

Kaitlin Lovell

Colton, OR 97017

March 21, 2023

Oregon House Committee on Climate, Energy, and Environment

Attn: Chair Marsh

Re: HB 3464

Dear Chair Marsh, Vice Chairs Levy and Levy, and Committee members,

I am writing to support HB3464 and encourage you to strengthen it.

I am a 20 year resident and farm/forest owner in Colton who has actively and successfully encouraged beaver to naturally repopulate and transform a five acre wetland on our 20 acre property. When we purchased the property we learned it had been a private beaver farm in the 1950's, unsuccessful at raising beaver for pelts. We knew beaver could thrive in this location so we set about to encourage their return by planting willows and putting fallen trees along the riverbanks. We did this because as scientists we were well versed in the ecological benefits of returning keystone species such as beaver to the landscape including increased fish, wildlife, amphibian, and benthic diversity, improved water quality and decreased stream temperatures, improved groundwater recharge and hydrology including reduced downstream flooding, carbon sequestration, and climate resilience. But the beaver have contributed far more than we anticipated. Living with beaver has been rewarding and economically beneficial.

Today, our beaver complex consists of 5 dams, the longest one is over 150 feet long and the highest one stands over 10 feet tall. It is easily visible from the road and during the summer it has taken on the feel of a neighborhood park with families walking down to watch the beaver and waterfowl, listen to the frogs and catch roughskinned newts while challenging each other to spy the brook lamprey, trout, and Pacific Giant salamanders we've seen. Some neighbors have followed our example and planted willow plugs along their riverbanks to encourage the offspring of our beaver to colonize, and they have been welcomed. We hope this year will mark the 6<sup>th</sup> successful litter produced by the beaver.

The beaver are an invaluable part of our farm. Over the last few years of prolonged drought, we have noticed that our pasture that abuts the wetland remains green well into September. Because of this we do not have to supplement our livestock with hay, saving us money. Our pigs dig only a few feet before finding wet soil to wallow in, and our shallow domestic well no longer runs dry in late summer. Our riparian forests have, until very recently, stayed very healthy and robust. During the heat waves, animals and humans alike wander down to the ponds and the riverbanks which are typically 10 degrees cooler than the ambient air temperatures. In addition to being the original dam engineers, beaver are lesser known for also inventing the swamp cooler, a much needed (and free) climate adaptation feature. We grew to believe that our farm needs the beaver to be resilient to the climate catastrophes, and in 2020 the Riverside fire tested that theory.

On Sept. 6<sup>th</sup> the Riverside fire burned 5 miles away, the sky glowed orange above our farm. What we didn't know was that embers had taken hold in the clearcut less than a mile above our house with nothing but trees between the hotspot and the edge of our property. As usual, our grass was green and our trees were full of water thanks to the beaver, but against the 70 mph winds I didn't know if that would be enough. As I walked to the end of the driveway to take what I thought may be the final pictures of our home, I was stopped in my tracks. Standing at the edge of the beaver pond, the temperature was at least 10 degrees cooler, but more surprising, the air was a dead calm. Trees less than 1/10<sup>th</sup> of a mile away behind my house bent sideways in the wind, but the trees in the beaver pond were still. I believe that the beaver pond created a microclimate, a small inversion that kept the winds aloft and at bay. I have scoured the scientific literature to see if there is any mention of this phenomena but I only have my anecdotal proof. I suspect I haven't found it because researchers do not stand at the edge of beaver ponds in the middle of wildfires, the research is done after the fire zone is safe and is primarily focused on more persistent conditions of hydrology and vegetation impacts not on the temporary wind, air, or temperature conditions in beaver ponds. But in the ensuing days as the hotspot grew to over 500 acres it did not come racing down the hillside and I credit my beavers for creating a wind break that prevented it. When the fire crew could finally tend to this hotspot, they used my driveway as the staging area and identified the beaver ponds as a potential water source should the fire move. That's also where they found our chickens and pigs seeking refuge. The beaver safely protected our farm in more than one way during that fire.

Only later in December 2021 did my beaver come under threat and that threat is why I am supporting HB3464, and asking you to make it stronger. During high flows in December 2021 the beaver tried to abate the flows by damming up the undersized, perched culvert under our road, causing the stream to rise 8 feet and overtop the road. As the only house served by this culvert we were inconvenienced but nothing more. After a few days, Clackamas County Dept. of Transportation finally made their way down the road to clear the culvert and were shocked by the beaver activity. Their first suggested solution was to trap the beaver to protect the culvert that they had failed to maintain in over 20 years. We refused to allow them to trespass to protect their improperly designed, built, and maintained culvert (the culvert did not meet fish passage laws at the time it was installed, requirements that have been the law of the land since before Oregon's statehood).

After clearing the culvert, my husband and I reached out to ODFW who could not offer any assistance because, they explained, they don't really have resources to work on beaver issues. We took it upon ourselves to reach out to beaver and hydrology experts to find alternative solutions. The first suggestion proved successful – every morning clear the culvert of the previous night's beaver activity and after a few days the beaver will move their activity upstream. We did exactly that and within days the beaver stopped blocking the culvert and moved their activity about 10 feet upstream with our neighbor's support. The longer-term solution is to do what should have been done when the road was built – place a channel spanning fish passable, at grade culvert in its place and the beaver will not block it up. We have even offered to seek out grant funding to help offset the cost of this solution but the Clackamas County Dept of Transportation will not consider this option. Instead, we learned that the Clackamas County Dept. of Transportation, knowing we were opposed and would not grant permission to trap and kill, advised our downstream neighbors that they could walk onto our property and shoot and kill the beavers without our permission, advice our neighbors ignored and reported to us.

I doubt that Clackamas County Dept. of Transportation is unique. There are thousands of culverts that were installed in violation of state fish passage laws. Many, like ours, have been in place long past their expected useful life and without proper maintenance have fallen into disrepair, undermining roadbeds, causing flooding, and further impeding fish and wildlife passage. Instead of addressing the root of the problem, these departments of transportation have literally scapegoated what is likely tens of thousands of beaver to death all to protect illegal and improperly maintained assets. HB 3464 can address this problem.

I applaud the sponsors of HB 3464 for recognizing the critical ecological and landscape resilience value of beaver, recategorizing beaver from predator to fur-bearer, creating a permit system to seek to understand and track activities on and by beaver, and encouraging private landowners to live with and benefit from beavers.

Based on my personal experience, I am also asking you to strengthen HB 3464 by amending ORS 498.012 (2)(a) to read, "However, any person who takes a **beaver**, cougar, bobcat, red fox or bear must have in possession written authority therefor from the landowner or lawful occupant of the land that complies with subsection (4) of this section." This change will prevent DOTs from illegally trespassing on private property or advising others to do so.

Thank you for considering these proposed changes.

Respectfully,

Kaitlin L. Lovell