## colorado open lands Tarryall Creek Stream Restoration Design-Build

Park County, Colorado



top: Eroding bank typical of pre-restoration conditions bottom: Stream bank following restoration

The stabilization of Tarryall Creek restored prime trout habitat, returned willows to the riparian corridor, and greatly reduced sediment production in the creek.

Biohabitats was retained by Colorado Open Lands, a land conservation organization, to restore portions of Tarryall Creek along a two-mile reach that flowed through a working ranch. This narrow stream valley had been used for grazing and hay cutting for over 100 years. The riparian buffer contained only sporadic clumps of willows, and the stream banks were severely eroded.

The goals of this design-build project were to stabilize eroding banks, re-establish a natural riparian buffer, and provide habitat for trout. A stable reach of Tarryall Creek on private fishing club land was measured and utilized as a reference reach. Biohabitats obtained the 404 permit from the U.S. Army Corps of Engineers and approval from the Colorado Department of Wildlife.

The design restored a stable pattern and dimension to the degraded reaches while maintaining the existing, stable riffle/pool sequences. Trees and boulders from another location on the ranch were harvested and used to construct log vanes, rootwads, and large, woody debris. These structures, along with gravel/ cobble point bar material and transplanted willow clumps, were combined to stabilize eroding banks while also creating cover for trout.

## SERVICES

Inventory & Assessments Design-Build Permitting Construction Management Project Management

conservation planning ecological restoration regenerative design



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