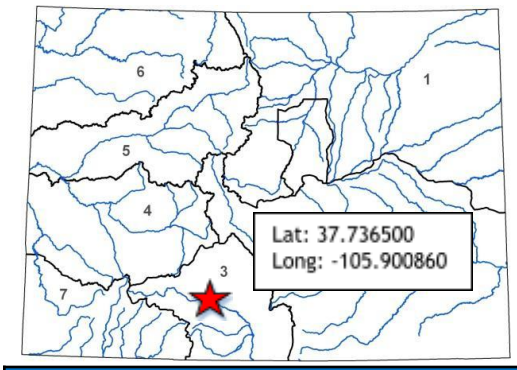
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

San Luis Valley Rye Resurgence Project
San Luis Valley Water Conservancy District
September 2023 Board Meeting

Water Plan Grant Program Application



LOCATION	
Counties: Alamosa, Rio Grande, Saguache	
Drainage Basin:	Rio Grande

DETAILS	
Total Project Cost:	$830,000
Water Plan Grant Request:	$405,000
Recommended amount:	$405,000
Other CWCB Funding:	$0
Other Funding Amount:	$420,000
Applicant Match (in-kind):	$5,000
Project Type:	Implementation
Project Category:	Agriculture
Measurable Result:	1,200 AF of groundwater pumping reduction; Soil health improved on 1,200 acres

Colorado Water Plan Grant funding will assist in the launch of a robust, value-added market for San Luis Valley rye—a low-water crop—within Colorado's distilling and baking communities. Ten farmers will grow 120 acres (one typical center-pivot-irrigated field) each of winter cover crop, including 30 acres of distilling or baking rye that will be marketed at a premium price. During the two-year market launch time frame, participating farmers will grow a total of 300 acres of rye and sell 900,000 pounds of market rye.

Success of this innovative project would mean the creation of a San Luis Valley rye market, one more option for farmers seeking to reduce groundwater water use, prevent erosion, and improve soil health—all while making a profit.

CWCB dollars would go toward cleaning, processing, bagging, and transporting the rye, along with professional market development, including graphic design and materials.

When asked why the San Luis Valley Water Conservancy District was willing to hold this grant on behalf of producers, their manager Heather Dutton said, "We can't expect farmers to assume all the risk if we want innovative solutions for a sustainable water future." This project exemplifies the Colorado Water Plan's push to innovate for robust agriculture, specifically Action 2.10 to "integrate soil health, water conservation, and adaptive practices that increase economic outputs with less water use."

This effort also has the support of the Rio Grande Basin Roundtable, as it would further their Basin Implementation Plan goal of "aquifers with sustainable supplies of groundwater for farmers and ranchers, towns, and wildlife habitat." The project supports multi agency soil health goals, as many of the farmers that will participate in the project are currently participating or plan to enroll in the Colorado Department of Agriculture's Star Plus Program. This project demonstrates a commitment to collaboration and broad-based involvement with the up-front commitment of farmers, the support of the SLVWCD Board of Directors, and the interest of rye processers, distillers, and bakers.

Funding Recommendation:
Staff recommends full funding of $405,000 to the San Luis Valley Water Conservancy District for the San Luis Valley Rye Resurgence Project.

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Water Plan

Water Project Summary

Name of Applicant	San Luis Valley Water Conservancy District	
Name of Water Project	San Luis Valley Rye Resurgence Project	
Grant Request Amount		**$405,000.00**
Primary Category		$405,000.00
Agricultural Projects		
Total Applicant Match		**$5,000.00**
Applicant Cash Match		$0.00
Applicant In-Kind Match		$5,000.00
Total Other Sources of Funding		**$420,000.00**
Farmers		$60,000.00
Distillers and Bakers		$360,000.00
Total Project Cost		**$830,000.00**

Applicant & Grantee Information

Name of Grantee: San Luis Valley Water Conservancy District
Mailing Address: 623 Fourth Street Alamosa CO 81101
FEIN: 846,027,307

Organization Contact: Heather Dutton
Position/Title:
Phone: 719-589-2230
Email: heather@slvwcd.org

