

## Bull Trout Working Group

Meeting Notes: February 16, 2023

1:00-4:00 PM

Present: Paul James, Shuba Pandit, Bob and Sue Mckelenberg, Katy Pfannenstein, Russ Byington, Todd Newsome, Sam Scherck, Jason Romine, John Reeves, Kelsey Harbick, Eric Aker, Kevin Haydon, Andrew Matala, Brittany Beebe, Zack Mays, William Meyer, Aimee Taylor, Zac Zacavish, Kayla Gallentine, Kathryn Furr, Gary Toretta, Joel Hubble, Pat Monk, Scot Kline, Connor Cunningham, Jose Vazquez, E Torrey, Kevin Hayden.

### Updates and announcements

AFS – WA Char Symposium

Salmon Recovery Conference,

- Aimee will be presenting
- Alex will be doing a short presentation

RFP March 1<sup>st</sup> Deadline, USFS, WDFW Conservation Projects.

Requesting funding to resample eDNA in Waptus, Little Naches, eDNA cost estimates to rerun for brook trout

Kelsey YNF also to apply broad range eDNA. Coastal Tribal Fisheries reading for invasive species etc.

Separate assays for all fish species, mussels, mammals etc.

- Run eDNA for all fish assay in Satus, Toppenish – Tributaries, Logee Creek, S. Fork Ahtanum.

Zotero Library – Up to date again. Links are all repaired. Don't need an account to access the library, just click link to direct to YBFWRB files

- Redd survey reports
- Publications
- Old Email Communications

Temporary File Folder- Aimee is asking for links to titles of which appropriate files are missing. Send updates to Aimee to add. informal reports vs official publications.

Katy Pfannenstein

National funds, \$2 Million. Proposals due in September. Grants.gov

Scott – Steps needed before bull trout moved above Peekaboo Falls. Still have to do an elevation survey. Recreation issues need to be addressed with a Dual Survey by the Forest Service. The Cle Elum Biologist Vacancy adds complications.

Kathryn Furr- Last Habitat Sub-Committee meeting: recap of Feb. 8<sup>th</sup> mtg with preliminary results on Species Status Assessment which has not had any priority changes. The Yakima Basin remains rated as Medium on the Resiliency Scale. An update of the un-released WDFW statewide BT recovery framework projected to be released in 2024 (for statewide unified processes).

Connor – USFWS plan to shock N.F. Tieton to determine if trap and haul fish are spawning and contributing to the population. Attempting to capture juveniles for genetic analysis. Scott has concerns

about damage to fish from electric burns. Craig to look at contribution to overall Tieton populations with fin clips. The goal is to find YoY and Juveniles that are products of trap and haul program.

### **Yakima Bull Trout Video**

Mitch Long with KCT working with WDFW (?) towards creating an overview video of Bull trout in the basin with stories like Gold Creek and Kachess. Aimee, Zac, and Sam will work together to produce materials.

### **Russ Byington– Overview of rescue efforts and captive rearing.**

- 95 from Gold Creek being reared currently, 0 from Kachess River. Lessons learned and adaptive management - reduce density, increase feeding, and increase holding time from 8 months to 10 months. Measure, PIT tag and hold for longer to understand tag retention.
- Reared bull trout tagged with acoustic tags:
  - 10 in Keechelus (with mortality)
  - 50 in Kachess
- Pit Monitoring of La Salle bull trout
- Gold Creek: Most detections of adult and released La Salle fish are found at the mouth. Additionally, 3 La Salle fish were found in other tributaries of Keechelus Lake (Rocky run, Coal creek). Future goals for the project will include increase in tags. Unfortunately, low release numbers have resulted in low survival and low returns in Gold. Detection Probabilities? CJB model – Kachess river goal is to monitor directionality and detection probabilities.
- Discussion: How do we move adult fish past dewatering?
  - o Mules for fish transport? Gold creek dries up to the wilderness barrier. This could be an appropriate approach. Aimee mentioned upstream dewatering this year almost all the way up to the falls
- Paul James to send information on Bull Trout findings in tributaries, including length and pit tag.
- Discussion of Kachess river redds/YOY in year 2022. No redds found, only 2 YOY rescued from dewatering reach.
  - o Upstream of Mineral Ck confluence in perennial flow 15 YOY counted during demographic survey

### **Mecklenberg Updates**

- Zoning change proposal. Mardy Lakes property (DOE, WDFW, WSDOT), Planning commissions have been approved. Conservation NW to file an Appeal.

