

# Snohomish Basin Salmon Recovery Technical Committee Meeting Summary

September 13, 2022, 9:00—11:00; Zoom

## Attendees

Matt Pouley, Tulalip Tribes  
Mike Rustay, Snohomish County  
Gretchen Glaub, Snohomish County  
Carston Curd, Snohomish County  
Alex Pittman, Snohomish County  
Andrea Mojzak, King County  
Ashley Kees, WDFW  
Brett Shattuck, Tulalip Tribes  
Darcey Hughes, SWM  
Dylan Collins, Tulalip Tribes  
Gwendolyn Hannam, WDFW  
Heather Griffin, City of Everett

Jim Shannon, Port/City of Everett, H&A  
Josh Chamberlin, NOAA NWFSC  
Keith Binkley, Snohomish County PUD  
Kevin Lee, WDFW  
Kollin Higgins, King County  
Lindsey Desmul, WDFW  
Marty Jacobson, WA Dept of Ecology  
Morgan Ruff, Tulalip Tribes  
Paul Crane, City of Everett  
Pete Verhey, WDFW  
Ryan Lewis, Snoqualmie Tribe  
Steve Hinton, Tulalip Tribes

## Intros and Agenda Review

Mike Rustay and Matt Pouley opened the meeting with introductions and reviewed the agenda.

## Regional and Basin updates

### Technical Committee Staffing update

Emily Davis left her role at King County as her contract expired. A kudoboard was set up to thank her for her work on the Technical Committee today and the committee was encouraged to leave a message. The co-chairs will keep the committee updated as the Snoqualmie Team works to fill the vacancy.

### Operating Rules

Mike reflected on operating rules and roles for the co-chair position and encouraged the committee to ask questions and pursue alternative operating procedures as needed.

### 2022 Salmon Recovery Funding Board (SRFB) Grant Round Update

Gretchen Glaub presented the outcome of the grant round; earlier this summer, the Forum approved the Technical Committee's ranked list. Between June and September, Tulalip Tribes' Helicopter-Placed Wood Project on the Pilchuck River was deemed ineligible for funding and was removed. The list wasn't re-ranked, but it made the ranked list shorter. Currently, several projects are lacking funding, but additional RFPs and grant programs are being sought by the Lead Entity to fully cover the ranked list.

It is anticipated that the Governor's budget and subsequent legislature operations will also change the list's funding status by spring of next year.

- *Puget Sound Acquisition and Restoration fund* (PSAR) will need \$65M from the State Legislature for our project list to be fully funded. Legislative outreach will be needed to secure this amount.
- Our projects for the *Floodplains by Design* grant program were ranked third on the list and well within the typical funding the program receives.
- A few projects in the basin are ranked pretty well on the *Estuary and Salmon Restoration Program* (ESRP); there are \$25M in project asks for the program and we'll need only \$9M to be funded by the legislature for the allocation to be directed to the projects in our basin.

- *Fish Passage Barrier Removal Board* – lots of projects were submitted from around the state, totaling \$86M requested by local entities. Projects on Sexton Creek and Langlois Creek were ranked fairly high, but most of our basin's other projects weren't ranked very highly.
  - Morgan Ruff talked about Tulalip Tribes' efforts to see how and if program can better serve our basin, or if the Board's biases are a substantial barrier to participation.
  - It was mentioned that the Board's scoring appears to be biased against urban areas of Puget Sound, and suggested to discuss with WRIA8, which has had similar challenges.
  - The City of Everett had also ranked low and is reassessing participation in the program.

Stream Flow and Water Quality grant programs are now open or opening soon. Many programs are removing match requirements, like Ecology. Heather Griffin mentioned that water quality maximum was raised from \$5M to \$10M.

Lots of opportunities will be coming down the pipeline (especially from the Bipartisan Infrastructure Law funding). Morgan detailed the efforts to simplify and easily identify actions needed to move forward with project lists. The committee was asked to keep Morgan and Gretchen in the loop projects experience delay or cost overruns to help communicate and overcome those challenges with agencies.

