

Happy New Year!!

2024 Is Looking Brighter for Beavers Across the US and especially right here in WA State!

On December 14, 2023, Washington State Senators Jesse Salomon and Marko Liias filed a *beaver management* related bill to be reviewed during WA's 2024 Short Legislative Session. If passed, Senate Bill 5846 would kick off the development of our own WA State Beaver Management Plan to manage beavers more sustainably for all their benefits and their challenges.

Sustainable management = valuing beavers' important ecological role as a Keystone Species & Climate Resilience engineer, providing beaver coexistence services to WA residents to Live Better with WA's Wildlife, and modernizing management of lethal

conflict removal and sustainable recreational harvest. What a way to close 2023!!!



Photo Credit: Ben Goldfarb, author of *Eager: the Surprising & Secret Life of Beavers & Why They Matter.* A tail-slapping good read!!!

Call to Action

The 2024 Legislative Session just started this week and the Beaver Bill is already swimming towards its first committee hearing this Monday, the 15th. Offer your meaningful support for this *watershed* opportunity in one or more of the following ways:

- Register here before Monday at 11am and get your position of "Support" noted in the archived legislative record. It is an easy and influential way to provide support for the bill.
- A more influential approach is <u>submitting comments</u> on the Bill directly to committee or <u>emailing comments to our Legislators</u> with a heartfelt personal show of support highlighting why this bill is important for beavers
- The best way to influence WA's legislation is to share this opportunity with your friends and colleagues and encourage them to

submit comments or positions as well by the 15th at 11am. Please help spread the word!!!

We'll keep you updated on the life of Senate Bill 5846 as it hopefully continues to *flow* through the Senate.

<u>Drop us a note</u> if you submit comments on the Bill or email your Senator. We'd love to have 100 Beaver Believers reach out to our Legislators to let them know we CARE about all the amazing reasons to partner with beavers for water, for wildlife, and for a climate resilience WIN!!

2023 In Beaver World

What a Remarkable Year for Beavers & Beaver-based Restoration!

Beavers made the headlines in national and international news throughout the year and are finally getting more of the accolades and appreciation they are due.

A few important 2023 highlights include:

- California implemented a state sponsored beaver restoration program, released beavers into California waters for the first time in over 75 years, and announced a \$2 million funding program to support non-lethal beaver coexistence strategies. Read more here.
- Oregon removed the "predator" classification from herbivorous beavers and is now working towards more sustainable management of our ecosystem engineers, see the text box below for more info.
- Mutual of Omaha's revamp of Wild Kingdom Protecting the Wild aired their "Eager Beavers" episode on NBC prime time featuring two WA based beaver organizations.....the Methow Beaver Project and Tulalip Beaver Project. Watch the episode at our upcoming screenings in March with Okanogan Highlands Alliance in Tonasket and again in April with the Methow Conservancy's First Tuesday program. More info to come soon.
- International News for the Eurasian Beaver (*Castor fiber*) the North American beavers cousin:

- Wild Beavers return to west London for the first time in 400 years and are now reproducing. Read more here and here and here
- Scotland's Beavers experienced another win as NatureScot approved the release of 6 beaver families in new Cairngorms National Park sites. Read more here



California reintroduces beavers into Plumas County waterway on Maidu Tribal Lands to renew ecosystems; 1st such release in nearly 75 years - CBS San Francisco

Methow Beaver Project's 2023 Year In Review Extravaganza

It's astonishing what you can accomplish in 1 year when you work in partnership with People and Beavers! Here's a brief summary of our collaborative accomplishments:

- We have implemented beaver-based restoration actions in 7 tributaries of the Methow and Okanogan River watersheds which includes 223 beaver dam analogs, 118 small wood jams, 5.41 miles of streams treated, over 3500 riparian plants, and so much water slowing down and spreading out enough to increase base streamflows in our project areas.
- We assisted over 50 landowners/stewards or land managers with beaver coexistence services

- We wrapped/protected more then 125 priority trees for landowners/stewards
- We installed 3 beaver coexistence flow devices
- We relocated 7 beavers in 3 family groups from irreconcilable conflict with people to three of our restoration project sites
- We worked with over 400 preschool-university students
- We worked with 3 university undergraduate interns and 1 first year career professional
- We collaborated with 9 graduate students for Masters and PhD research
- We hosted 3 and co-instructed 2 workshops on beaver-based restoration,
 beaver relocation, & beaver coexistence for more then 60 practitioners, land
 managers and funders
- We presented at 4 science conferences and 5 general audience outreach events
- We co-chaired the WA Beaver Working Group and the National Beaver Working Group's Policy & Legal subcommittee
- We helped launch WA's Beaver Policy Focus group

Beavers and People..... What a TEAM!!!! Thanks to all who have been part of this amazing TEAM!



