February 2017 Bull Trout Working Group Minutes

Meeting held February 2, 2017 at the Yakima Basin Fish & Wildlife Recovery Board office

Attendees: Gary Torretta, Scott Willey, Eric Merten & Tom Matthews, USFS; Mitch Long, KCT; Scott Kline, Eric Anderson & Josh Rogala, WDFW; Dave Fast, Yakama Nation; Richard Visser, USBR; David Child, YBJB; Alex Conley, YBFWRB; Brain Miller, RC&D; Jeff Thomas, USFWS; Ashton Bunce; Danielle Squeochs, DOE. On the phone: Gabe Temple, WDFW; Sierra Franks, USFWS.

1. Review and Approval of Agenda

2. Bull Trout Action Plan (BTAP) update

Cassandra Weekes updated the group on the BTAP update process. A BTAP work session for the three Rimrock populations (South Fork Tieton, Indian Creek, North Fork Tieton) was held before the Bull Trout Working Group meeting to review the proposed 2017 action updates and additions for each population. A revised draft will be sent out by the end of February and final comments will be incorporated by mid-March so we can approve the 2017 update for the Rimrock populations at the April Bull Trout Working Group meeting.

During the morning session, the group also reviewed and recommended final edits to the Upper Yakima sections of the BTAP (Cle Elum, Teanaway, Upper Yakima River). The group approved the Upper Yakima Action updates and directed Cassandra to incorporate the comments received in the morning session. The group agreed to begin updating the BTAP actions for the Naches arm of the Yakima Basin next. This includes Deep Creek, Crow Creek, American River, and Rattlesnake Creek.

3. Bureau of Reclamation update

Richard Visser gave an update on Bureau of Reclamation projects and the bull trout MOU meeting. Regarding the MOU meeting, he informed the group that the State and others would like to move from a mitigation strategy to a more proactive restoration with mitigation strategy with much more effort going into restoration projects.

The action items that came out of the MOU meeting include:

1. Nutrient enhancement: the Yakama Nation and partners will meet to prepare a more detailed proposal for nutrient enhancement in the Upper Yakima basin. When a draft proposal is completed it will be shared with the Bull Trout Working Group.
2. Peak-a-Boo Falls: The USFS committed to look at their policy for providing fish passage at natural fish barriers and to provide the group with the Watershed Analysis conducted by the USFS in 1996 to help inform future management.

   There are old anecdotal reports of bull trout ascending Peak-a-Boo Falls at a time when there was a large logjam at the base of the falls that likely assisted adult bull trout migration above the falls. The USFS watershed analysis mentioned above showed no indication of bull trout utilizing

habitats above the falls. The westslope cutthroat population above the falls will be studied to ensure no negative impacts associated with passage over Peak-a-Boo falls. Partners will work together to determine how to move forward.

3. Box Canyon passage: Reclamation is working with partners on Box Canyon passage across the reservoir bed. Reclamation will contract with WDFW to pay for Bruce Hiner's (WDFW) time to work on a conceptual design, and then Reclamation will do the final design. Final design is anticipated in April 2018. Funding will be sought, and if secured, the project could be implemented in fall 2018.
4. Population management: WDFW is identified as the agency to take the lead on developing a bull trout salvage plan. In addition, the Yakama Nation is taking the lead on an assessment for translocation/supplementation/reintroduction.
5. Funding: there is a request into the state for 1.5 million dollars for restoration and 1.7 million dollars for passage at Clear Creek Dam. The state is concerned with the lack of federal funding and at the cost of proposed projects in the upper Yakima; there are more than 30 million dollars in projects identified just in the Upper Yakima Basin. The state bull trout funding is tied to KDRPP. If KDRPP hits a barrier, bull trout funding is jeopardized.
6. MOU: Wendy will convene a meeting of MOU signatories in June or July.
7. The Fish Passage TWG meeting will be held in early March. Passage at Clear Creek Dam, Box Canyon on the reservoir bed, the Narrows, and South Fork Tieton are on the agenda.

4. Clear Creek Dam Fish Passage and Trap-and-Transport Update

Jeff Thomas gave an update on this project. The goal of the project is to maintain the genetic diversity and population fitness of the NF Tieton bull trout population by providing passage past Clear Creek Dam to natal spawning habitat near the headwaters of the NF Tieton River upstream of Clear Lake.

In 2016 hook-and-line sampling was conducted below Clear Creek Dam weekly beginning July 7 and continuing through August 3 (five sample dates). A total of 32 adult bull trout were captured.

30 fish were transported above the dam; these included two recaptures caught below the dam in 2015. Two fish were not transported due to suspicious markings that indicated they might be hybrids.

Eight of the 30 fish transported in 2016 were not subsequently detected. Of the 22 detected, 21 were detected up the NF Tieton. Only one of the 22 fish transported was not detected up the NF Tieton; it was detected in Clear Creek once.

