



# The many benefits of beavers and how New Mexico can leverage them



All photos are from New Mexico courtesy of WildEarth Guardians and New Mexico Beaver Project, except slide 9 which is from Oregon courtesy of Charles Erdman/Trout Unlimited.

Presentation by Chris Smith  
505-395-6177,  
csmith@wildearthguardians.org



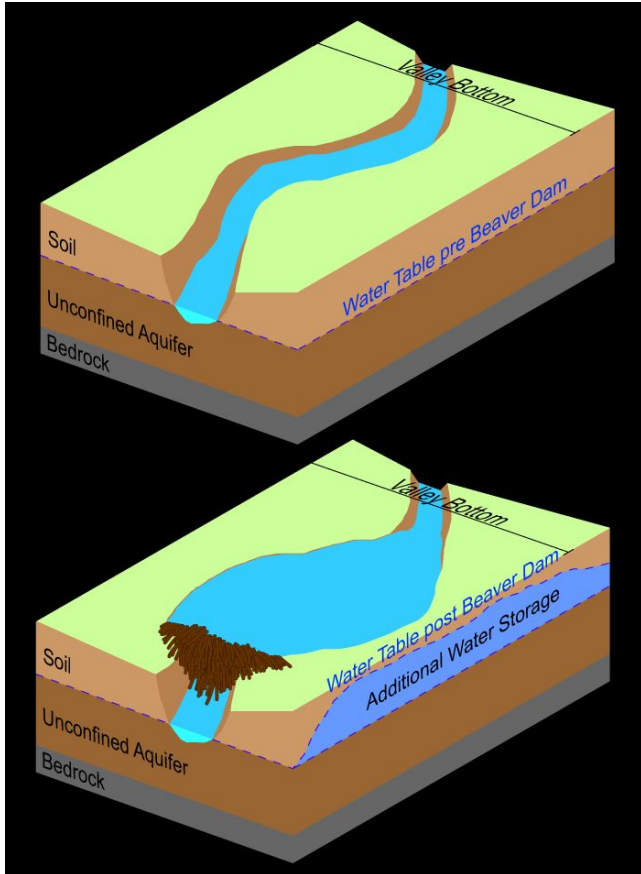
- ✓ **Surface water**
- ✓ **Groundwater**
- ✓ **Water quality**
- ✓ **Water temperature**
- ✓ **Habitat and biodiversity**
- ✓ **Carbon storage**
- ✓ **Watershed restoration**
- ✓ **Wildfire mitigation**

# Surface water



**Beavers don't technically "create" water, but it sure can seem like it. By slowing the flow of water, beavers make more water more available later in the summer and fall. With beaver dams slowing things down, water's journey takes much longer and can keep more miles of waterway more wet later in the year.**

# Groundwater



**Aquifers are like sponges underground. They store water and act as reserves during drought and dry periods. Roughly 87% of New Mexico’s public water supply comes from groundwater.**

**Beaver dams and ponds allow water to seep down through the water table and recharge aquifers. As water slows and collects, it better saturates the ground underneath.**

**Beavers can help us with water supply now and water security in the future.**

# Water quality and temperature



**Beaver dams strain and store sediment and pollutants. Beaver dams can filter out unwanted nitrogen, a compound which can lead to overgrowth of algae and oxygen level reductions. Water coming out of beaver complexes is often cleaner!**

**And by promoting the health and abundance of riparian vegetation—which creates more shade—beavers can actually keep waterways cooler in hot summer months.**

# Habitat and biodiversity

**Wetlands make up only 6% of the land on earth, but 40% of all plant and animal species live or breed in wetlands. So, they're kind of important! And beavers create, maintain, and improve wetlands habitat. Chances are that if you have seen a wetland in New Mexico, it's where a beaver pond used to be.**

**Beavers are also great at creating and improving aquatic habitat. Beaver ponds can act as fish nurseries and are especially important to salmonids like our Rio Grande cutthroat trout.**





# Carbon Storage

**Along with helping to mitigate many of the symptoms of climate change, beavers may also help get at the root cause.**

**Beaver-inhabited meadows are carbon sinks, and can store large amounts of greenhouse gasses.**

**The scope of beaver trapping in North America during the height of the fur trade may have had a significant global climate impact.**

# Upscaling Restoration



**Beavers are our best partner for maximizing on-the-ground restoration work. While humans can do quite a bit of good healing degraded waterways and rehabilitating wildfire-charred landscapes, most of that work can be made much more impactful by the presence of beavers. In many cases, beavers will work faster and better (and much cheaper!) than we can.**



