *(Note: Andrew Gingerich provided this update on September 15, 2016, which Kristi Geris distributed to the Aquatic SWG that same day.)*
5. **The Aquatic SWG meeting on October 12, 2016, will be held by conference call (Item VII-1).**

II. Summary of Decisions

1. Aquatic SWG members present approved the 2015 White Sturgeon M&E Report, as revised, with Washington State Department of Ecology (Ecology) abstaining (Item VI-3).

III. Agreements

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

IV. Review Items

1. There are no items that are currently available for review.

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 asked for any additions or other changes to the agenda. No additions or changes were requested.

The revised draft August 10, 2016, conference call minutes were reviewed. Kristi Geris said all comments and revisions received from members of the Aquatic SWG were incorporated into the revised minutes, and there are no outstanding edits or questions to discuss. Aquatic SWG members present approved the August 10, 2016, conference call minutes, as revised. Ecology abstained because an Ecology representative was not present during the August 10, 2016, conference call.

Action items from the last Aquatic SWG conference call on August 10, 2016, are as follows (note: the following italicized item numbers correspond to agenda items from the August 10, 2016, conference call):

- *Bob Rose will discuss internally the Colville Confederated Tribes' (CCT's) proposed criteria for culling juvenile white sturgeon and will report back to the Aquatic SWG (Item VI-1).* Rose said he has no updates at this time. He said he or Donella Miller (Yakama Nation [YN]) will raise questions or concerns if and when they arise.
- *Douglas PUD will consider requesting permission from FERC to combine all ASA Annual Reports and deadlines into one submittal and will report back to the Aquatic SWG following completion of the 2015 ASA reporting season (May 31; Item VI-1).* Andrew Gingerich said he spoke with Shane Bickford, and Bickford indicated that Douglas PUD does not have objections to this proposal. Bickford also suggested that individual Aquatic SWG members provide agency support letters to submit to FERC to illustrate that all agencies are supportive of consolidating these reports. Gingerich said, once Bickford reviews and approves Douglas PUD's draft letter to FERC, Gingerich can

distribute the letter for Aquatic SWG members to use as a template for their respective agency letters. John Ferguson asked if agency letters should be addressed to Douglas PUD or to FERC, and Gingerich said he is unsure. Patrick Verhey suggested providing an email to Douglas PUD indicating support of consolidation that can then be appended to Douglas PUD's request to FERC. Gingerich said he will pass that suggestion along to Bickford. Gingerich added that he believes FERC is willing to allow the Aquatic SWG to decide how to meet compliance, so long as there is unanimous agreement among the group. Steve Lewis said, typically, if the U.S. Fish and Wildlife Service (USFWS) were to file agency letters, they would be appended to the official request. Lewis suggested contacting the Wells Project contact at FERC to determine what FERC will require to process this request. Gingerich agreed, and said he will also pass this information along to Bickford. Gingerich said Douglas PUD will: 1) provide a draft letter to FERC to the Aquatic SWG for review, requesting permission from FERC to combine all ASA Annual Reports and deadlines into one submittal; and 2) determine where and from whom the respective agency support letters should be sent.

- *There will be a formal introduction of the new Ecology Aquatic SWG Technical Representative, Breean Zimmerman, at the next Aquatic SWG meeting on September 14, 2016 (Item VI-2).*

This will be discussed during today's conference call.

- *Douglas PUD will distribute a Doodle Poll to convene a technical subgroup to discuss the future of the Douglas PUD White Sturgeon Program (Item VI-4).*

Andrew Gingerich distributed a poll following the meeting on August 10, 2016. This will be further discussed during today's conference call.

- *Updates on discussions about the future of the Douglas PUD White Sturgeon Program will be provided during each Aquatic SWG monthly meeting, with the goal to make a decision by the Aquatic SWG meeting on January 11, 2017 (Item VI-4).*

This will be discussed during today's conference call.

- *Douglas PUD will distribute a Revised Draft 2015 White Sturgeon M&E Report for a 10-day review, with plans to request approval of the draft report during the Aquatic SWG meeting on September 14, 2016 (Item VI-4).*

Andrew Gingerich provided the revised draft report, as well as a comment and response document, to Kristi Geris on August 15, 2016, which Geris distributed to the Aquatic SWG that same day. This will be further discussed during today's conference call.