Chiliwist Creek will rise again...

out of it's severly incised channel. Beaver-based Stream Restoration aka beaver mimicry is very effective at rebuilding natural processes in degraded channels like this reach in Chiliwist Creek, a tributary of the Okanogan River. The stream degradation in this photo occurred after the 2014 Carlton Complex Wildfires and debris flow events that followed. Joe and Willy of MBP provide scale in the photo

above showing more then 6ft of channel incision but also the framework of beaver dam analogs waiting to be woven and stuffed with conifer boughs to slow down water, capture sediment, and eventually reconnect with the floodplain.



Photo: April 2023 Chiliwist Creek with her new BDA's slowing water and capturing sediment

We have installed 35 BDA's (beaver dam analogs made of wood and conifer boughs) in Chiliwist Creek over the last two years. In 2023, we, along with the amazing stewards of the land and stream, planted nearly 1,000 riparian plants, adaptively managed some BDA's that had been flanked by fast flows in Spring '23, and built on top of others that had been buried by sediment transported during those same spring flows.



When the BDA in this photo was installed in 2022, these posts were exposed about four feet above the streambed, about chest height. In December 2023, Restoration Coordinator, Joe Weirich, stood on the now significantly higher streambed, and the posts were almost completely buried in sediment! This means the stream is aggrading or depositing sediment from the structures slowing water down and allowing suspended sediment to deposit and stay put in this reach. Chiliwist Creek is much closer to *re*-connecting with the floodplain as it did before the fire. We have relocated 5 beavers to this site in the last 2 years and they have taken up residency nearby. Eventually, they will likely establish in our restoration reach and take floodplain reconnection to historic levels!!! In the meantime, we will continue to do our part and adaptively manage the structures to slow water and spread it across this floodplain sponge.

2023 State of the Beaver Conference, Canyonville, OR

In November, two Methow Beaver Project team members, Joe and Alexa, presented some of our work at the 2023 State of the Beaver Conference. This conference helped jumpstart the modern beaver restoration movement in the West back in the 2000's and two of our 2023 Seasonal Staff got to see where it all began!

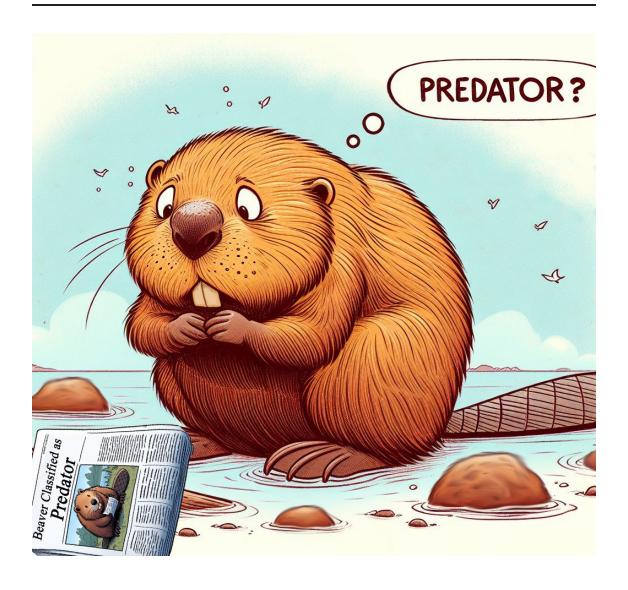
Huge THANKS to State of the Beaver founders Lois, Leonard, and Stan of the Beaver Advocacy Committee and THANK YOU to the Cow Creek Band of the Umpqua Tribe of Indians for hosting!

Joe's presentation focused on the Methow River, at a site named Silver Side Channel, south of Twisp, WA. Once an active and dynamic riparian system, Silver has undergone significant land conversion over the last 150 years and hosted one of the first European settlements in the area, though short lived. Today much of the historic floodplain is protected from annual flows by a levy and was long ago converted to agriculture and residential lands. The Methow River no longer flows through this side channel but hyporheic or underground flow from the river fills the channel with cold water, even through late summer.

