

# GREEN RIVER DROUGHT RESILIENCE AND SEDIMENT CONTROL



Photo source: Trout Unlimited

## WHAT THIS PROJECT DOES

To improve resilience in Wyoming's Green River, a major tributary of the Colorado River, a multi-year, collaborative effort is underway to control sediment and erosion issues made worse by decades of drought and warmer temperatures. Partners will pursue approx. 25 separate projects in streams that have deeply degraded and actively eroding channels that are contributing sediment and nutrients to the river, exacerbating the effects of drought on ranching and agricultural operations, wildlife, and aquatic species. Partners will use low-tech and process-based techniques, such as beaver-dam analogs and wood structures, to slow river flows, induce sediment deposition, limit erosion, and support re-colonization of beavers. They will also revegetate riparian and wetland areas to restore land cover and manage grazing to protect establishing plant communities. Partners are already making progress on implementation, including in Muddy Creek and Sage Creek, and expect to complete 5-10 projects each year.

## PROJECT BENEFITS

This series of projects will enhance stream flows, river health, and habitat for diverse fish and wildlife species, including Colorado River cutthroat trout, elk, and sage grouse. It will also improve water quality and ensure better forage health in adjacent meadows, which reduces irrigation costs for local ranchers. Re-establishment of plant communities and wetlands will stabilize river banks, reduce the impacts of run-off, boost wildfire resilience, and increase groundwater recharge. Additionally, by preventing phosphorus-laden sediments from flowing into Flaming Gorge Reservoir, these projects will improve water storage capacity and help prevent harmful algal blooms.

## PROJECT DETAILS

Project Location: Upper  
Green River Basin

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Project Cost: \$378,865

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Federal Funding: U.S. Fish  
and Wildlife Service and the  
Bureau of Land  
Management

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Partners: U.S. Fish and  
Wildlife, U.S. Bureau of  
Land Management, the  
U.S. Forest Service,  
Wyoming Game and Fish  
Dept., Trout Unlimited, and  
The Nature Conservancy

# WHAT IS RESILIENCE IN THE COLORADO RIVER BASIN?

The Colorado River is a resource for 40 million people. It provides drinking water, food and energy production, recreation, and irreplaceable habitat for rare and native birds, fish, and wildlife. But it's on the brink of collapse.

To avert a crisis, we must begin to implement durable solutions and increase investment in water-related climate resilience to protect all who depend on the Colorado River.

## WHAT IS RESILIENCE?

Resilience is the ability for the Colorado River Basin to prepare for and adapt to climate shifts and extremes, including rising temperatures, increased drying, and variability in precipitation. Resilience means identifying, piloting, and implementing durable strategies to avoid or mitigate climate-related risks to the Colorado River community.

## HOW TO IMPROVE RESILIENCE IN THE COLORADO RIVER BASIN



Enhance forest health through focused forest management and forest restoration strategies such as clearing surface fuels, restoring river and stream channels, removing invasive plant species, and conducting prescribed burns.



Restore the wetlands, meadows, riparian areas, and connected floodplains that comprise healthy watersheds across the Colorado River Basin. Use methods like beaver-related restoration and hand-built wood and rock structures to slow river flows, recharge groundwater, and re-establish natural storage.



Improve agricultural efficiency and enable growers to thrive with less water by supporting regenerative agriculture practices, alternative crops, and investing in infrastructure upgrades like lining canals with concrete.



Boost municipal water conservation by expanding what is already working, like low-water-use appliances, leak detection systems, replacing thirsty lawns with waterwise landscaping, and incorporating water in development and growth decisions.

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