

Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	Colorado Rio Grande Restoration Foundation
Name of Water Project	Rye Resurgence Film & Educational Impact Campaign
Grant Request Amount	\$150,000.00
Primary Category	\$150,000.00
Engagement & Innovation Activities	
Total Applicant Match	\$0.00
Applicant Cash Match	\$0.00
Applicant In-Kind Match	\$0.00
Total Other Sources of Funding	\$50,000.00
Mighty Arrow Foundation	\$50,000.00
Total Project Cost	\$200,000.00

Applicant & Grantee Information

Name of Grantee: Colorado Rio Grande Restoration Foundation Mailing Address: 623 4th Street Alamosa CO 81101

Organization Contact: Daniel Boyes Position/Title: Executive Director Phone: 719-589-2230

Email: daniel@riograndeheadwaters.org

Description of Grantee/Applicant

No description provided

Type of Eligible Entity

- Public (Government)
- Public (District)
- Public (Municipality)
- Ditch Company
- Private Incorporated
- Private Individual, Partnership, or Sole Proprietor
- Non-governmental Organization
- Covered Entity
- Other

Category of Water Project

Agricultural Projects

Developing communications materials that specifically work with and educate the agricultural community on headwater restoration, identifying the state of the science of this type of work to assist agricultural users among others.

Conservation & Land Use Planning

Activities and projects that implement long-term strategies for conservation, land use, and drought planning. Engagement & Innovation Activities

Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website.

Watershed Restoration & Recreation Projects that promote watershed health, environmental health, and recreation.

□ Water Storage & Supply

Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging existing reservoirs to restore the reservoirs' full decreed capacity and Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap.

Location of Water Project	
Latitude	37.736500
Longitude	-105.900860
Lat Long Flag	Other: Coordinates based on other boundaries or locations
Water Source	San Luis Valley Unconfined Aquifer and the Rio Grande
Basins	Rio Grande
Counties	Alamosa; Rio Grande; Conejos; Saguache
Districts	20-Rio Grande; 21-Alamosa La Jara; 22-Conejos Creek; 26-Saguache Creek; 27-Carnero
	Creek

Water Project Overview

Major Water Use Type	Education
Type of Water Project	Education
Scheduled Start Date - Design	9/1/2025
Scheduled Start Date - Construction	11/1/2027
Description	

The Project will lead in the creation of a documentary film, "Rye Resurgence." This film will shine a light on the growing need for agriculture to adapt to changing water supplies by showcasing the work of stakeholders in the San Luis Valley to recover local aquifers. The film will explore how farmers are altering traditional approaches to farming by introducing water saving, crops into crop rotations, specifically Rye, while working together as a community to build market demand and a supply chain that fosters the healing of the soil and watershed and builds economic resilience all while creating a regional food system in Colorado and beyond.

Measurable Results

New Storage Created (acre-feet)

New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive Existing Storage Preserved or Enhanced (acre-feet)

New Storage Created (acre-feet)

Length of Stream Restored or Protected (linear feet)

Length of Pipe, Canal Built or Improved (linear feet)

Efficiency Savings (dollars/year)

Efficiency Savings (acre-feet/year)

Area of Restored or Preserved Habitat (acres)

Quantity of Water Shared through Alternative Transfer Mechanisms or water sharing agreement (acre-feet)

Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning Number of Coloradans Impacted by Engagement Activity

500,000 Other

The primary outcome of the project is a 30 minute documentary film that features the farmers in the San Luis Valley and partners of the Rye Resurgence Project as they work to develop the market for rye as a way to save water, restore aquifers, and support the resilience of agriculture and ecological communities. Between in person screenings, film festivals, online distribution and organic press coverage, anticipated reach is ~1 million viewers with this film and associated assets. In Colorado, the film is expected to reach approximately 500,000 Colorado residents through local screenings, festivals, grassroot organizing, and streaming across Colorado PBS.

Water Project Justification

The Rye Resurgence Film supports the goals of Colorado's Water Plan by addressing aspects of each of the four action areas: Vibrant Communities, Robust Agriculture, Thriving Watersheds, and Resilient Planning.

Vibrant Communities: Page 181 of the Water Plan notes that, "Partner Actions Rely on Effective Engagement and Education at Different Levels; Partner engagement is critical to the success of the Water Plan. Partners do not just include the typical stakeholders that engage in water issues – partners include all Coloradans. Partner engagement needs to occur at different scales—from the federal and state levels down to local government and individual residents."

