

## December 6, 2022 Yakima Basin Bull Trout Work Group Meeting Notes

Present:

Aimee Taylor (MCFEG), Kayla Gallentine (YBFWRB), Zac Zacavish(MCFEG), Sam Scherck (MCFEG), Pat Monk (BOR), John Reeves (Resident), Jason Romine (USFWS), RD Nelle (USFWS), Jose Vasquez (USFWS), Scott Kline (WDFW), Steve Caromile (USFWS), Todd Newsome (YNF), Alex Conley (YBFWRB), Shubha Pandit (YNF), Russ Byington (YNF), Michael Humling (USFWS), Josh Rogala (WDFW), Connor Cunningham (USFWS), Brittney Beebe (USFWS), Gary Toretta (USFS), Craig Haskell (USFWS), Gene Shull (Okanogan-Wenatchee NF), William Meyer (WDFW), Kathryn Furr (USFS), Mitch Long (KCT), Richard Visser (BOR), Katy Pfannenstein (USFWS).

### 1) Updates and Announcements

#### 1) Steve Caromile: SSA

- The species status assessment has gone out for tribal review, and then will be available for review by BTWG.

#### 2) Joel Freudenthal (via email): S.F. Tieton Bridge

- On track for final design for mid-February.
- First round of review on road easement survey is done.
- Finalizing the construction grant with DOE and Reclamation.
- Will also apply for more funding from USFWS on their fish passage grant. Estimated costs are dropping but still short on construction funds by \$400-600K.
- Would also like to secure \$500K for monitoring and corrective actions following completion.

#### 3) Richard Visser: BOR updates

- Reclamation will be the lead Federal agency on the SF Tieton Project. Reclamation is looking to add funds to this project beyond the 700K to fill the existing funding gap. We should know by early next year if we will have the funds to do so.
- The Clear Creek schedule is being adjusted due to some environmental compliance issues so it looks like we will award a contract in the Fall of 2024 and hopefully start construction in the spring of 2025
- Janine Empel is the PM for the Tieton Dam Fish Passage project and is getting things lined up to “restart” the project. We hope to start construction following the completion of Cle Elum Dam Fish Passage project. This should line up full passage in the Tieton System by the early 2030s.
- Reclamation is also looking into providing some funding for the Gold Creek Project if the USFWS grant is successful.

#### 4) Russ Byington: La Salle Bull Trout Hatchery update

- Rescued fish are on track for growth with last year’s crop. No health issues to report and so far, no mortalities. Planning on release as usual late May/early June. Just Gold creek fish, nothing to salvage on Kachess (only 3 bull trout YOY found).

- Noted previous bacteria outbreak on outer skin on Kachess tank fish. This year Gold Creek fish are in Kachess tank, so we will see if the bacterial outbreaks are linked to the tanks or the source of the fish.

#### 5) Craig Haskell and Connor Cunningham: USFWS Monitoring

- Bull trout 10-year plan. Noted multiple rounds of input. Habitat sub-committee gave tentative approval, follow-up meeting to finalize document.
- Bull trout antenna units moved in storm. Gold has none in upper reach. G90 has been fixed. Rimrock/SF Tieton needed some work. Several of the rimrock / clear lake antennas still in place.
- Connor - Submersible antennas from BOR are working well. Success in lower Kachess river, seem to be sturdier.

#### 6) Gene Shull: US Forest Service Update

- Central Washington Initiative (CWI) national bipartisan funding roll out. This funding is generally for reducing wildfire across the landscape and watershed health.
- Looking to do a roll out to explain the program in January or February, **will present at February BTWG meeting**. The gist is a 5-year aquatic watershed resilience program with \$3-4 million available for priority actions in aquatic habitat restoration on forest land.
- Looking for partnership opportunities for projects starting 2024-2025.
- Question from Todd: Is the forest service going to do big commercial thinning projects or to use the wood for fisheries projects?
  - Gene: What are the sideboards of CWI? Terrestrial thinning (non-commercial AND commercial components) in addition to watershed resiliency. 3-4 Million is set aside for aquatic actions.
- Question: How will funds be dispersed across the different jurisdictions? Evenly dispersed or a competitive grant round?
  - Gene: Targeting high priority actions identified via partners, and higher watershed root cause stressors.

#### **2) Redd Season Re-cap by Aimee Taylor**

Preliminary results:

## REDD COUNTS BY STREAM

Stream Name	Definite + Probable Redds
Deep Creek	95
South Fork Tieton River	93
Indian Creek	75
American River, Union Creek, Kettle Creek	22
North Fork Tieton River	16
Rattlesnake Creek	10
Box Canyon Creek	9
Crow Creek	6
Gold Creek	6
Middle Fork Ahtanum Creek	3
North Fork Ahtanum Creek	3
Kachess River	0
<b>TOTAL</b>	<b>338</b>

Aimee – Total Redds across the basin = 338

Final report from Marc Divens in April

Used redds classified as “definite” and “probable” in the final count. Generally trending downward for all populations.

