

FLOUR MILL PROJECT



Credit: Trout Unlimited

WHAT THIS PROJECT DOES

Located in Maybell, CO, Trout Unlimited's (TU) Flour Mill Project with Colorado State University (CSU) and a local landowner will provide ranchers and local landowners with critical irrigation data that will help them effectively improve their soil and water conservation efforts. Across Colorado, ranchers are often using water intensive, traditional irrigation techniques on their properties. With prolonged drought and a decreasing water supply in the Colorado River and its tributaries, many are looking for ways to improve their irrigation practices while maintaining their operations and cutting costs. TU and CSU will assist local landowners by installing soil moisture sensors on their properties to study the productivity of alternative forage types and if they reduce water usage in the process. If successful, this information will be shared with other ranches to help improve irrigation efficiency and reduce operational costs, thereby maximizing impact across the state. Partners anticipate this work will begin in 2026.

PROJECT BENEFITS

This project could have profound impacts on Colorado's ranching industry. First, it will provide the state's ranching communities with locally derived data on how soil health and water conservation can go hand-in-hand to help farmers and ranchers adapt to increasingly hot and dry conditions and less reliable water supplies. In turn, farmers and ranchers may be able to reduce costs, maintain or enhance their operations, and adopt less water-intensive forages. This transferable data could eventually be used to benefit the state's agricultural practices, leading to further water savings, improved agricultural efficiency, and reduced pressure on Colorado's rivers and streams that provide drinking water, support tourism economies, and serve as vital habitat for cherished fish and wildlife. Data from the project could ultimately benefit downstream users and the Colorado River Basin as a whole. By collaborating on projects that conserve water and create sustainable farms and ranches, partners and landowners are working to ensure water security for the next generation of Colorado producers.

PROJECT DETAILS

Project Location: CO-3

Project Cost: ~\$250,000

Funding Programs: Trout Unlimited and Colorado State University's IN-RICHES Program are collaborating to apply for future funding.

Partners: CSU IN-RICHES Program (Integrated Rocky Mountain-region Innovation Center for Healthy Soils), local landowners, Colorado Cattlemen's Association

PROTECTING THE COLORADO RIVER AND THE COMMUNITIES THAT DEPEND ON IT

The Colorado River is a resource for 40 million people. It provides drinking water, as well as critical food and energy production. It's an engine for local economies, an irreplaceable habitat for native birds, fish, and wildlife, and an essential part of the Western way of life. But it's on the brink of collapse.

The river is over-allocated, and its two largest reservoirs have fallen to roughly one-third capacity. Decades of drought and rising temperatures threaten the reliability of future water supplies in Colorado River Basin states, putting crucial infrastructure in jeopardy and increasing risks to communities from natural disasters like wildfires and floods.

INVESTING IN THE COLORADO RIVER BASIN'S FUTURE

In order to ensure that the Colorado River can continue to be a reliable source of clean water for communities and agriculture throughout the Basin, we need long-term, sustainable state and federal funding for strategies that make the river more resilient, conserve water, and protect communities from increasingly severe fires, floods, and drought.

HOW TO CREATE A MORE RESILIENT COLORADO RIVER BASIN



Improve forest health using management and restoration strategies designed to protect the forested areas in the Colorado River Basin, such as thinning overgrown areas, removing invasive plant species, and conducting prescribed burns.



Restore wetlands, high-elevation mountain meadows, and riverside habitat to help improve the health of rivers and streams across the Basin, reduce sediment in downstream reservoirs and water infrastructure, improve water security, and enhance forage. Strategies include implementing wood and rock structures to slow river flows, reestablishing native plants, and replenishing groundwater to help protect clean water supplies and restore degraded rivers and streams.



Increase agricultural efficiency and enable farmers to develop strategies that work for them, like supporting on-farm water conservation methods, alternative crops that use less water, and investing in infrastructure upgrades like lining canals.



Boost municipal water conservation by expanding what is already working, like water-efficient plumbing and appliances, leak detection systems, water reuse, replacing thirsty lawns with drought-tolerant landscaping, and incorporating water planning into urban development and growth decisions.

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