PAGOSA GATEWAY PROJECT: A COMMUNITY PROJECT TO PRESERVE AQUATIC HABITAT IN THE FACE OF DROUGHT AND CLIMATE CHANGE COLORADO



Building Watershed Resilience through the WaterSMART Environmental Water Resources Projects

PROJECT DETAILS

Project name: Pagosa Gateway Project A Community Project to Preserve Aquatic Habitat and in the Face of Drought and Climate Change Colorado

Potential Project Partners: Trout Unlimited, San Juan Watershed Enhancement Partnership which includes U.S. Forest Service, Colorado Parks and Wildlife, NRCS, San Juan Conservation District, Archuleta County, Town of Pagosa Springs, Mountain Studies Institute and many others.

Federal Funding Award: \$375,000

Total Project Cost: \$2,042,795

Federal Funding Program: Bureau of Reclamation's WaterSMART Environmental Water Resources Project In 2022, Trout Unlimited, in partnership with the Upper San Juan Watershed Enhancement Partnership (WEP) was awarded an Environmental Water Resources Project grant to convene a diverse group of stakeholders to improve approximately 2.1 miles of the San Juan River to preserve aquatic habitat in the face of declining flows and warming temperatures. The San Juan River is home to native and recreational fisheries. River recreation, including sport fishing, is a significant economic driver in this small, disadvantaged rural community. A recent environmental and recreational water supply needs assessment commissioned by WEP identifies alarming changes in stream hydrology driven by prolonged drought. This project addresses the needs assessment's findings.

This project intends to increase water supply reliability for ecosystems along the San Juan River above Pagosa Springs. This increase in reliability will not be achieved by altering management of water but, rather, by modifying the channel to be more resilient in the face of historical flow alterations and expected future changes to low-flow conditions. The Pagosa Gateway Project is located in Archuleta County, Colorado. The upper terminus of the Project is on the San Juan River 2.1 miles upstream of the Town of Pagosa Springs and the lower terminus ends at the entrance to Town.

The Pagosa Gateway Project will implement a series of measures, including creation of low flow channels, riffle and pool habitat, bank stabilization and revegetation, fish passage, and similar measures to increase the resiliency of the San Juan River and its fisheries in the face of a very dry and hot future. The project will undertake structural interventions and plant riparian vegetation that are intended to increase the availability of late summer habitat for aquatic and terrestrial species respectively, and reduce the potential for increasing water temperatures in a warming future. Maintaining cool temperature regimes in the river is critical to the viability and quality of the sport fishery above and through the Town of Pagosa Springs. Contributions of woody debris add habitat and structural complexity to the stream bed. Riparian re-vegetation efforts will increase the acreage of active riparian forests throughout the project area. The removal of buried cars, abandoned steel pipeline, and concrete debris from the stream banks will enhance habitat quality and remove a potential source of toxic fluids and materials from the river corridor.



PHOTO: SAN JUAN RIVER THROUGH PAGOSA SPRINGS | TROUT UNLIMITED

Community Support

The Pagosa Gateway Project enjoys broad support. The Project is supported by the San Juan Watershed Enhancement Partnership (WEP). WEP's steering committee includes members from the diverse water uses within the watershed, including municipal, agricultural, environmental, and recreational, as well as local government, businesses, water and soil conservation districts. The Town of Pagosa Springs is a Category A partner in the Project and has approved both cash and inkind support.

The Importance of Federal Funding

Trout Unlimited was awarded \$375,000 through the Bureau of Reclamation's WaterSMART Environmental Water Resources Project to support these efforts on the San Juan River. The full project cost is \$2,042,795.

WaterSMART Environmental Water Resources Projects is a new category of funding to support projects focused on environmental benefits and that have been developed as part of a collaborative process to help carry out an established strategy to increase the reliability of water resources. Applicants are invited to leverage their money and resources by cost sharing with Reclamation on Environmental Water Resources Projects, including water conservation and efficiency projects that result in quantifiable and sustained water savings and benefit ecological values; water management or infrastructure improvements to mitigate drought-related impacts to ecological values; and watershed management or restoration projects benefitting ecological values that have a nexus to water resources or water resources management.