- *Douglas PUD will provide a Draft ASA Document Approval Process Statement of Agreement (SOA) for discussion during the Aquatic SWG meeting on September 14, 2016 (Item VI-5).*

This will be discussed during today's conference call.

2. Ecology Aquatic SWG Technical Representative – Breean Zimmerman (John Ferguson):

John Ferguson asked Breean Zimmerman, the new Ecology Aquatic SWG Technical

Representative, to introduce herself to the Aquatic SWG. Zimmerman said she was hired with the Ecology Water Quality Program as the Hydropower Projects Manager in mid-June 2016. She said she has a background in water rights and has worked with the water resource program for a number of years. She said she also worked with Aspect Consulting for several years. She said she is new to aspects of this type of work and appreciates everyone's patience as she gets settled in. She said these workgroups and forums are interesting and she is excited to be a part of it. She said she is looking forward to meeting in person at some point in time. Ferguson provided Zimmerman with a brief overview of what to expect in the Aquatic SWG, including notice about the several documents to review in the first quarter of the year. Ferguson suggested Zimmerman review the Aquatic SWG meeting minutes from August 2016, regarding the total dissolved gas (TDG) update. Ferguson also reviewed current ongoing white sturgeon, lamprey, and bull trout topics, which will be further discussed during today's conference call.

3. White Sturgeon (Andrew Gingerich):

DECISION: 2015 White Sturgeon M&E Report

Andrew Gingerich said the Draft 2015 White Sturgeon M&E Report was available for a 30-day review period. He said, after the CCT provided comments, a Revised Draft 2015 White Sturgeon M&E Report and a comment and response document were distributed to the Aquatic SWG by Kristi Geris on August 15, 2016, for an additional review period. Gingerich said Jason McLellan indicated the revised draft adequately addressed the CCT's comments. Gingerich noted that the 2015 report is a good start to several more years of M&E. Aquatic SWG members present approved the 2015 White Sturgeon M&E Report, as revised, with Ecology abstaining.

Brood Year 2016 Wells Hatchery Update

Gingerich said there are just more than 13,000 larval-origin fish remaining on station at Wells Hatchery, from the initial 22,000 larval-origin fish collected from Lake Roosevelt. He said there are approximately 3,500 direct gamete-origin fish on station from Marion Drain. He said Marion Drain fish will eventually be surplus to Chelan Falls to support Chelan PUD's program. He said Washington Department of Fish and Wildlife (WDFW) and Chelan PUD are in direct discussions about when to move those fish. He said, in terms of larval-origin fish on station, mortality is down in all five tanks, with zero to five mortalities per tank per day. However, he said mortalities increased in two of the tanks last week, with 20 to 40 mortalities per day occurring in those two tanks. He said fish health samples were obtained from those tanks on September 12, 2016, and hatchery staff are awaiting the results of those samples being processed. He said the remaining fish in the two tanks are being treated with a standard salt bath. He said he is cautiously optimistic that survival will improve.

2016 White Sturgeon M&E Update

Gingerich said he recently provided a white sturgeon M&E summary sheet (Attachment B) to Geris, which Geris distributed to the Aquatic SWG prior to the call on September 14, 2016. Gingerich said the Attachment B summarizes Douglas PUD's 2016 white sturgeon M&E efforts to

date. He said 2015 data are not included in the summary, partly because he wanted to convey that Douglas PUD is employing similar indexing methodologies as Chelan and Grant PUDs and are not directly comparable to 2015 data given the small modifications in methods.