#### Other Basin Updates

- Gretchen discussed outcomes from this summer's Legislative Outreach events; simple tours and talks have helped legislators and federal representative delegation to write letters of support for projects.
- Earlier this month, the Snohomish Basin Salmon Recovery Forum met in person for the first time in a long while to remember Terry Williams and also tour Thomas' Eddy. Gretchen shared that longtime Forum member Jim Miller had passed away as well.
- Summertime tours of Snoqualmie Valley floodplain projects went well, and Andrea Mojzák mentioned future updates will be presented to the committee at a later date.
- The Puget Sound Salmon Recovery Council (PSRC) will be discussing a 10-year strategic plan for the PSAR program, defining what an 'emergency' is in the salmon world, and how funding will be moved in those instances. Stay tuned from Gretchen, Keith, and Morgan for input into those discussions.
- Josh Chamberlin announced that the Puget Sound Partnership (PSP) completed a study design report to assess the cumulative effects of restoration in the Whidbey Basin. Information and updates are posted to their website: <https://www.psp.wa.gov/cumulative-effects.php>

#### **Blue Heron Slough Update**

Jim Shannon, from Haley & Aldrich, Port/City of Everett, discussed the Blue Heron Slough Mitigation Bank's September 1 unveiling, which was attended by many local, state, and tribal entities. A drone video of the current project status was shared.

The project comprises 350 acres of estuary habitat facilitated by four breaches, two of which have already occurred this summer. A fair amount of grading was done on the inside of the site to create more mature channels. Jim noted that this is a mitigation project.

Committee members were encouraged to look while driving by on I-5 during high tide to see the changes happening; also, Olympic View Park in Marysville has a safer view! Members noted the project has been decades in the making and that it took a lot of collaboration.

### **Tulalip Beaver Project**

Dylan Collins, Assist Wildlife Biologists for The Tulalip Tribes, presented an update from the Tulalip Tribes' Beaver Program to the committee. Molly Alves leads the program. The project began in 2014 after Terry Williams attended a summit with several goals:

- *Tribal Sovereignty* – Beaver relocation used to be illegal, but The Tulalip Tribes are exercising treaty rights.
- *US Forest Service (USFS) Memorandum of Agreement* – USFS agreed to receive relocated beavers on the land they manage.
- *WA State Beaver Bill Amendment* – Law was amended with bipartisan support for beaver relocation on the western side of the state.
- *Certified Beaver Relocator Program* – WA Department of Fish and Wildlife (WDFW) developed a pilot program, and The Tulalip Tribes are in the fourth year of hosting technical training
- Trapping and relocating 10- to 70-pound beavers.

Historic fur trapping decimated the beaver population, and human engineering during their absence has significantly altered hydrological pathways. While beaver populations are recovering, their dams can be part of the solution and restoration of ecosystems.

Beavers are complex creatures and not fully understood. After trapping was outlawed in 2000, local complaints skyrocketed, especially since culverts can easily be blocked by their engineering and territorial habits. Overall, there's a lack of knowledge around coexistence with beavers. The Tulalip Tribes' beaver program uses a three-step process for determining relocation sites based on Michael Polluck's work at NOAA. It incorporates information about stream gradient, power, width, and the valley width to rank areas of suitability. Then, sites identified with high to medium suitability are monitored for access, conflict, and food. An evaluation of the Skykomish River found that 75% of suitable habitat was unoccupied.

Nuisance beaver activity and families are identified by partnerships with counties, conservation districts, Beavers Northwest. Often this occurs where beavers aren't providing ecological benefit, like in detention ponds. The program utilizes game cameras at sites to ensure the whole family is trapped and relocated together. Processing occurs at the Bernie Kai-Kai Gobin Fish Hatchery. Several principles are employed to ensure safety and protection of the beavers, especially minimizing handling and contact. Beavers are climbers, so there's special architecture at the hatchery to make sure they don't escape! Beavers are weighed and tagged, and a hair sample is taken for genetic processing. Gender is identified by cloacal secretions – 'motor oil scented' secretions come from male beavers, while female's secretions smell like 'burnt cheese'.

