Transformative Water Pitkin County, Colorado, U.S.A.

The Colorado ranch rests on a flat glacial terrace, stretching 40 acres between the Roaring Fork River and State Highway 82. Once a busy cattle and sheep operation, the land was transformed into an asphalt plant in the early 1980s when work on the highway necessitated industrial use of the space. For years, trucks and construction equipment roamed the property, causing the land to become densely compacted. The ground was impenetrable, causing pollution and construction waste to drain into the Roaring Fork River. In the mid-1990s, the current owners purchased the property, which was now overgrown with invasive species and littered with piles of asphalt and historic but dilapidated cabins. The redesign increases the environmental sustainability of the space while restoring the natural beauty and cultural heritage of the old ranch.

The landscape is required to function as a holding facility for the water used by the nearby town. Wetlands, streams, and ponds store and purify the water while still adding beauty to the space. The design team carefully studied the beds of the Roaring Fork River to create an aquatic landscape, which naturally filters the running water. Gravel added to the streambed and strategically planted groupings of willows and cattails foster healthy aquatic life. A water treatment system adds oxygen and cleansing bacteria to further increase the water quality on the ranch.

The project removed invasive plant species and replaced them with an array of naturally occurring grasses, wildflowers, and trees. The restored landscape creates new wildlife habitat and enhances biodiversity. During the initial site analysis, the design team conducted an inventory of native plants and grasses in the area to create a specific herbaceous plant mix for the site. Sod consisting of weed-free wildflowers and grasses successfully provided immediate coverage of the land. To conserve water, plantings mimic natural plant geography and are organized into zones based on water need. In select places, a high-efficiency drip irrigation system is used.

The project incorporates recycled materials left behind from prior land use, helping to sustainably manage waste while also preserving the cultural heritage of the site. Piles of scrap asphalt have been reused to create the new road base. The design team left the roads without curbs so that stormwater could drain into the adjacent landscape and infiltrate the ground. The five historic cabins on the property were reconstructed using reclaimed, local wood. Some cabins were relocated and strategically arranged to emulate historical ranches of the Roaring Fork Valley.

Project Resources

LANDSCAPE ARCHITECT

Design Workshop Richard Shaw, FASLA; Valerie Alexander Yaw, ASLA; Taber Sweet

AQUATIC/POND CONSULTANTS Aqua Sierra, Inc., Morrison, Colorado USA

WATER RIGHTS CONSULTANTS Resource Engineering

LANDSCAPE CONTRACTOR Landscape Workshop

BUILDING CONTRACTOR B & H Construction