Gingerich reviewed Attachment B, noting the two indexing sessions in July and September. He said Douglas PUD is only about 30% through the second indexing session for 2016. He said six wild and more than 400 hatchery fish have been captured to date. He said, among those fish, 88% were brood year (BY) 2013 (or 3-year-olds), 10% were BY 2014 (or 2-year-olds), and 2% were BY 2015 (or 1-year-olds). He noted there is no difference in capture probability between BYs from July through September. He said it is interesting that the current indexing is catching a lot of 3-year-olds and not a lot of 2- and 1-year-olds. He suggested this may mean that: 1) 2013 fish have higher survival than other BYs; or 2) the capture probability for 3- and 4-year-olds is higher (due to their recruiting to the capture gear better). He said he feels the latter is more likely, which implies the M&E technique is biased. He also noted, that in July, crews caught an average 9 fish per day, while in September, they caught 28 fish per day. He said, on average, fish size in September is slightly larger as well. Bob Rose asked about bait used in July versus September, and Gingerich said there has been no change in bait. Gingerich said crews are using Gilmore squid, which is another standardization among regional M&E programs. He said he thought water temperature might be a factor; however, water temperatures are fairly similar between the two sampling periods (within 1 or 2 °C). Rose asked if similar results have been observed in Lake Roosevelt. McLellan said yes, there have been lower numbers caught in the spring versus late summer and fall sampling periods. He said the highest rates of movement are during fall months. He said fish are fairly small at release, and at the rate they grow, size may have an impact on recruitment to the sampling gear. Gingerich also noted that Douglas PUD is only 6 days into the September sampling session, and catch rates may decrease. He said the data in Attachment B are comparing 27 days (July) to 6 days (September) of sampling.

Gingerich said, between the indexing sampling efforts, Douglas PUD took the opportunity to target sampling of wild and larger fish, because no sampling of that nature has taken place since mid-2000 relicensing studies. He said a crew sampled for a 13-day period, using eight lines per day and 40 hooks per line, with an equal distribution of hook sizes. He said catch rates decreased significantly compared to juvenile/hatchery fish indexing in July and September. He believes this is largely because hatchery fish did not recruit to the larger gear. He said 86 fish were captured in total, including 15 wild. He said hatchery fish were predominantly 3-year-olds. He said, among the wild fish, six were classified as adults (greater than 170 centimeters [cm] fork length), and nine fish were classified as subadults, which were all similar in size (about 100 cm). He said the smallest subadult was 70 cm, which was an outlier. He said most were 85 cm and larger, and the largest was 105 cm. He said fin ray samples were obtained from all wild subadult fish for aging, as discussed and recommended in 2015. He said fin ray sampling techniques are improving, and genetic samples (DNA) are also being obtained, for all wild fish as

recommended. He said one fish was a recapture from 2015 indexing, and two fish were recaptures from 2016 indexing conducted in July. He said, interestingly, no medium-sized fish (between 105 and 170 cm) were captured. He said these data will be used as baseline data to compare to in future years.

Years 5 through 10 Subgroup Meeting Summary

Gingerich said a subgroup convened on August 30, 2016. He said all Aquatic SWG members participated, except USFWS, who could not attend. He said some members participated in-person and some joined by phone, and he believes the subgroup had a good first discussion about how to proceed in future years. The meeting notes from the subgroup meeting (Attachment C) were distributed to the Aquatic SWG by Geris on September 6, 2016.

Gingerich said the subgroup discussed how many fish to stock, and he believes the subgroup generally reached consensus on using number of adults in the Bonneville Pool as a model—however, not by river mile, but scaled on surface area. He said a target of about 1,000 adults (166 cm fork length) was reached. He said the subgroup also agreed to attempt model runs similar to what Grant and Chelan PUDs have done. He said the group needs to determine expected survival rates for hatchery-origin fish, noting that they discussed possibly using Upper Columbia White Sturgeon Recovery Initiative (UCWSRI) survival estimates. He said he sent data to McLellan and Chad Jackson (WDFW) to formulate expected survival rates for model inputs. Gingerich said the group also needs to determine how to include exploitation rates.

McLellan said he just distributed an email to the Aquatic SWG during today's meeting, which contains a white sturgeon population model for the Wells Project (Attachment D) and estimated Wells Project releases survival information using the logistic regression developed by the UCWSRI (Attachment E). McLellan said he revised the survival estimates based on the release data Gingerich provided. McLellan explained that he ran simple descriptive statistics with all data combined and applied the Upper Columbia River logistic equation for a survival estimate where weight at release is the key variable. He said data analyzed included release data from 2014 to 2016. He noted that 2014 was the release group with the greatest weight at release and had the highest predicted survival, whereas the release group with the smallest weight at release had the lowest predicted survival. He said the means and medians were close and the data was fairly normally distributed. He also noted the histograms located in the lower portion of the Attachment D.

