FROM THE DESK OF Michelle McSwain

March 23, 2025

Chair John Lively, Vice-Chair Mike Gamba, Vice Chair Bob Levy

Oregon House of Representatives House Committee on Climate, Energy, and Environment 900 Court Street NE Salem, Oregon 97301

RE: TESTIMONY IN SUPPORT OF HB 3932, AN ACT TO PROHIBIT A PERSON FROM TAKING A BEAVER FROM CERTAIN WATERS

Chair Lively, Vice-Chairs Gamba and Levy, and Honorable Members of the Committee,

I am writing in support of HB 3932 that would close waterways to hunting and trapping of beavers that DEQ have determined are "impaired". As a retired Hydrologist for the Bureau of Land Management (BLM) and U.S. Forest Service, and Assistant Field Manager for the BLM, I have first-hand knowledge of the benefits beaver provide to steam ecosystems. Below is my story of one such vicinity where I've witnessed beaver restore degraded systems to thriving and vibrant wetlands and functioning streams with improved water quality.

Thirty-eight years ago I began my career with the BLM Vale District in SE Oregon after having obtained my master's at OSU in Forest Engineering/Hydrology. Over the course of a couple years, I hiked and surveyed hundreds of miles of streams on public land. Mile after mile on Whitehorse Cr., Little Whitehorse Cr., Willow Cr., Doolittle Cr., Fifteenmile Cr., the conditions were the same: they were downcut, eroded, widened, denuded with no vegetation, warm and full of fine sediment.

A coalition of folks called The Trout Cr. Working Group came together to address the condition of the streams and when I transferred to my new position with the Forest Service on the west side of the Cascades, the coalition was hard at work to make changes to livestock grazing. When I returned a few years later and toured the area with the BLM Rangeland Management Specialist, I was surprised at the increase in riparian vegetation, particularly willow, as a result of changing the timing to livestock grazing. But it wasn't until I returned several years later that I saw the area truly transformed, and it was all due to the beavers! With managed livestock grazing the riparian vegetation flourished and so came the beaver. They created a remarkable system of wetlands with narrow, deep, cold streams connecting the beaver complexes.

Throughout my career I witnessed various engineered strategies to improve stream conditions, usually efforts that attempted to create structures that mimicked beaver dams. These included rock gabions, cement walls, log dams and other methods. Over the years, these projects cost hundreds of thousands, if not millions, of dollars and generally always resulted in failure; oftentimes creating conditions that were worse than before the project was implemented.

The benefits associated with beavers and their dams have been well documented and I have observed and measured many of those parameters, including stream temperature and macroinvertebrates. The conditions beavers create result in cold, clean water with less fine sediments. They store flood waters, mitigating high flow and minimizing effects to downstream infrastructures. They also help to build streambanks with the captured sediments creating optimal stream habitat for aquatic species, including fish. They store water in the floodplain and wetlands during high flows so that streamflow is lengthened throughout the summer season.

As illustrated in my story above, beaver are not the "silver bullet" to improve impaired waters if there are other contributing factors to degraded water quality, such as poorly managed livestock grazing. However, allowing beaver to flourish and go about their work undisturbed along with other restoration activities, will increase the likelihood of improved stream conditions and water quality. The beaver is the ultimate engineer and can create and maintain structures that improve stream conditions and water quality better than any man-made attempts; and the restoration costs nothing, it is free! Removal of beavers within waters designated as "impaired" does not make sense if the objective is to improve water quality and remove the stream as 303(d) listed. Therefore, I urge you to support SB 3932.

Very sincerely yours,

Michelle McLuain

Retired Hydrologist, USFS & BLM; BLM Asst. Field Manager