# Wildfire mitigation

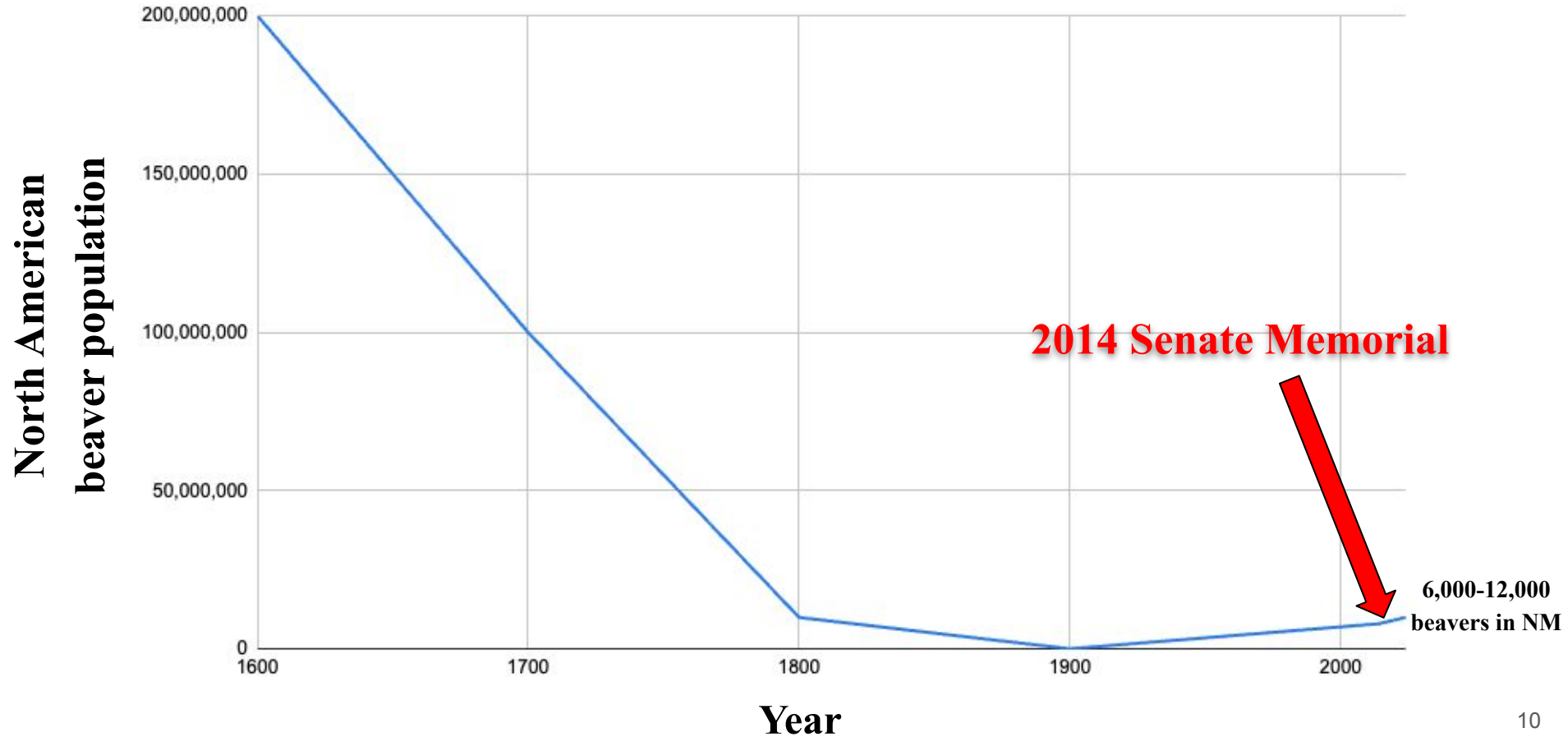


**Lush and soggy beaver complexes are proving to be critical to mitigating wildfires. “It’s really not complicated: water doesn’t burn.” - Joe Wheaton, geomorphologist at Utah State University**

**Wetlands and ponds are refugia for plant and animal communities to survive fires and then begin to re-establish throughout the landscape.**

**And beavers, by slowing and storing water, can mitigate post-fire flooding.**

# Where are we?



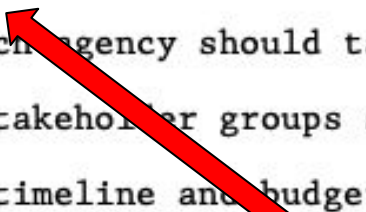
SENATE MEMORIAL 4

51ST LEGISLATURE - STATE OF NEW MEXICO - SECOND SESSION, 2014

INTRODUCED BY

Timothy M. Keller and Roberto "Bobby" J. Gonzales

NOW, THEREFORE, BE IT RESOLVED BY THE SENATE OF THE STATE OF NEW MEXICO that the department of game and fish, the forestry division of the energy, minerals and natural resources department and the state land office be requested to develop recommendations jointly on how New Mexico may proceed to develop a statewide beaver management plan. The recommendations should include which agency should take the lead role for development, which stakeholder groups should be included in the development and a timeline and budget; and



**Other states with beaver plans or plans in the works:**

- **Washington**
- **Oregon**
- **California**
- **Utah**
- **Montana**
- **Colorado...**

# New Mexico should have a statewide beaver plan

*Goal: as many beavers (and their benefits) in New Mexico waterways as possible, while protecting property/infrastructure and minimizing conflicts*

- **Model beaver presence and suitable habitat**
- **Asses habitat improvements needed for restoring beavers**
- **Scale up relocation efforts**
- **Fund coexistence tools and materials to deal with conflict beavers**



Chris Smith: 505-395-6177,  
csmith@wildearthguardians.org