April 2017 Bull Trout Working Group Minutes

Meeting held April 3, 2017 at the Yakima Basin Fish & Wildlife Recovery Board office

Attendees: Ashton Bunce & Alex Conley (YBFWRB); Cassandra Weekes (MCFEG); David Child (YBJB); Eric Anderson & Scott Kline (WDFW); Dave Fast, Jeff Trammell & Paul Huffman (Yakama Nation); Richard Visser (USBR); Scott Willey, Eric Merten &Tom Matthews (USFS); Mitch Long (KCT); Jeff Thomas, Pat Monk & Rob Randall (USFWS). On the phone: 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 Naches-arm bull trout populations (Deep Creek, American River, Crow Creek and Rattlesnake Creek) 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 April and final comments will be incorporated by mid-May so we can approve the 2017 update for the Naches populations at the June Bull Trout Working Group meeting.

At the Bull Trout Working Group meeting Cassandra asked the group if there were any final comments or feedback on the BTAP Rimrock populations (NF Tieton, SF Tieton and Indian Creek) update that the group worked on together in February. The group did not have an additional comments and agreed to approve the Rimrock populations update as final. The group agreed to begin updating the broad scale and multi-pops BTAP actions next.

3. Bureau of Reclamation update

Richard Visser gave an update on Bureau of Reclamation projects:

1. The Fish Passage Work Group met to discuss SF Tieton passage, Clear Creek Dam passage, Box Canyon passage, and Kachess Narrows passage. Jeff Thomas presented his Clear Creek Dam project and findings. The group reviewed options for passage. At the meeting the attendees also reviewed three passage alternatives for the SF Tieton: 1) blasting the bedrock under the water to provide passage when the reservoir is low, 2) relocating the channel back to its historic location, or 3) relocating the channel near the historic location, but a little to the west, and blast a small amount of bedrock. The third option is the most feasible; a 30% design should be completed soon.

2. There will be a technical review of the Kachess EIS this month.

3. Sierra Franks informed the group that USFWS is working diligently to complete the Current Operations Bi-Op, and that Reclamation is compiling the additional information requested by USFWS.

4. Box Canyon and Kachess River Data Collection Update

Scott Kline provided an update on the data collection efforts in 2016. A key point of the talk was that Box Canyon young-of-year bull trout generally have only half the stream to rear in- the half that is of higher gradient and likely makes them more susceptible to being flushed out of the stream. Initial results indicate that Box Canyon is deficient in the quantity of pools and large woody debris, and snorkel survey results indicate that juvenile bull trout presence is very low compared to similar streams in published studies. Scott is interested in analyzing flow data in an effort to determine if Box Canyon is "flashier" than other streams in the Yakima Basin, such as the SF Tieton and Deep Creek, which have stable bull trout populations.

The surveys at Box Canyon and the Upper Kachess River will be repeated again this summer. Scott is also planning to complete PHABSIM modeling for rearing habitat in Box Canyon and Kachess and determine the relationship between fish density and key habitat parameters. He will be relying heavily on volunteers to assist with survey efforts.

5. Upper Yakima Salvage Proposal

Scott Kline gave a brief overview of the draft Upper Yakima Salvage Proposal that William Meyer is working on. The goal is to monitor and record the timing and extent of dewatering in the Upper Kachess River and Gold Creek, and when a problem is identified, decide whether it's best to move the fish upstream or downstream based on size class and stream flow. WDFW will be relying on volunteer contribution to complete this effort.

6. eDNA Sampling

Cassandra Weekes updated the group on eDNA sampling. A sub-set of the Bull Trout Working Group met on March 7th to identify the project's goals and objectives, and prioritize sampling locations. After the March 7th planning meeting Cassandra sent out a survey to regulatory agencies and stakeholders in the Yakima Basin for further input. Based on feedback from the meeting and survey, Cassandra determined the project's goals, objectives, and sampling locations.

Mid-Columbia Fisheries is in the process of hiring an AmeriCorps member to be an eDNA project lead, purchasing sampling equipment, contracting with the USFS Rocky Mountain Research Station to analyze the samples, and planning logistics of camping and sampling.

There was a discussion of whether the cost to utilize pack mule service to access the upper reaches of the Cle Elum, Cooper and Waptus is worth the investment, or whether those funds would be better utilized to sample additional locations.

7. Nutrient Enhancement

Dave Fast presented the Yakama Nation's draft nutrient enhancement plan and asked the group for feedback. Dave discussed several factors that may be limiting in Box Canyon Creek bull trout, such as: available rearing habitat, available spawning habitat, passage to spawning habitat, predators (fish, birds and humans) and nutrients. The Keechelus-Kachess Food Web Study suggested that the reservoir has the capacity to support a larger population of bull trout under the current management, yet abundance remains low.

Solutions to low nutrient levels include the application of fertilizer (generally used in sockeye rearing lakes), carcass analogs (processed fish), or salmon carcasses from hatcheries. Of these, salmon carcasses are the most viable option; the carcasses are readily available at Yakima Basin hatcheries, since they are in-basin fish there would be less concern about introduction of pathogens, but they would still be sterilized using a heat treatment protocol developed by the USFWS that eliminates pathogens.

A discussion was held about monitoring. It concluded that handling juvenile bull trout in the stream would place unneeded stress on an already imperiled population, therefore other monitoring techniques are recommended, such as macroinvertebrate sampling and/or water quality monitoring for nutrient availability.

8. Potential Project: Kachess River Large Wood Replenishment

Mitch Long presented a proposed large wood replenishment project on the Upper Kachess River. The Forest Service is felling 100-150 hazard trees at Kachess Campground and there's potential to place the wood in the Upper Kachess River. Seasonal dewatering occurs in the lower ~1 mile of the river presumably due to past land use management (mining, logging, road construction, etc.) and reservoir operations at the mouth.

The proposed timeline is to convene a technical working group meeting in April 2017, fly LiDAR in May 2017, move logs to the landing in June 2017, and conduct a comprehensive field assessment from June-October 2017, convene a technical working group in October 2017, finish preliminary designs in October 2017, complete permitting November 2017-July 2018, and implement the project in July-September 2018. The total cost is ~250,000 with $45,000 in match (donated wood) from the USFS.

9. Vulnerability Assessment update

Alex Conley gave a brief update on scheduling a 2-day workshop regarding Jason Dunham's Vulnerability Assessment. The 2-day workshop would include learning what data went into the modeling effort, what the current status is, and how the Vulnerability Assessment is used in conjunction with the DSS modeling. Alex will follow-up with Jason Dunham.

10. Closing Items

Suggested topics for the next meeting: DSS modeling, Upper Yakima Salvage Proposal, eDNA, SF Tieton Passage and 30% design, Gold Creek preliminary designs, Trap-and-Transfer Project at Clear Creek Dam.

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