In 2017, Silver Side Channel was restored for juvenile salmon rearing and overwintering habitat through dredging and riparian plantings. Beavers were not considered, despite the fact that the project created ideal beaver habitat, which was quickly occupied by happy beavers. The beavers dammed the mouth of Silver, turning a single braided channel a few feet wide into a magnificent deep pool over 30 m wide and kilometer long. Though this was great for fish and other wildlife, the restoration practitioners and adjacent private landowners were concerned about the flooding. MBP was contracted to install a flow control device at the outlet of Silver to manage the floodwaters while keeping the beavers in place and preserving their ecosystem benefits. Silver is a great example of how multiple stakeholders can work together to find common ground and mutually beneficial solutions. And remember, if you are restoring streams, "ALWAYS PLAN FOR BEAVERS!!!"







Good News for Beavers in Oregon

Beavers were classified as predators in Oregon? Wait, what??? Beavers are strict herbivores, they eat plants – the inner bark of trees and shrubs, twigs, leaves, and lots of other vegetation. Mark Twain was right: sometimes truth *is* stranger than fiction.

In Oregon, "The Beaver State", beavers have been classified as predators for decades. And, under Chapter 610 of Oregon State law governing predatory animals, "Any person owning, leasing, occupying, possessing or having charge of or dominion over any land... which is infested with... predatory animals, as soon as their presence comes to the knowledge of the person, may... proceed immediately and continue in good faith to control them by poisoning, trapping or other appropriate and effective means." Now, because of OR House Bill 3464, the "Beaver Believer" Bill, effective January 1, 2024, the term "predatory animal" will no longer apply to beavers! As a result of this bill, the Oregon Department of Fish and Wildlife (ODFW) and the Oregon Fish and Wildlife Commission will be able to encourage effective beaver coexistence strategies before resorting to lethal removal. This will create a system that determines when beavers can be lethally removed from lands and requires reporting of lethally removed conflict beavers. Now, OR can mange beaver populations more effectively and sustainably, with the primary goal to re-build watershed health, biodiversity, and wildfire and climate resilience through natural solutions.

For more info, check out the <u>Oregon "Beaver Believer" Bill (HB 3464) Fact Sheet</u>, from the Western Environmental Law Center.



Here are photos of our students participation in Nature Immersion with collaboration of the Methow Beaver Project. Photos made available from Julie Vanderwal.



Paschal Sherman Nature Immersion Program

We shared multiple field trips this year with students from Paschal Sherman Indian School in coordination and collaboration with our dear friends at the Nature Immersion Program, Sarah Fox and Morgan Moomaw. Our field

experiences focused on Two Ways of Knowing, combining Traditional Ecological Knowledge with western scientific methods. On our last trip of the year, we practiced water quality survey techniques, deployed camera traps, made toothpaste out of biochar, and sang fun and educational "edutaining" beaver songs! During the singing, our decibel reader (ever the scientists) registered 93 decibels! These kids got pipes!

Beavers Thrive Where They Can Dive

A significant challenge in relocating beavers is finding suitable release habitat. When assessing habitat suitability, we look for deep, consistent water sources, for food (riparian veg), and we look for signs of other beavers in the vicinity. It's often difficult to find prime beaver habitat that is not already occupied. The lack of suitable beaver habitat has spurred MBPs current stream restoration efforts in the Methow and Okanogan Watersheds.

While we wait for those sites to become habitable for beavers, we search high and low to find good homes for our beaver allies.

When we find suitable habitat, we do our best to prepare the site for beaver release. We can't protect them from every hazard in the wild, such as predators, but we do our best to prepare the release site to minimize the beavers' exposure to the elements. A few tactics we use are camera trap monitoring, identifying potential unoccupied old beaver lodges, and building multiple food caches to give the beavers a respite finding food while they acclimate to their new home.

Caring for beavers can be hard work, but beavers return the favor multiple times over by rebuilding and expanding vital wetland habitat and storing water, and supporting life in our arid mountain ecosystem. Check out these before and after drone photos of a beaver release up Chiliwist Creek, where a local land steward

allowed us to release a beaver family into their spring fed ponds.

The photos are only a month apart!

Beavers are really good at slowing water and spreading it out!





Getting Down And Dirty!

Infrastructure impacts, fish stranding, and water use challenges are taken seriously by MBP when we assess a beaver conflict site for coexistence potential. We can often protect culverts like the one in the photos below and help landowners live with the beavers in place. But when that culvert is in an irrigation ditch and the potential for wetland habitat restoration is limited, that's a deal breaker. In this scenario, the best option is to live-trap and relocate the beaver to a wilder home, and remove the dams.