## Scott 2022 Demographic Results

- Box Canyon – Good News! Distribution is uniform. There are signs that the woody debris is retaining YoY and older juveniles. There are so many variables affecting YoY that it's difficult to draw any conclusions on whether trends are downward...
  - o YOY In Box canyon are appearing to trend downward (low r-squared) whereas older juveniles are on the rise.
  - o Discussion of increased juveniles = cannibalism = decreased YOY
- Indian Creek – Great Results considering not having been surveyed in years.
  - o Many YOY and juvenile bulls
  - o One adult hybrid captured and culled
- Deep Creek
  - o Not as many bulls as brook trout
- S.F Tieton – Goal to prioritize more demographic surveys and reaches
  - o Initial survey shows fairly low density...
- Kachess
  - o Similar densities as other streams
  - o Intend to continue monitoring through restoration.

Discussion: density = related to habitat available? Would like to bring Paul into survivability research. Folks agree there is more demographic work to be done before collection for reintroduction plan.

S.F. Tieton

Indian Juveniles

Deep (?)

Questions arise about different results across years. Shuba – Flow and year relationship? Scott notes that surveys are conducted in a similar timeframe, mostly within baseflows. William mentions crew sizes (CPUE) are pretty consistent each year.

Scott mentions more Brook Trout in Box Canyon than ever seen previously (still low – about 5 EBT). Survey efforts help quantify brook redds? Deep creek inundated by Brook trout... Where are they spawning? Are they moving around in the lakes? Maybe dropping down from upper lakes.

## eDNA – Discussion / Tying to Reintroduction, Field Work 2023-24

- Resampling Waptus upon Jose's recommendations. Another pass is needed to confirm past hits.
- Alternate sources of funding and analysis with MCFEG. Labor is not an issue although analysis might be in terms of funding. Talk to Alex before the end of 2023 about this.
- Rocky Mountain Research Station / WDFW Genetics lab may be quicker turnaround.
- How strong of a foothold is in Waptus? Could we run broad spectrum eDNA like Kelsey mentioned – to determine brook and bull at same time?

- Jose explains: This method uses meta barcoding. It is traditionally less precise, though there is some evidence MBC is getting closer to accurately scanning for multiple species (this technique tends to be more prone to inaccuracies). Broad spectrum eDNA scans are 2-3 years out to being sensitive enough for species targeted processing, and equipment is typically only available at universities.
- Is it worth doing eDNA during spawning seasons? Jose – When done in 8-mile it worked well. More negatives indicate intermittent adults. Jose suggests placing a rush order in to RMRS before submitting data to streamline and speed up possessing timeline.
- N.F Little Naches? Upper? Possible 2-day funding for the samples.
- F&W Grant to also cover Cooper River? There are reports of sightings.
- Exploratory funding – Alex and Kevin to talk about Ecology funding and other sources. 2017 Waptus BT?

### **Aimee: Yakima Basin Temperature data**

- Goal: Standardize, share, and store water temperature data
- Logger – most important metadata is GPS coordinates in decimal degrees where logger is placed
- Logger name = site ID. Some long term site names, others are new / assigned
- Sample Frequency/logging interval – 4 hours is too long (need to discuss), all units should be SI
- QAQC shiny app / tool used by USEPA. Would like to incorporate standardized QAQC process
  - Produces report with flagged records (suspect & fail), can also use for summary stats
  - Link: <https://nalms.shinyapps.io/ContDataQC/>
  - Hobo Loggers – Might have varying time zone defaults (Double check before deploying)
- Collaborate on where temp logs are set up.
- Data status and needs:
  - Some historical data from YN and USFS
  - YNF 1990-2015
  - USFS 1996 – 2010
  - WDFW/TU 2018-2022 (Teaway)
  - Big gap between 2010 to present.
- Hasn't added NorWest to the map yet
- Please send any summarized or raw data to Aimee
- Richard Visser – What data does Aimee has for the lower river? Not much.
- Share raw files but also inform Aimee of metadata.

- She will be setting up a form/ File upload to YBFWRB website
- The end goal is a map product.
- Barriers to data sharing/ standardization
  - Whether probe has been calibrated.
  - Formatting data may be one extra (annoying) step. but send to Aimee with or without formatting.
  - Discussion of a calibration day?
  - Coordinate before people set up for the season. Volunteers for smaller discussion? Kat Satnik and Brittany Beebe will attend
  - **Smaller meeting to convene on March 13 2:00 PM. Please email Aimee for Zoom Link**

#### **Setting dates for 2023 Bull Trout Working Group meetings –**

- Aimee sent out a list of tentative dates for work sessions. She will send calendar invites
- Plan to begin working through Action plan updates: What have we accomplished?

#### **Quick discussion of vehicle recreation in Keechelus reservoir bed / boat launch**

- Cle Elum District has jurisdiction now, instead of splitting management between two forests. This will help move forward.
- Kathryn – Plan A vs Plan B
  - YN support letter – long term solution with Gold Creek valley restoration project October 2023
  - Gold Creek, Lake Keecheless, Cultural Resources meeting in February 23.
- Aimee, Zac, and Sam to work on BT Outreach