## **PNW Beaver Network Launches** to Build Regional Capacity for **Beaver-Based Restoration**

## **By Jean-Paul Zagarola**

On April 11th, the PNW Beaver Network officially launched with a virtual convening hosted by the Bonneville Environmental Foundation (BEF). The event brought together university researchers and restoration practitioners from community based non-profits and Tribal departments across Oregon and Washington.

The Network aims to connect beaverbased restoration (BBR) and coexistence practitioners throughout the Pacific Northwest and provide greater access to tools and resources to build beaver programs and implement projects.

With funding from the Paul G. Allen Family Foundation, the Oregon Conservation and Recreation Fund, and other private donors, BEF is advancing several initiatives to expand community based BBR capacity across the region.

Key objectives include:

- 1. Leveraging funding to support BBR projects with willing landowners and land managers.
- 2. Localizing a PNW Beaver **Restoration Assessment Tool** (BRAT) for fine-scale planning and project prioritization by collaborating with Utah State University, community based non-profits, and Tribal departments on data collection and processing.
- **3. Supporting research** led by Washington State University on greenhouse gas dynamics in beaver habitats and restoration sites.
- 4. Creating a multi-state resource hub to promote effective policies, facilitate access to planning data, and connect practitioners on key BBR topics.

These efforts build on more than five years of pilot projects initiated by BEF and local partners. Beginning in Oregon's Willamette Basin, BEF co-led a two year data collection effort with the Mid-

Willamette Beaver Partnership to localize a Beaver Restoration Assessment Tool, commonly referred to as "the BRAT model" developed by Utah State's Riverscapes and Management Lab (RAM Lab). This community-based initiative engaged volunteers and created opportunities for Native American undergraduate students to gain hands-on experience and career skills in conservation and restoration through the New Beginnings For Tribal Students Program hosted at Oregon State University. By the end of the program, all of the participants commented on their newfound appreciation for the ingenuity these crafty rodents possess and their ability to generate a host of benefits for humans and wildlife alike.

Western Beavers volunteer Beaver Dam Analog install in Central Oregon on private ranch land. Photo Credit: Reese Mercer

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"I was surprised to learn that beavers could be a part of management strategies for ecological restoration and fire protection. Once we were trained and in the field I started to notice signs of beavers everywhere. These places were often lush and beautiful, and the dams themselves would create amazing alterations to the nearby floodplain. They proved to be ingenious creatures with the ability to adapt their dam building strategies to the available plant materials. I have a new appreciation for beavers which is wild because I already thought they were amazing. Go (real) beavers!"

- Corey de la Cruz, M.S. Student, Oregon State University Department of Biological & Ecological Engineering

During this early phase, BEF also began collaborating with other diverse partners to identify barriers and opportunities for expanding beaver based restoration across the region. Through this work, a community of practice around beaver based restoration for the region, grounded in local but overlapping interests, began to take shape.

The benefits of beaver habitats are well researched and documented. Beaver engineered floodplains and wetlands **create biodiversity hotspots.** Studies have shown beaver managed wetlands can improve water quality better than human constructed wetlands (see here and here for examples). They mitigate the impacts of climate **change** through flood attenuation, by releasing stored groundwater during summer drought and by providing wet refuge, and in some cases fire breaks, during catastrophic fires. Unfortunately, beaver populations remain far below historic levels and the region's heavily altered stream systems have created conditions that make it challenging for beavers to build year-round dams ultimately limiting ponding and wetland opportunities.

Although the activities of the last century have been detrimental to beaver populations, there are good reasons to be optimistic about their recovery. Beavers are very adaptable and given the opportunity and a little assistance, they can get back to their dam building and canal carving ways. Beavers are on the rebound in many places. Enhancing stream conditions by addressing hydraulic and vegetation limitations can provide what beavers need to create and manage wetlands long-term. A lot of progress is already being made by some tribes and nonprofits, however, it is fairly isolated to a few groups in a few specific areas. An analysis of state restoration databases reveals that from 2021 to 2023, only 16 out of 693 (2.3%) completed projects in Oregon and 5 of 538 (0.9%) projects in Washington contained any sort of beaver focus. Partnering with beavers at a scale necessary to help fend off the increasing impacts of climate change in the Pacific Northwest, requires improved accessibility to knowledge and resources and collective action in addressing shared barriers to implementing projects across the region.

The April 11th kickoff drew 35 partners including staff from two universities, five Tribes, and twelve local non-profits. Each partner shared their current beaver-related work and what excites them about joining the Network. BEF also introduced the newly launched **PNW Beaver Hub.** The online hub will act as a central platform offering:

- Access to localized BRAT data and other planning data
- Updates on beaver-related legislation via the Beaver Policy Tracker
- Information on BEF-supported BBR research and information on other critical topics identified by those who participate in the Network.

As the Network takes shape, BEF will be assembling a core team and work groups to guide website content, improve data collection, and collaborate on key focus areas to help build an accessible community of practice around beaver based restoration in the PNW. Sign up for updates at the **Beaver Hub** if you're interested in learning more about the PNW Beaver Network.





Beaver maintaining its lodge in the Tualatin Basin, Oregon. Photo Credit: John Comery

(The Wetlands Conservancy volunteer)