SFT lowest since 1995 survey

Rattlesnake creek burned in the Schneider Springs fire, where redds have been found historically. A massive channel spanning rock dam was found lower down on the stream in September, with many additional partial dams. This allowed for algal growth and may have been there for multiple years. Other participants noted there have been problems with this around the bridge, but the large dam was found up river near off road vehicle traffic on closed access points.

Naches arm was easier to survey, though N. F. Tieton was dewatered, stranding redds. Participants discussed how it is normal for this reach to jump around. It is not actually a very defined river channel paired with a historically dry July-October this year. Gary Torretta called it a “losing reach”, flows go into a wetland, which tends to pump water back out further downstream. Last pass was completed October 13<sup>th</sup> (where much of the spawning index was dewatered). One adult was found at the top near the falls.

Indian Creek: still a passage barrier in North Spring. Discussion on removing this barrier because up-stream was a heavy spawning area in years prior to the barrier. Overall count was up from recent years.

Scott – we should consider removal of debris barriers on Kachess and Indian. HPA in the works to allow for modification of dams and other fish passage barriers.

Upper Yakima Basin conditions were generally poor.

Box Canyon Creek: The first two passes were good, whereas the last two were poor due to the high-water conditions. Injured fish observed in both Kachess River and Box Canyon due to otter activity

No redds observed in Kachess River. Only YOY found this year in Kachess were near extreme upper reach.

Todd – Kachess and Box adipose fin presence should be noted when live fish are observed.

Gold Creek was tough. First two passes the river was still disconnected. At least 3 Redds were constructed in the inundation zone of the reservoir and there is concern for backwatering and poor juvenile rearing conditions.

### **3) eDNA: State of the Science, Bull Trout Data Gaps in the Yakima Basin by Jose Vasquez**

Jose Vasquez's presentation will be uploaded to YBFWRB BTWG website pending approval from USFWS.

Overview:

449 total eDNA samples collected in the Yakima basin between 2017-2020, more or less split between USFWS and MCFEG. Samples were mostly collected in areas predicted to be able to support Bull Trout by the climate shield model using standard Rocky Mountain Research Protocol methods.

eDNA is an effective way of finding rearing populations but is not aimed at low density populations. Negative Results = No rearing populations, but can't rule out intermittent use by subadults or migratory adults. No reason to go back unless new low-density populations are suspected.

Positive Results = More complicated. A source of BT DNA was present at the time of sampling but that does not always mean fish were present. Predator transport, hybrid populations, and contamination from outside sources like waders (also known as allochthonous sources,) can all lead to positive results in the absence of Bull Trout. A low density positive needs to have a survey to follow up/ground truth. eDNA resampling is advisable when results are unclear.

Samples to date have had no hits in the Naneum, Swauk, Teanaway, Wenas, SF Manastash, NF Taneum, Big, and Little Creek watersheds- conclude no rearing pop at time of collection- may have intermittent/migratory use- but posit no need for future distribution research unless change/new evidence indicates need

Positive Results in Cle Elum:

4 of 84 samples, unclear results. Allochthonous DNA perhaps? Next steps – recollect eDNA if possible (Confined to Waptus/Cooper, as mainstem is unsuitable habitat). Discussion ensued about re-sampling this area, but there is not currently USFWS funding for that.

Cabin Creek watershed – low concentrations found in one out of 15 total samples. Suspect result. Does not rule out migratory adults.

Little Naches Watershed – Likely present in the surveyed areas. Next steps should be to verify BT presence with active capture or telemetry.

Examples from eDNA in Methow, Wenatchee, and other creeks

Rocky Mountain has an approximately 9-24 month eDNA data processing wait time. It costs \$85 per sample, and more samples = better.

## Data Gaps

eDNA has been collected only in Climate Shield Model predicted habitat.

Should any areas not included in the CS model be surveyed? (Middle and West Fork Teanaway?  
WM says “no, they are just too hot”)

Delatte Creek in the Cooper watershed?

There are still 203 unsampled Climate Shield predicted sites with >50% predicted occupancy probability in critical Bull Trout habitat. Discussion about whether these should be sampled:

Adults seen in Nile Creek after electroshocking (2014-15).

Wildcat Creek has high probability in the Climate Shield Prediction Model.

Clear Creek for reintroduction? Pristine habitat but loads of Brook Trout.

Cowiche Creek?

South Fork Little Naches – Zac can snorkel

Alex – use priorities to drive momentum for funding.