Organization Contact - Alternate: Matt Hildner
Position/Title: Office Manager
Phone: 719-589-2230
Email: matt@slvwcd.org

Grant Management Contact: Heather Dutton
Position/Title:
Phone: 719-589-2230
Email: heather@slvwcd.org

Grant Management Contact - Alternate: Matt Hildner
Position/Title: Office Manager
Phone: 719-589-2230
Email: matt@slvwcd.org

Description of Grantee/Applicant

The San Luis Valley Water Conservancy District (SLVWCD) was formed in 1949 to operate a reservoir at Wagon Wheel Gap, which was never built. The SLVWCD now operates an augmentation program within five San Luis Valley counties. Through the program, the SLVWCD replaces depletions to the Rio Grande and Closed Basin caused by domestic, commercial, municipal, and agricultural wells. This program ensures senior water rights are

protected while allowing for economic growth in the San Luis Valley. The SLVWCD also works with partners to address issues such as groundwater sustainability, compliance with the Rio Grande Compact, water supply protection, and river health.

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; Saguache
Districts	20-Rio Grande

Water Project Overview

Major Water Use Type	Agricultural
Type of Water Project	Construction / Implementation
Scheduled Start Date - Design	10/1/2023
Scheduled Start Date - Construction	

Description

The Rye Resurgence Project will help farmers reduce reliance on groundwater, improve soil health, and maintain agriculture profitability by developing a value-added market for rye. The project will incentivize water conservation by partnering with growers who rely on groundwater for some portion of crop production. The project area has been impacted by reduced groundwater and surface water. Partners will develop a market for rye, a low-water crop (~12") to expand options for farmers seeking to reduce water use. Ten farmers will grow 120 acres each of winter cover crop, including 30 acres of distilling or baking rye that will be marketed at a premium price. The cover crop will be grown with minimal water use and turned into the soil as a green manure or grazed by livestock. These actions will reduce erosion and improve soil health.

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)
46,000	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
	Number of Coloradans Impacted by Engagement Activity

Other

1,200 AF of groundwater pumping reduction. Soil health improved on 1,200 acres.

Water Project Justification

The project directly supports the goals of the Colorado Water Plan (CWP) and Rio Grande Basin Implementation Plan (RGBIP). The CWP vision for Robust Agriculture states that, "innovations are needed to sustain irrigated agriculture, including strategies to stretch available water supplies, increase resiliency, enhance food production, and maintain profitability." Further, the CWCB Agency Action 2.10 is to "integrate soil health, water conservation, and adaptive practices that increase economic outputs with less water use." The supporting information for Agency Action 2.10 goes on to say, "Colorado, in response to aridification, periodic and intense drought, and declining groundwater supplies in some basins, must increase focus on promoting soil and water conservation to sustain agricultural production. Pairing soil and water conservation strategies with positive production and economic outcomes is essential for increased adaptation. In partnership with CWCB, Colorado Department of Agriculture (CDA) will assess impacts to water use and economic opportunities that accompany emerging soil and water conservation strategies (i.e., reduced tillage or low-water crops)." Agency Action 2.10 also highlights the CDA Star Plus program: "The CDA's Star Plus program encourages voluntary adoption of soil health practices, including no or low till, cover crops, crop rotation, and incorporating livestock. These practices are good for farmers' and ranchers' bottom lines, the soil, and the environment."

The proposed project is a perfect example of the implementation of Agency Action 2.10 as it seeks to help farmers build a market to enable production of a low water use crop while remaining profitable and improving soil health. Further, many of the farmers that will participate in the project are currently participating or plan to enroll in CDA's Star Plus Program. Finally, the project fits well within the RGBIP as it supports the Basin's goals of "aquifers with sustainable supplies of groundwater for farmers and ranchers, towns, and wildlife habitat" and

“vibrant and resilient agriculture, recreation, municipal, and industrial economies that support thriving communities.”

Related Studies

Colorado Water Plan
Rio Grande Basin Plan
Complementary to the Groundwater Management Subdistricts' Plans of Water Management and efforts to recover the San Luis Valley's Aquifers

Taxpayer Bill of Rights

There are no relevant TABOR issues.