The levels highlighted note that governments, such as water districts, "should leverage resources and coordinate public education and awareness campaigns that focus on topics like water efficiency and reuse. Local projects that explore and research emerging strategies, pilot programs, and new ways of doing more with less help demonstrate strategies that others can implement." Further, residents "should be conscious of their "water footprint" and adopt a water-saving ethic. Every resident should have the opportunity to engage in water issues, know their local water sources, and understand how to conserve. Engagement helps promote inclusion and larger support for water. Inclusive outreach and education tailored to meet regional needs and diverse populations and age groups will need to be conducted to achieve this objective.

The film fits well within these visions for partner actions as it will raise awareness of the Rye Resurgence Project, an effort spearheaded by the San Luis Valley Water Conservancy District, as a pilot program to save water by creating markets for low-water use crops that can be implemented elsewhere in the State. Further, the film will help Coloradoans better understand how their water footprint includes the types and origins of food they buy, and empower every resident to support sustainable agriculture and water conservation by supporting farmers' efforts to grow low-water use crops.

The film will showcase the vibrant and rich agricultural, ecological and historic significance of the San Luis Valley, celebrating what a treasure this region is within the larger fabric of Colorado. Contributing to almost 40% of Colorado's agricultural output, and as the home of the Rio Grande Headwaters, what happens in the valley affects all Coloradans. This film will showcase the voices of local farmers with long histories in the valley who are seeking solutions to continue farming sustainability while exploring water saving methods and alternative crops, such as Rye. The local community is coming together to combat water scarcity issues by driving local demand for Rye across millers, bakers, brewers, distillers, maltsters, conservationists and biologists alike. One aspect that makes this film so special is seeing how a community can come together through their own areas of expertise and all agree on the innate value and importance of protecting our most vital resource, water. This film will

celebrate the vibrant community within the San Luis Valley as they work together to help solve for the depleted aquifer and we will see how this creates an upswell of support reaching into the front range and urban communities of Colorado and beyond as more buyers become educated around the incredible water saving benefits and rich flavor profile of San Luis Valley Rye.

Robust Agriculture: The Project greatly aligns with the partner actions to support Robust Agriculture. Page 194 of the Water Plan states, "Farms in groundwater-dependent areas such as the Rio Grande Basin and Republican River Basin are actively taking agriculture out of production to meet compact obligations and stabilize groundwater levels. Supporting these communities as they work to find solutions that help transition to more sustainable water use involves not just providing funding but supporting planning efforts to build a robust agricultural future with increased ecosystem and community benefits." A partner action that addresses this challenge is, "Lower water use cropping: Economic drivers may mean a change in crop type for producers who frequently experience water shortage. Innovation in crop genetics and crop selection may provide a more profitable and resilient commodity than traditional Colorado crops. Alternatively, deficit irrigation combined with investments in soil health can be viable approaches." The Rye Resurgence Project is a direct response to this action as it seeks to support San Luis Valley farmers' efforts to reduce their groundwater pumping in order to stabilize aquifer levels by growing the market for San Luis Valley Rye. Further, the Rye Resurgence Project addresses the Healthy Lands partner actions, "Soil heath and effective use of water: Healthy soils can increase the resiliency of agricultural systems including water use efficiency, which can benefit crop growth and may increase profitability," and, "Reducing erosion and improving water quality: Management practices such as conservation tillage, contour farming, and buffer strips can reduce on-farm erosion and improve water quality." Page 195 of the Water Plan notes that, "Partner Actions Rely on Effective Engagement and Education at Different Levels As Colorado grows, its cities are expanding; Government: Agriculture is intrinsically tied to quality of life in Colorado. Government recognition and promotion of the industry's importance (including for our Tribes) through public engagement and non-agricultural partnerships will help educate people on agriculture, promote local food production, and support the industry through the tough challenges it faces. Quasi-governmental entities, ditch companies, acequias, commodity and trade organizations: Entities like water conservancy and conservation districts and ditch companies can conduct outreach campaigns on various water issues, such as alternatives to buy and dry transfers or strategies to build agricultural resilience, and provide support to irrigators that seek grant funding for water-related project development and implementation. Collaborative groups from acequias to CSU Extension and many more already support the agricultural sector, and engagement among these groups can help bring the Water Plan vision to fruition. Residents: Providing pathways for success to the next generation of farmers will help sustain the agricultural workforce and may attract new people to the industry."