The Tribes' program only relocates beavers from the same watershed in which they've been trapped from and excludes certain watersheds to minimize introduction of invasive species during the relocation process. Beaver families are relocated to a preselected area – they're hard to track, because they don't have necks for radio collars, and their environment is rough. Success rates are presented as percentages, but there's no data on predation or migration. Success metrics are difficult for funding and grants, because failure may occur when beavers leave their relocation spots.

- 263 beavers have been relocated
- 16 of 23 spots actively monitored are occupied
- 12 of 23 sites have dams built

The Beaver Program takes a lot of measurements and mapping: surface water storage, hydrological impacts, and biodiversity metrics are or have been employed to track changes at the relocation sites. Drones are used to map landscape feature changes during the fall, too. The program has found:

- 22x more surface water at relocation sites
- 2.4x more groundwater storage
- 2.3°C reduction of water temperatures

The program has encountered funding challenges, especially since grant funds are typically directed to one-time projects instead of long-term monitoring. The program is interdisciplinary and requires lots of staffing. In addition, human misperceptions of beavers, disturbance of natural areas (e.g. dispersed campsites, recreational trapping, inadvertent shooting) can impact site suitability. Climate change has also affected certain areas of the Snohomish and Stillaguamish River target basins.

The Tribes' have found the program to still be viable in these basins and are looking to grow capacity and continue relocation and monitoring. While there are no plans to expand geographically, The Tulalip Tribes are hoping to gain access to Department of Natural Resources (DNR) lands in the Snohomish and Stillaguamish watersheds for the program. The future of the program will make data more accessible, include camera traps and more drone surveys. Beaver Dam Analogs (BDAs) are vertical, in-stream, wood structures which have been employed on the Skykomish River to retain water and moderate flow throughout the year, encouraging beaver habitat. At these and other sites, data will incorporate GPS radiotelemetry, thermal imaging, an eDNA study for vertebrate assemblages at receiving sites, amphibian community surveys, biannual salmonid surveys, and elusive species monitoring. Some of this work will be assisted through partnerships with Washington State University.

#### Questions by the Committee

- Have any relocation sites been impacted by the ongoing Bolt Creek Fire near Skykomish?
  - Some relocation sites are quite close: there are 6- to 8 up the Beckler River, but on the east side of river, opposite the fire. Some sites were monitored on the west side, but carrying beavers across the river is tough because they're heavy. The team will fly the drone after the fire and are also interested in outcomes.
- What times of the year does the process occur?
  - Winter is when issues happen, but relocation is June through October. Access to hatchery and being snowed out of remote sites is the main consideration for timing. Landowners experiencing beaver issues are sometimes given options to bide their time while waiting for the relocation period. Most landowners have been dealing with beavers for years, so a couple of months' delay might not be a huge issue.
- Committee members from the City of Everett were interested in beaver trapping in detention ponds, near Silver Lake, and on Smith Island – the city's consultant generally makes nuisance beaver activity 'disappear' from detention ponds, but the city is excited by the possibility of proactive partnerships.
- Snohomish County has three categories of beavers – beavers in environments they can't thrive and are in conflict (e.g. storm water detention systems); beavers in places they may be managed

(e.g. refer to Beavers Northwest); situations where beaver activity can be watched. Keeping flexibility to keep beavers where they are is the priority, where possible.

- Lindsey Desmul shared availability of “look, don’t touch beaver dams!” signage which encourages Hydraulic Project Approval permit and benefits. Contact her or Kirk Lakey for them, there are a ton.
- Andrea Mojzak posted King County beaver resources:  
<https://kingcounty.gov/services/environment/animals-and-plants/beavers/working-group.aspx>

### **Meeting Wrap-up**

- Information for Life Cycle Model zoom for later this morning was shared.
- Andrea Mojzak shared that earthwork for the first half of the Fall City Floodplain project is wrapping up and will bring before and after photos for the project in the next couple of meetings.
- Next meeting is on October 4, 2022.

#### *Follow Up Items:*

1. People should post to the kudoboard by end-of-day
2. Matt will follow up with Josh Chamberlin about a future meeting discussion item