

Your Watershed column: A story of ecological restoration

Jon NicolodiYour Watershed

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Butler Creek is located in the White River National Forest at the headwaters of Rifle Creek. It is directly north of Rifle by about 16 miles, and "if you look at pictures from decades ago, Butler Creek was a mess," said Clay Ramey of the U.S. Forest Service.

"The management practice back then was to actually spray herbicide down onto the willows along the stream so that there would be more water for grazing," he recalled.

Considering that "back then" refers to only the 1990s, Butler Creek deserves the little special attention it is getting.

Beginning in 2017, the Middle Colorado Watershed Council and the USFS embarked on a multi-year recovery project of Butler Creek. The lack of willows and the footprint and grazing by cattle created a stream bank that slumped down into itself, eroding readily, creating messy, quick runoffs and silty waters.



The creek's population of Colorado River cutthroat trout, listed as either "sensitive" or a "species of special concern" by governmental agencies, was being suffocated by the immense amount of sediment in the waters from stream erosion. It was destined for extirpation.

With funding from Patagonia World Trout Initiative and Western Native Trout Initiative, the MCWC, the USFS and numerous volunteers planted hundreds of willows along the denuded banks of Butler Creek, transplanting them from other willows in the area so they knew they would take well. The willows were fenced off with a solar electric fence to give them a chance to grow.

The Butler Creek grazing pasture, one of many pastures in a massive allotment, was modified to allow grazing only in the early summer when the willows don't taste as sweet to the cattle as they do in the fall. Colorado Parks & Wildlife made a donation as well: the East Branch of Parachute Creek had plenty of beavers, and they figured they could gift some to the cause.

"It's really all about the beavers," said Ramey. The entirety of Butler Creek used to be a series of beaver dams, and when they were chased away and died off, the dams broke, and the gradient of the creek changed to increase erosion.

"The dams of the beavers also keep water around for longer and raise the water table," he said. The beaver dams will catch the sediment that suffocates downstream native fish populations.

"We plant the willows to give the beavers something to feed on and to build their dams out of. The willows are great anyways for their purpose of stabilizing the streambanks, but we're hoping it's the beavers that truly fix up the mess and bring ecological health back to Butler Creek."

"Having Colorado River cutthroat trout habitat is incredibly important," Ramey said. But the USFS and the MCWC are looking at the big picture as well: The willows give wildlife and cattle something to feed on. They help bring the water table higher, which keeps water in the creek for longer through the dry summers, the antithesis of the hydrological knowledge of the 1990s.

Recovery takes time, but within a year, positive changes are already happening.

"The beaver population is thriving, and the willows we transplanted have had a great survival rate, despite the dry summer," said Nate Higginson, watershed specialist for the Middle Colorado Watershed Council. "We've seen Colorado River cutthroat trout spawning in the creek. Time will tell if they flourish, but at least they're still there, and the entire ecology, from the grazing cattle to wildlife, benefit from this return to balance along Butler Creek."

Jon Nicolodi writes a monthly column for the Middle Colorado Watershed Council, which works to evaluate, protect and enhance the health of the middle Colorado River watershed through the cooperative effort of watershed stakeholders: anyone standing in the watershed. To learn more about the MCWC, visit <https://www.midcowatershed.org> (<https://www.midcowatershed.org>), and find additional information about the Butler Creek restoration at <https://www.midcowatershed.org/restoration> (<https://www.midcowatershed.org/restoration>). You can also find the Council on Facebook at <https://www.facebook.com/midcowatershed> (<https://www.facebook.com/midcowatershed>).