# Upper Salmon Basin Watershed Program Advisory Committee Meeting Wednesday, March 9<sup>th</sup>, 2022 @ 1:30 p.m. USBWP Conference Room

### Notes

<u>Attendees:</u> Daniel Bertram, Greg Schoby, Mike Edmonson, Leah Madsen, Bryce Oldemeyer, Tom Curet, Rosana Reith, Harley Wallis, Mike Whitson, Bryce, Kelly Shade, Shannon Williams, Mike Overacker, Steve, Mike Ackerman, Rob Richardson, Jen Smith, Graham Freeman, John Lofredo, Mary Overacker, Justin Petty, Brian Hamilton, Brian Drake, Jessica Buelow, Jude Love, Zack Zalada, James Whittiker, Bruce Mulkey

#### Agenda Modifications: None

Approval of Meeting Notes: Notes from the January 5, 2022 meeting where approved.

### **Presentation**

- History of Deadwater Brent Beller (IDFG)
  - Historic mining i.e. diversion of Moose Creek into Dump Creek increased flows and drainage area resulting in downcutting, slope failures and a courser bedload deposit in the alluvial fan. This has caused a narrowing of the salmon river channel slowing flows upstream. The slowed upstream flows has resulted in annual icing issues. Where frazil ice clings to surface ice, causing a hanging dam resulting in scouring forces at deadwater.
  - Ice jams increase the river stage and impacts many miles of river, occasionally above the town of Salmon. Has resulted in winter flooding. The public demanded action after floods in 1982 and 1984, which resulted in the flooding damage off the Lemhi River.
  - Alternatives to address the icing issues were developed by the USACE but were largely eliminated alternatives. These included levee system improvements for Salmon (too high a cost), flood proofing structures in the Lemhi (would still result in stranding and access issues), ice barrier upstream of Salmon (cost/benefit issues), fill deadwater reach (not guaranteed to eliminate ice jams), air bubbler system in deadwater (too low water temps), ice breaker boats, dyanamite ice jams in the deadwater area, heat deadwater reach using a wood boiler (too much water), dusting of the ice (low sunlight/large area), Diverting the Lemhi River into an old power ditch (could flood new areas), Spur dikes in deadwater (high maintenance costs, similar outcome as filling deadwater).
  - The Corps drafted an EIS in 1985 with mixed public support for any channelization alternative. As a result, the final recommendation was that the corps could not recommend any of the alternatives.
- Deadwater Predation Study Mike Ackerman
  - Predation is a known source of mortality for juvenile salmonids but not well understood above the reservoir systems. Deadwater slough is known to support predators and is a migratory corridor for eight Chinook salmon populations.
  - Some earlier studies on sockeye and chinook indicate that the deadwater reach is showing a lot of salmonid loss.
  - The study that Biomark completed was to estimate abundance of the Northern Pikeminnow, document predation of NPW on juvenile Chinook salmon, estimate food consumption potential of NPM, and evaluate impacts of local Chinook populations.
  - Gastric lavage was performed on fish caught to analyze their stomach contents
  - The bioenergetics model was used to estimate the grams of fish that a signle NPM must consume in order to maintain its body weight. The model was run for the time that juvenile salmon are actively migrating downriver. It estimated that an individual NPM needs to consume 44g of fish during the fall to maintain their body conditions which is substantial given the abundance estimations.
  - o 1663 individual NPMs were caught, mostly in the fall, and had an overall mean length of 15.3-inches
  - Abundance estimators were used to estimate how many NPM were in deadwater slough. Estimators varied from 12,500 to up to 37,000.
  - Did confirm fish contents in the stomachs of 44 NPM, many of which were Chinook. NPM lack true stomachs, so gastric lavage can be difficult
  - <u>Further research is needed on predation in upriver habitats, quantifying predation rates, and placing</u> predation in context of other limiting factors.

<u>Tech Team Update</u>: ranking was done for the muddy springs culvert replacement project. Presentations were given on the 2021 IDFG upper salmon basin redd distribution study

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Advisory Committee Membership Update

Governor's Office of Species Conservation – Graham Freeman was introduced as OSC's new Aquatic Species Manager

Vacant Positions

Shoshone – Bannock Tribe Custer County Commissioner

Schedule Next Meeting

May 4, 2022 at 1:30 pm