

THE LIVE STREAM

The Coal Creek Watershed Coalition Newsletter



photo credit: Matt Berglund



Welcome, Elin

Elin first moved Crested Butte in 2013 for one, quick winter of ski bumming. One turned into two, and a couple of summers later, she was putting her biology degree to good use as a research assistant for an aquatic ecologist at RMBL. After several years of working in the aquatic sciences in the Valley, Elin left to pursue a master's at Colorado State University, where her research focused on plant community composition of wetlands on BLM lands across Colorado. Ultimately, the unique community and recreational opportunities in Crested Butte brought her back to the Valley. In her free time, Elin enjoys mountain biking, skiing, and generally spending time outside with her partner and dog. She is excited to be working with CCWC to help protect Crested Butte's local watersheds!

Thompson Divide Mineral Withdrawal is Complete!

We are thrilled that Mt. Emmons has officially been protected from mineral development for the next 20 years! On April 3, 2024, Secretary of the Interior Deb Haaland signed an order to prevent new mineral development throughout the Thompson Divide until 2044. This action will protect the diverse uses of the Mt. Emmons area, including water resources, wildlife, and recreation.

To permanently protect Mt. Emmons from future mining, Congress will ultimately need to pass a bill. In 2023, Senators Bennet and Hickenlooper and Representative Neguse introduced the Colorado Outdoor Recreation and Economy (CORE) Act to do just that. Though the CORE Act has not yet passed through Congress, the mineral withdrawal provides twenty years for Congress to pass legislation to permanently protect the Thompson Divide and Mt. Emmons.

The mineral withdrawal is the first of three steps to protect Red Lady. The other two steps are the land exchange and the cancellation of the water rights associated with the Keystone Mine. During the land exchange, Mt. Emmons Mining Company (MEMC) will relinquish 625 acres of privately owned land in Gunnison and Saguache counties to the federal government in exchange for the 551 acres that encompass the Keystone Mine site, which is currently located on Gunnison National Forest Lands. When the land exchange occurs, a conservation easement will be executed at the same time. The conservation easement, held by the Crested Butte Land Trust, will allow reclamation in disturbed areas, prohibit development of any kind, and allow for existing recreational use in perpetuity. The land exchange will provide MEMC more flexible options to continue water treatment and reclamation activities on portions of the Keystone Mine site. Finally, several local organizations, including CCWC, are negotiating with MEMC to arrive at a settlement in water court. We anticipate that the settlement will abandon most of the water rights associated with the Keystone Mine. Together, the mineral withdrawal, land exchange and conservation easement, and cancellation of the water rights will prevent additional mining on Mt. Emmons.

Our local community has been fighting for this for nearly 50 years, so this is an incredible accomplishment. CCWC, in particular, has been active in leading the effort to address water quality issues attributed to mining in Coal Creek Watershed for the last 20 years. CCWC is committed to continuing to partner with federal, state, and local regulators to work to reduce the impacts of past mining activities on Crested Butte's local watersheds.

Are Beavers Nature's Fire Fighters?

In the last few years, it feels like beavers have become the poster child for river health and restoration. These creatures that many once saw as a nuisance are now being reintroduced, and people are imitating their dams across the nation. That includes here in the Gunnison Valley, where in recent years land managers have installed structures that mimic beaver dams, in hopes of slowing down river flows and possibly even encouraging a beaver family to take over ownership and maintenance of the dams.

We've often heard of beavers called the most influential ecosystem engineers, second only to humans. In other words, beavers have an incredible capacity to alter their landscape. The changes they make slow down stream flows and spread water out over the landscape and outside of defined river channels.

Most people think of dams when they think of beavers, but beavers also dig canals out from rivers, perpendicular to the normal flow of water. As they build their dams, the water level rises and flows into these canals, moving water further away from the river channel and into the valley bottom, causing the land around the river to slowly soak up the water like a sponge.

The more water that gets soaked up by the land around the rivers, the more lush, green plants can grow, no matter whether it is a wet year or a dry year. In recent years, research has demonstrated that the combination of this lush vegetation and saturated soils caused by beavers means these areas are less likely to burn in wildfires than sections of river that haven't been influenced by beavers (Fairfax and Whittle, 2020; Foster et al., 2020; Markle et al., 2022; Weirich, 2020; Whipple, 2019; Wohl et al., 2022).



Unburned beaver influenced riparian area adjacent to burned forest.
Photo: Emily Fairfax (2024)

Likewise, new research published by [Emily Fairfax](#), a beaver researcher out of the University of Minnesota, found the same effect in megafires, or fires that burn more than 100,000 acres. This research looked specifically at the Cameron Peak Fire, the East Troublesome Fire, and the Mullen Fire, all of which burned in Colorado in 2020 (The Mullen Fire was predominantly in Wyoming but crossed the border north of Steamboat Springs).

The paper found that riparian areas, or the areas between a stream channel and the surrounding uplands, that had beaver dams were significantly more resistant to the megafires than other riparian areas without beavers (Fairfax, 2024). This is important because these areas provide refuge to plant and animal species, helping them survive fire. By providing areas where plants and animals can survive these fires, beavers are helping to ensure their populations rebound after the fires, as well.

Moreover, when riparian areas are resistant to fire that comes up to their borders, those areas can also help protect water ways from the larger effects of wildfire. Wildfires mobilize soils, debris, and nutrients that would otherwise be held in place by healthy forests. After a forest burns, sediment, ash, and wood are more likely to be washed into streams by rain or snowmelt. When riparian areas remain intact thanks to beaver activity, the healthy willows and grasses help slow down runoff water, trap that sediment and ash, and protect the health of fish and other aquatic life that need clear water to survive!

WATER WORDS

In water words we explore the etymology of words we commonly use in the world of water.

Dynamic Equilibrium (n.) A state of flux, where any changes over time result in zero net change.

Rivers are constantly moving sediment from one place to another. A river is in **dynamic equilibrium** when the same amount of sediment is entering the system via erosion as the amount of sediment leaving the system by being washed away.



The Slate River (left) and Coal Creek (right) deposit sediment in some areas (on the inside of bends) and erode it in other areas (on the outside of bends).

Join us for our Appreciation Party!

Please join us for our annual Appreciation Party on **June 20!** We will have food and drinks at the **Grant Lake Pavilion from 4-7pm** to celebrate our supporters and partners. All are welcome!



Please consider making a tax-deductible donation to CCWC to support our mission.