

BEAVERS:

NATURE'S ENGINEERS FOR RESILIENT WATERSHEDS

Beavers are one of North America's most effective natural restoration partners. By building dams and ponds, they slow and store surface water, recharge groundwater, trap sediment, and create critical habitat for salmon, lamprey, amphibians, and waterfowl. In an era of worsening droughts, floods, and declining water quality, protecting and coexisting with beavers is one of the most cost-effective tools available to municipalities and land managers.



WHY BEAVERS MATTER

- **Water storage:** Beaver ponds increase summer baseflows and help sustain wetlands and riparian vegetation through dry seasons.
- **Wildfire buffering:** Beaver-created wetlands retain moisture in riparian zones, forming green firebreaks that can resist burning during wildfires. Research across the western U.S. (Fairfax and Whittle 2020) shows that areas influenced by beavers experience significantly less burn severity.
- **Mitigation of high flows:** Dams slow water, reduce downstream erosion, and buffer the impacts of heavy rain events.
- **Habitat creation:** Beavers support biodiversity and improve conditions for fish, wildlife, and pollinators.



Beaver dams and a verdant riparian zone in Oregon surrounded by charred trees from the 2021 Bootleg Fire. Photo credit: Charles Erdman/Trout Unlimited

The Problem

Despite their ecological value, beavers are frequently trapped, killed, or relocated when conflicts occur near roads, culverts, or other infrastructure. These lethal or displacement approaches are short-term fixes, as beavers usually end up returning on a regular basis.

Coexistence Works

Across the Pacific Northwest and beyond, proven coexistence tools allow people and beavers to thrive together:

- Flow devices (pond levelers, culvert protectors) allow water storage benefits to continue while still preventing flooding near infrastructure.
- Tree-wrapping and fencing protect valued vegetation.
- Targeted site assessments can determine when relocation is appropriate.

These tools are inexpensive and offer long-term savings compared to ongoing trapping.

Policy & Funding Opportunities

- Increase funding for coexistence approaches for beaver management through USDA's Wildlife Services' Nonlethal Initiative under APHIS (Animal and Plant Health Inspection Services) and extend this work into areas in WA where APHIS is not currently working, such as north-central WA.
- Advance federal policy and grant pathways to increase the portion of beavers managed through nonlethal means, particularly on-site coexistence.
- Promote wildfire insurance discounts for landowners who have beavers around.

Beavers don't need to be managed away. They need to be managed wisely.



*Installation of a pond leveler to prevent flooding of a local PUD's access route.
Photo by Cascade Forest Conservancy*



*Beaver in southwest Washington state.
Photo by Cascade Forest Conservancy*



*A beaver release in southwest Washington state.
Photo by Cascade Forest Conservancy*