McLellan said part of the discussions focused on determining what survival values to use. He said the idea was to evaluate the available data by applying the Upper Columbia River survival rates to establish numbers to begin considering. He said the group needs to decide whether to use a particular survival rate from the release data to date and produce fish of that size, or agree on releasing fish of a certain size (e.g., 200 grams) and using model predicted survival for that size for model runs. Rose said it may take 4 to 5 years to obtain a good dataset, and asked if

catch rates would then be compared. McLellan said this is correct, that everything would be dependent on M&E. He noted, that if fish are released at 300 grams, where survival is estimated at 98%, the vast majority of those fish will survive and there is lower uncertainty. He said, however, there is less certainty with smaller fish because of their lower estimated survival. He suggested conducting a program based on this survival-size assumption, continue M&E, reevaluate, and adjust as needed.

Gingerich said McLellan's suggestions make sense; however, he noted that raising fish to 300 grams in size may be limited by hatchery capacity/growth constraints. He also questioned if there is a scientific justification to having the local environment provide differential survival. He said 98% survival limits natural selection. McLellan agreed these are valid discussions. He suggested, regarding Gingerich's first point, reviewing Attachment D where McLellan took the Beamesderfer model with Chelan and Grant PUDs data and input Wells Project data into the model. He suggested Aquatic SWG members modify the inputs to the model to see how they affect model outputs. He also suggested convening another in-person meeting, sooner rather than later, to discuss these numbers and to evaluate different strategies. He said, based on his review of Attachment D, he found that the stocking numbers needed to maintain 1,000 adult fish are relatively small and well below the 3,000 and 5,000 fish per year currently being stocked. He said, based on these calculations, he believes it is logistically possible to produce 300-gram fish. He said his calculations even included 20% exploitation. He also suggested perhaps including 100 fish harvested per year, but also asked how members want to address harvest and allotment rates.

John Ferguson questioned if hatchery facility modifications will be required to grow fish to 300 grams, or if the number of fish needed is low enough that capacity may not be an issue. He also asked if this target size of adults applies only to hatchery fish or also to wild fish. McLellan said the model is setup to assume no natural production (leaves natural recruitment at 0). He added that the model does take into account the current population, based on the Jerald (2007) estimate of 34 fish (Attachment F). McLellan also noted that there is an input for wild abundance in the model, which tapers off over time. Steve Lewis asked if there is a way to incorporate natural production for future years, and McLellan said there is.

Rose said he believes Gingerich's comments are relevant; however, he also suggested setting aside the genetic piece for now because it is difficult to address and hypothetical. He said regarding the logistics piece, he agrees with growing fish to a larger size and appreciates that these conversations are occurring. He suggested McLellan and Gingerich determine and share with the Aquatic SWG what needs to be done to be able to accommodate these fish. Rose said, if Wells Hatchery cannot accommodate the fish, he suggests thinking about what other resources are available to achieve this fish size.

McLellan reiterated his suggestion for Aquatic SWG members to review Attachment D to make sure the tool is working correctly. He said he believes it is; however, he wants the SWG members to verify that they agree with the model.

Ferguson asked about next steps, and suggested that Gingerich distribute another Doodle Poll to convene a second in-person subgroup meeting, to which Gingerich agreed. He also noted that the last subgroup meeting focused on this model and how to obtain a target number of fish. He said the other part of this discussion is fish source. He said, once the Aquatic SWG agrees on a target stocking number, discussions need to focus on where the fish come from. He said he believes there were good results from the larval program, and Douglas PUD will likely support staying with larval-origin fish; however, these discussion still need to take place. He said the subgroup is still targeting reaching resolution on both issues by the end of the year. Ferguson asked if the source discussion will be handled within the subgroup or the entire Aquatic SWG. Gingerich said he has no preference, and noted that almost all Aquatic SWG members are also participating in the subgroup. He said the source discussion naturally feeds into ongoing discussions within the subgroup, so it makes sense to begin the source discussion there. He said, ultimately, unanimous approval is needed, and suggested the subgroup bring a recommendation back to the Aquatic SWG.