We've seen our share of interesting beaver dams blocking culverts as coexistence and relocation professionals, but this was a first. A creative and resourceful beaver built a series of small dams 30 ft *inside* a culvert pipe. We unblock culvert pipes all the time, but we usually aren't inside them when we do it! No matter, MBP likes a challenge. After shutting off the ditch intake, Willy and Joe donned hip waders and head lamps and crawled into the pipe. It was dark and wet and surprisingly steamy... Alas, they were able to clear the material from the pipe and restore flow to Twisp Ponds.









Upcoming Events

Mutual of Omaha's Wild Kingdom - Protecting the Wild Presents

EAGER BEAVERS! - 2 showings

1st Showing

When: 6:30pm on Friday, March 8th, 2024

Where: Tonasket Cultural Community Center

2nd Showing

When: 7pm on Tuesday, April 2nd, 2024

Where: Twisp River Tap House

We're excited to show a special episode of Mutual of Omaha's Wild
Kingdom Protecting the Wild, aired nationally in December, featuring local
Beavers and maybe some Methow Beaver Project staff.

The presentation and video will dive into the fascinating, watery world of beavers and their crucial role as ecosystem engineers. Come learn about their tireless work in building wetlands that act like sponges and lessen the impact of drought and wildfire. Beavers, by creating critical riparian habitats, not only foster a more resilient ecosystem but also play a key role in supporting other species, including endangered salmon.

March 8th, the Tonasket CCC will be serving dinner before the event by donation. Doors will open at 5:30pm, show starts at 6:30pm.

April 2nd, The Tap House will be offering drinks and delicious food on a night when they are typically closed. Support a local business by purchasing a drink, a snack, or dinner! Doors will open at 6:15, presentation at 7pm.

Come as you are, bring your curiosity, and let's explore the remarkable benefits beavers bring to natural landscapes for increased climate resilience.



MBP's Director Alexa Whipple with one of Wild Kingdom's hosts Peter Gros in a Methow Watershed beaver pond in May 2022 during filming of the *Eager Beavers* episode. What an honor for MBP to be part of Wild Kingdom lore!

Citizen Science

Help the Methow Beaver Project measure change on our project sites!

Our team is preparing to plan and implement projects on several new sites over the next three years. Before we make any changes on the sites, we need to capture the current conditions. Are you ready for some fresh air and exercise that benefits not only your own health, but the health of our local ecosystems? Do you enjoy birding, botanizing, or observing water? Our team is looking for community members to come out in the field this spring and make observations with us on our project sites. We will look at indicators – specific, quantifiable measures of living and non-living ecosystem attributes – that connect our long term goals with our short term objectives. You can attend just one bird survey, join our team on multiple site visits, or even adopt a project to check up on more frequently on your own. Imagine natural and/or "faux" beaver dams moving water across a relatively dry site, changing the population of birds that utilize the habitat, over time. In

this way, bird species abundance and diversity can be used as an indicator of ecosystem recovery. If this sounds like fun to help track, contact Julie Vanderwal at juliev.mbp@methowsalmon.org.

Monitoring Sidebar: HOW we monitor our projects for efficacy and WHY?

At the Methow Beaver Project, we aim to find the monitoring methods and indicators that give us the clearest understanding of patterns and processes of change, with the most efficient use of time, energy, and funding. We want to include the community in monitoring so that we can all learn together, develop our capacity to steward our watersheds, and communicate clearly about this work and the changes that happen.



We follow scientific principles but also highly value anecdotal evidence from people who know the land, the water, the community. We also subscribe to the restoration principles of The Society for Ecological Restoration (SER), an International organization leading global environmental restoration planning and implementation. Specifically, their 5th Restoration Principle states, "Ecosystem recovery is assessed against clear goals and objectives, using measurable indicators." The United Nations principles to guide the decade 2021-2030 also state that ecosystem restoration includes monitoring, evaluation, and adaptive management throughout and beyond the lifetime of projects. "The monitoring of biodiversity, ecosystem health and integrity, and human well-being responses to

restoration should be undertaken to determine whether objectives and goals are being met." The best-practice United Nations principle goes on to say that monitoring must begin at the inception of the project in order to be effective, to capture baseline conditions and then assess the direction and magnitude of change over time. Different methods can be valuable, whether they are statistically rigorous or less formal.

We need your assistance in developing and implementing the most appropriate, effective, and accelerated watershed restoration and monitoring plans. Join us for critical watershed work that also happens to be incredibly fun, challenging, and satisfying!!!

Contact Julie at juliev@methowsalmon.org and Help steward and restore our shared watersheds!!!



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Storing water for the future-one beaver at a time www.methowsalmon.org



Methow Beaver Project, a program of Methow Salmon Recovery Foundation

Our mailing address is: MBP PO Box 755 Twisp, WA 98856

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