Genetic analysis indicated that 13 of the 30 fish did not belong to the NF Tieton population, which was a surprise. Five were SF Tieton bull trout and eight were Indian Creek bull trout. Only one hybrid was captured; its genes were from the NF Tieton.

The trap-and-transport efforts are planned again in 2017. Next steps include considering alternative capture methods, completing a rapid genetic assay prior to releasing fish, establishing an index area for redd surveys in the North Fork Tieton (if possible), and genetic parentage analysis.

Jeff will be circulating an official report of this work later in the month. The PowerPoint of his presentation is on the Yakima Basin Fish and Wildlife Recovery Board website at: http://www.ybfwrb.org/recovery-planning/bull-trout-recovery-planning/btwg/.

5. Box Canyon Creek and upper Kachess River data collection update

Scott Kline provided an update on the Box Canyon and Kachess River data collection efforts in 2016. The project goals included completing a demographic survey, habitat survey, application of PHABSIM, and macroinvertebrate sampling in both Box Canyon Creek and the upper Kachess River.

Initial snorkel survey results in Box Canyon demonstrated that juvenile (>=1+) bull trout presence per 100m2 was low compared to similar streams in two other published studies. Box Canyon had 0.06 juvenile bull trout per 100m2.

Initial snorkel survey results in the Kachess River, including Mineral Creek, demonstrated that juvenile (>=1+) bull trout presence per 100m was greater than in Box Canyon. The Kachess River had 3.90 juvenile bull trout per 100m while Box Canyon had 0.81 juvenile bull trout per 100m. Bull trout per 100m2 calculations in Kachess were not possible since the habitat survey was not completed in this system.

The Box Canyon Creek habitat survey was conducted using the USFS stream inventory manual and other methods so that habitat metrics could be compared to several different recommended criteria. Following those parameters, results indicated that Box Canyon was deficient in the quantity of pools and large woody habitat key pieces and had sufficient spawning substrate. The Kachess River habitat survey is planned for 2017.

The macroinvertebrate samples have not yet been analyzed but professional opinion during snorkeling was that the macroinvertebrate community seemed robust.

Data collection in Box Canyon Creek and the Kachess River will continue in 2017. Scott will give another update at the next Bull Trout Working Group meeting. A PowerPoint of his presentation can be found on the Yakima Basin Fish and Wildlife Recovery Board website at: http://www.ybfwrb.org/recovery-planning/bull-trout-recovery-planning/btwg/.

6. Brook trout hybridization

Cassandra showed a PowerPoint and led a discussion focused on four questions:

1. Where do we have brook trout in the Yakima Basin?
2. Where do they overlap with bull trout?
3. Are they hybridizing?
4. Is hybridization a problem? If so, where?

The group determined there are three bull trout populations that have a “problem” with brook trout: Deep Creek, North Fork Tieton River, and Indian Creek. These three populations have documented hybridization occurring. The group also discussed the impact of climate change and how it may increase competitive interactions between brook and bull trout.

The group discussed doing ongoing genetic monitoring in Indian Creek and maybe other areas in order to detect trends in hybridization rates over time. The group also noted that while brook trout do not appear to be a major limiting factor for most of our populations at this time, that may change if stream temperatures rise. The group recommended adding an action to the BTAP calling for tracking and evaluation of brook trout impacts on bull trout.

The next step is to determine if there are feasible methods to reduce the abundance of brook trout within these streams. Members expressed interest in the use of XX males (Trojan Y males), but Eric Merten noted that that could increase brook trout competition with bull trout in the short term. While eradication was seen as unlikely in most areas, opportunities to suppress populations through electrofishing were discussed.

7. Stream temperature data storage

To follow up on the Bull Trout Working Group December agenda item regarding temperature storage, Alex and Cassandra looked into several existing temperature databases in an effort to find a feasible option for Bull Trout Working Group participants to file and share temperature data.

Temperature database inquires included: USFS NorWeST and Regional databases, Ecology's EIM database, StreamNet, CHamP database, STEM databank, Oregon DEQ, and contacting USGS about the potential to develop our own temperature database.

A handout was provided that outlined the findings for each database. In short, a feasible option has not yet been determined. Alex and Cassandra will continue to explore different options and report any new findings back to the group.

8. Recent grant proposals

There were four local proposals submitted for USFWS Recovery funds: Box Canyon and Upper Kachess River data collection, Little Naches road decommissioning, genetic collection and analysis, and Teanaway Community Forest road relocations.

9. Closing items

Suggested topics for the next meeting include: Box Canyon and Kachess River data update, eDNA sampling, BTAP work planning, and updates on both the DSS and Vulnerability Assessment projects.

The next Bull Trout Working Group meeting will likely be held in early April.