Douglas PUD will distribute a Doodle Poll to convene a second technical subgroup meeting to further discuss the future of the Douglas PUD White Sturgeon Program. Gingerich noted that he will also setup a WebEx for those who cannot make the meeting in-person. *(Note: Gingerich distributed a poll following the meeting on September 14, 2016.)*

- 4. 2016 Pacific Lamprey Study Update** (Chas Kyger): Chas Kyger said the Douglas PUD 2016 Pacific Lamprey Study is underway. He said 51 Pacific lamprey collected at Priest Rapids Dam were acoustically and PIT-tagged, and released 0.8-mile upstream of Rocky Reach Dam on the Chelan County side of the reservoir. He said those tags are now being tracked in the PIT-Tag Information System (PITAGIS). He said there has been one detection on an array in the Entiat River, which was detected within 8 hours of release. He said between Grant, Chelan, and Douglas PUDs, just fewer than 500 PIT-tagged fish and 151 acoustically tagged fish (including 51 from Douglas PUD and 100 from Grant PUD) have been released in the mid-Columbia River, which may contribute to the ongoing Pacific lamprey studies. Kyger said no downloads have been obtained from the acoustic receivers yet; however, data will be downloaded from seven receivers at Wells Dam beginning tomorrow, September 15, 2016. He said Chelan PUD also operates a number of acoustic receivers throughout the Rocky Reach Reservoir; however, he is not sure when Chelan PUD plans to download data. He said Douglas PUD will coordinate with Chelan PUD to share those data when they become available and will provide an update to the Aquatic SWG at that time.

Andrew Gingerich noted that LGL Unlimited (LGL) manages Douglas and Chelan PUDs' acoustic receivers; therefore, data analysis will be conducted in a consistent manner among the relevant datasets. John Ferguson asked about the turnaround time to receive an update after the download. He asked if LGL first processes those data and then Douglas PUD provides a summary. Kyger said he cannot speak to the turnaround time for data analysis from LGL; however, he said Douglas PUD can at least provide a basic summary of data as soon as the downloads are obtained. He added that this should be available within the next couple of weeks.

Steve Lewis asked about a fish released downstream of Wells Dam and detected upstream of Wells Dam. Patrick Verhey said WDFW and Douglas PUD are discussing this further offline. Kyger said the fish was not counted or detected, which means there are still issues at the count window or there are still gaps. He said he is suspicious of the grating installed near the count window, which may be too wide and fish are slipping through.

Lewis asked about lamprey translocation opportunities and support from Douglas PUD. Gingerich said, per the ASA and Douglas PUD's FERC license, unanimous approval is needed to move forward with translocation. Bob Rose said, in his opinion, there is flexibility within the regional participation and adaptive management portions of the ASA for Douglas PUD to support translocation efforts. Rose called for being creative in how to advance actions. Gingerich said he realizes the lack of Pacific lamprey upstream of Wells Dam may be a pheromone issue; however, he does not want this discussion to interfere with carrying out the current Pacific lamprey study. Ferguson agreed, and acknowledged the need to continue discussing translocation; however, at a later time. Rose said he believes the Aquatic SWG is agreeing there is flexibility in the interpretation of governing documents. He said he would like these discussions to move forward early next year and suggested putting this on the agenda beginning in January 2017. Lewis agreed there may be ways to interweave translocation, to some extent, into future efforts and studies. Ferguson suggested, for now, carrying forward monthly updates on the current Pacific lamprey study. Rose read Objective 1 in the Pacific Lamprey Management Plan, which states, "Identify and address any adverse Project-related impacts on passage of adult Pacific lamprey." He said he believes addressing the passage problem falls under this objective. He said Objective 3, which states, "Participate in the development of regional Pacific lamprey conservation activities," has room for interpretation.

