Landowners Support Beavers for Restoration


Photo by Justin Haug

By Okanogan Highlands Alliance & the Triple Creek Community

In 1980, a group of like-minded individuals purchased over 500 acres of land along Myers Creek north of Chesaw, on a site now known as Triple Creek. They formed an intentional community based on simple living and sustainable paths for securing food and shelter. Several households now live on this Okanogan Highland landscape of forests, meadows, wetlands, and riparian areas. A primary goal of the community is improving and restoring wildlife habitat for native species. Members have developed a forest management plan, rehabilitated overgrazed pastures, and reduced noxious weeds, thus reestablishing native plants. By engaging with local non-profits and agencies for wetland restoration, the community is creating a legacy to benefit future generations.

Myers Creek flows from headwater streams on Mount Bonaparte, is joined by MaryAnn Creek, and then flows north through the glaciated Chesaw Valley. The convergence of Bolster, Thorp, and Myers Creek creates the "Triple Creek" site, where a biologically rich wetland once thrived with herons, fish, beaver, and a remarkable water storage capacity. In the late 1990's, a rain-on-snow event severely incised Myers Creek, impeding water from flowing into the wetlands. The Triple Creek community, seeking to restore naturally occurring ecological processes, explored a variety of restoration options before deciding to work with Okanogan Highlands Alliance (OHA), a local non-profit. Together they developed a collaborative restoration team.

Triple Creek members make collective stewardship decisions. OHA's offer to facilitate stream and wetland restoration was accepted, and other groups were invited:

Trout Unlimited (TU), to bring restoration ecology expertise to the project;

US Fish and Wildlife Service (USFWS), to share design and hydrology expertise;

NOAA Northwest Fisheries Science Center, to provide input based on their work in mimicking beavers to restore incised streams;

WA Department of Fish and Wildlife (WDFW), to share expertise on flow and sediment dynamics.

Funding sources include the Department of Ecology water quality funds, USFWS Partners program, penalty settlement agreement between Ecology and Kinross Gold, and in-kind contributions from all collaborators.

The greatest challenge was identifying the optimal restoration technique that would connect the land and the water, while also being cost effective. The landowners' goal was to restore natural and native ecological processes. OHA worked through several designs at a mitigation site downstream of Triple Creek before settling on the Beaver Dam Analogue (BDA) approach for both sites. Experts suggested putting vertical pilings across the stream to provide beavers with a stable starting place for dam building, and weaving with live cuttings to slow flows. This approach has already started to capture sediment at the downstream mitigation site and will be implemented at Triple Creek within the year.

The initial success at the downstream mitigation site proved that the approach of mimicking beavers with BDAs is highly effective, radically less expensive than other restoration techniques, and also provides local jobs. Upstream, Triple Creek's willingness to make the site available to a collaborative team invites a larger scale project to move forward. Emulating the effect of beavers in slowing flows, capturing sediment, and connecting the water with the land will improve water quality and increase water storage capacity. Re-establishing beavers, and the plant life needed for their long-term presence, will be a key component of local drought and fire response.

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