Brook trout eDNA in YB: 109 unsampled Climate shield sites

N. F. Teanaway (Jack Creek) positive for Brooks. Other creeks, negative. \$35 per sample to rerun Bull Trout samples for Brook Trout DNA. Might make sense to re-run.

## **4) Upper Yakima Project Updates: Kachess River and Peek-a-Boo Falls**

### **a) Mitch Long – Kachess and Gold Creek Restoration**

Kachess River Restoration: Secured all the funding to implement project from USFS and YBIP, project will proceed in 2023. ESA window and timing will be tough to avoid spawning fish and spotted owl habitat protection. Currently in negotiations with Columbia Helicopters for assistance with wood.

Gold Creek Restoration: Currently in the design/permitting process, with consultation in progress and working on NEPA documents with contractors - -30% designs for 2 miles instream restoration. YBIP funding should allow enough funds to get through NEPA final designs. Goal is to hopefully begin implementation in 2024. Grant to FWS and another by the end of 2022.

Mitch hoping to talk to MIPT re Gold Creek fish rescue in complicated area like the pond

Scott asks: is there a path forward on figuring out full on consultation or streamlined?

If it requires further scrutiny Mitch would rather just go the full consultation route.

Gary: RBO did regional restoration team review – didn't feel like it was very arduous but was a more complex project with more potential for fish handling.

### **b) Scott Kline – Peek-a-boo falls fish passage**

Habitat is at least as good if not better above the falls as below. It's just such a small population that only 3 out of 8 years have had enough adults for trap and haul. Main idea has shifted to providing access to passage and letting the fish go up on their own. Question of whether to seed upstream of peekaboo with rescued YNF juveniles? Or just relocate YOY?

A survey is needed to look at passage design options, BOR might be able to get funding for design. Richard – may have additional BT funds for 2023. Also looking at how BOR supports the county on sf tieton and possible gold creek.

Box Canyon Reintroduction – Dispersed recreation concerns remain. Scott is working with Craig to get Cle Elum Ranger districts to add Box on the BT plan to confront dispersed camping issues. The BTTF can commit to more frequent visits up Box Canyon.

### **5) Jason Romine - Kachess Acoustic Telemetry Updates**

Tags are surgically implanted to evaluate fish movement patterns, habitat use, and survival

20 tags were implanted in 2022 into La Salle reared juveniles. 15 are pinger tags, 5 are temperature/pressure sensor tags.

Three individual sub-adults from 2021 are still providing data. Habitat use is varied (2 prefer Little Kachess, 1 prefers Big Kachess)

One adult of Box canyon origin is being tracked.

2022 release: TP sensor shows one fish likely removed from the system (tag disappeared) within one week of release and onemortality event (tag data shows pinging in one location at one depth and high temperature)

La Salle reared Bull Trout genetics are back, at least 2 juveniles are considered Box Canyon origin despite being collected in Kachess River. Gives some more evidence of mixing between populations.

Scott would like to have a report of the data showing disappearance of tagged fish (that it seems like anglers are removing Bull Trout) to add to Kachess Creel survey data as WDFW discusses fishing impacts and possible regulation changes.

Otter caused mortality is a concern at Kachess per observations of the group.

A PDF of presentation will be sent to the group and posted on BTWG webpage. Jason notes: Be careful with interpretation of these results

### **6) Aimee Taylor: Temperature Data Discussion**

End Goal: interactive map with data from throughout basin. Including all the sites, data from within sites, summary stats for each site, and other analysis options.

Purpose: Coordinate and collaborate on where to put loggers, where to take out loggers, who is monitoring what, use resources efficiently among and within different entities. Also data would be

available to anyone who needs to use it for whatever projects (i.e we don't need a WDFW temperature logger 50m away from a YN temperature logger on the same stream reach). For this to work ALL DATA COLLECTION / PROCESSING NEEDS TO BE STANDARDIZED

At this point data exists in each agency / entity's individual storage method. We need to find a way to efficiently share data. A standardized protocol for logger setup, QAQC, file naming, etc is also needed.

Aimee would like to open dialogue with all temperature "leads" from different entities and create a plan together. Email her if you would like to participate.

### **7) Bull Trout Work Group Plan and BTAP Review**

Alex reviewed the draft work plan for the BTWG in 2023, including administrative items related to running meetings and maintaining records, monitoring and analysis, planning, and coordinating with and expansion of Bull Trout Task Force.

#### **Timing and Topics for 2023 Meetings**

Cross Reference with other planning committees to set date, avoiding the YBIP land committee per Mitch. Next meeting to be held the 2<sup>nd</sup> week of February. Perhaps aim for Thursdays in general?

- Topics for next meeting

- discuss tying eDNA next steps to reintroduction proposals; also address at next MIPT meeting?
- present temperature protocol
- discuss BT redd master database (how to make user friendly for sharing data? version control, etc.)