The film fits within these Engagement and Education actions as it will promote local, water smart crops such as rye as a way to build agricultural resilience. The film will be an educational tool to help drive market demand for Rye and alternative water saving crops so that farmers can build these crops into their rotation as a water saving tool and lucrative cash crop. This will support the resilience of San Luis Valley communities, providing opportunities for the next generation of farmers.

Thriving Watersheds: Page 206 of the Colorado Water Plan calls out the importance of Healthy Lands, specifically, "Improving riparian and aquatic habitat: Resilient river systems require seasonal flow fluctuations and provide complex and connected aquatic and riparian habitats that sustain stable, diverse, abundant, and reproducing populations of aquatic and riparian species. Efforts to improve riparian and aquatic habitat are important to the recovery of native and imperiled species." The backbone of the film is the underlying dependency on the watershed to support human beings and wildlife alike. The work of farmers and stakeholders to improve aquifer health supports both healthy agricultural communities as well as communities of wildlife that depend on groundwater connected wetlands. For this reason the filmmakers are working closely with the San

Luis Valley Water Conservancy District and the Rio Grande Headwaters Restoration Project to craft the messaging in such a way that this film can be shared across the state of Colorado and beyond as a blueprint and educational tool in an effort to show how a shift in agricultural practices to save water is also a tool to restore watershed health. e. The film will highlight this point by featuring the Rocky Mountain population of Greater Sandhill Cranes, estimated at around 20,000 birds, that migrate through Colorado's San Luis Valley taking refuge at their biannual stopover wetland habitat. These majestic animals are yet another beacon of what is at stake if the San Luis Valley communities don't come together to implement water saving practices.

Resilient Planning: Page 219 of the Water Plan notes, "Partner Actions Rely on Effective Engagement and Education at Different Levels Raising awareness and helping all Coloradans recognize our water scarcity issues will be important to addressing our challenges. Education is the key to bridging perceived divides across the western and eastern slopes, rural and urban populations, and diverse people. Public education around water must be increased, and outreach efforts should be increasingly inclusive. The State should work with local governments to support common messaging that increases awareness of water challenges and helps all Coloradans understand the critical importance of funding, collaboration, and multi-purpose projects; Quasi-governmental entities, nongovernmental organizations: While NGOs and government groups can often support innovation, creative opportunities to innovate and engage new partners is needed. Often, NGOs or nonprofits can help support expanding connections. This can include working with the business community to identify adaptive technologies, identifying insights on adaptive practices by engaging Indigenous partners and cultures, or working with students on innovation challenges..." The film will highlight the importance of the business community in supporting sustainable agriculture as robust markets for low-water use crops are key to farmers being able to adjust their operations. This film will follow along as the Rye Resurgence Project navigates negotiations with buyers and CPG brands who are purchasing small and large orders of San Luis Valley Rye. It will also showcase infrastructure developments in the valley and the wider reaching market as the demand for Rye grows. This includes the expansion of the Colorado Malting Company owned by Jason Cody the grand opening of a regional grain hub, owned by Nels Wroe of Dryland Distilling, and the progression of a first of its kind Rye CPG product coming to market in 2026 from baker and owner of Tumbleweed Bread, Jake Gefell. Additionally the film will track the progress of farmers who are experimenting with water saving alternative crops. All of these developments factor into a more resilient, regional food systems model, with water savings at the core of its values hierarchy.

In addition to supporting the Colorado Water Plans goals and partners actions, the project addresses the Rio Grande Basin Plan goal of, "Engaged and informed citizens who understand the scope and urgency of local, state, and regional water issues and participate in robust and diverse educational opportunities." The film will communicate the impacts of water scarcity to Colorado's agriculture communities, highlight innovative solutions such as building markets for low water use crops, and provide a call to action for people in Colorado and around the west to help support climate smart solutions by choosing products created with low-water use crops.

Related Studies

CWCB's Agency Action 2.6 Report - 10 Strategies to Support Irrigated Agriculture The project supports the following actions: 2: Promote the Ecosystem Benefits of Agriculture; 5: Expand Market Pathways for Producers; and 8: Promote Drought Resiliency.

Taxpayer Bill of Rights

The Applicant, The Colorado Rio Grande Restoration Foundation, is not subject to TABOR limitations, as it is a Colorado nonprofit organization operating under Section 501(c)(3) of the U.S. Internal Revenue Code.