5. **2016 Bull Trout Study Update** (Andrew Gingerich): Andrew Gingerich said, currently, there is not a lot of movement of fish tagged for the bull trout study because most bull trout are on the spawning grounds or staging. He said Douglas PUD conducted an aerial mobile tracking survey in the mainstem Columbia River, designed to determine if fish were remaining in the mainstem Columbia River. He said, during the survey, 2 of 60 tagged fish were found. He said one tagged fish was not sending a mortality signal (detected near Beebe Springs). He said the second

tagged fish was detected near the confluence of the Wenatchee and Columbia rivers, and was sending a mortality signal. He said a PITAGIS query indicated this fish was last detected at a PIT-tag array at the Rocky Reach Bypass facility. Gingerich noted that he is not associating the death of the bull trout to the Rocky Reach Bypass facility; however, the fish was last detected at the Rocky Reach Bypass facility and was the only PTAGIS hit. He said, after not moving for 2 days, a code sent a mortality signal. He said, during the next survey, a crew will verify whether the tag is still sending a mortality code, and if so, will try to recover the tag to determine if it was expelled or is a dead fish. Steve Lewis asked how large the fish was, and Gingerich said the data is not currently available; however, Douglas PUD will investigate the possible mortality and will provide a summary of data once available. *(Note: Gingerich provided this update on September 15, 2016, which Kristi Geris distributed to the Aquatic SWG that same day.)*

6. **Draft ASA Document Approval Process SOA** (Andrew Gingerich): Andrew Gingerich said, he and Shane Bickford reviewed the language in the ASA and decided the language is strong enough to not need an SOA for the document-approval process. He said Douglas PUD will continue providing 30-day reviews for documents and ensure the agenda is distributed in advance of decision items. He said Douglas PUD is taking the position that if Aquatic SWG members are unavailable and do not request to postpone voting, this will be considered an abstention. He said there is no requirement in the ASA or Douglas PUD FERC license that states Aquatic SWG members must vote or attend meetings. He said review and approval on certain documents is stipulated (e.g., Ecology approval of the Gas Abatement Plan); however, this is not the case for every document. He suggested that Aquatic SWG members review Section 11 in the preamble of the ASA as a refresher on the approval process.

Steve Lewis asked if providing no comments conveys agreement. Ferguson said this conveys an abstention. Gingerich said the language in the ASA stipulates that if an item is on the agenda and a review period is provided, if a party does not request to defer voting within 5 days of the decision, the item can be approved by members present. Lewis asked if an agency discovers a major red flag in a study, but does not meet the comment deadline, can the agency still submit the comment. Gingerich said Douglas PUD will still accept the comment. Ferguson asked for clarification. Gingerich further explained that if the Aquatic SWG reviews and approves a plan, Douglas PUD may proceed with planning. He said if an agency submits requests after approval, Douglas PUD will attempt to accommodate the request to the extent possible; however, they may still move forward as planned. He said he does not recall Douglas PUD ever refusing to accept comments. He added that Douglas PUD tries hard to work with Aquatic SWG members on deadlines, but if the document is approved and late request cannot be accommodated to meet a subsequent deadline (FERC deadline or contract development as an example) Douglas PUD could refuse to accommodate.

VII. Next Meetings

1. **Upcoming meetings** (John Ferguson): The Aquatic SWG meeting on October 12, 2016, will be held by conference call.

Upcoming meetings are as follows: October 12, 2016 (conference call); November 9, 2016 (TBD); and December 14, 2016 (TBD).

List of Attachments

Attachment A – List of Attendees

Attachment B – White Sturgeon M&E Summary Sheet Email

Attachment C – Aquatic SWG White Sturgeon Subgroup August 30, 2016, Meeting Notes

Attachment D – White Sturgeon Population Model for the Wells Project

Attachment E – Wells Project Releases Survival Information

Attachment F – White Sturgeon (*Acipenser Transmontanus*) Population Assessment In Wells Reservoir
(Jerald 2007)

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
Breean Zimmerman	Aquatic SWG Technical Representative	Washington State Department of Ecology
Patrick Verhey	Aquatic SWG Technical Representative	Washington Department of Fish and Wildlife
Bob Rose	Aquatic SWG Technical Representative	Yakama Nation
Jason McLellan	Aquatic SWG Technical Representative	Colville Confederated Tribes