

Mimicking Beavers to Heal Damaged Streams

By Julie Ashmore, Conservation Coordinator, Okanogan Highlands Alliance

The Okanogan Highlands Alliance (OHA) is working with partners to benefit water quality and quantity, and to increase habitat for fish and wildlife, by reducing severe stream channel incision that disconnects Myers Creek (north of Chesaw) from its floodplain. These changes will facilitate the growth of native vegetation on the historical and new floodplains, providing resources to encourage beavers to recolonize the area and improve the hydrology of the project sites into the future.

The restoration approach mimics beavers by installing "beaver dam analogues" to slowly raise the water table and capture sediment to help build the streambed back up. Establishing riparian plants will help support beaver in the long term.

OHA installed beaver dam analogues at the Myers Creek mitigation site in September 2014. This approach of mimicking beavers can be very effective, and is radically less expensive than other restoration techniques, while still providing local jobs. At the Triple Creek wetland site, OHA is collaborating with Trout Unlimited and the US Fish and Wildlife Service (USFWS), who together will install beaver dam analogues in fall of 2016. Funding sources include Department of Ecology water quality funds, USFWS Partners program, the penalty settlement agreement between Ecology and Kinross Gold, and in-kind contributions from all collaborators. In-kind



The above photos show the incised channel in the Myers Creek watershed. The streambed has dropped, and as a result, the stream is disconnected from its floodplain.



A beaver dam analogue: vertical pilings placed across the stream were woven with live cuttings to slow flows and to provide beavers with a stable starting place for dam building.

support has also been provided by the National Oceanic and Atmospheric Administration (Northwest Fisheries Science Center) and the WA Department of Fish and Wildlife.

Emulating the effect of beavers in slowing flows, capturing sediment, and connecting the water with the land will improve water quality and increase the water storage capacity of the Myers Creek watershed. Re-establishing beavers, and the plant life needed for their long-term presence, can be an important component of local drought and fire response. Learn more at: okanoganhighlands.org/restoration.