



Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	Colorado Canal Company
Name of Water Project	Colorado Canal Company Strategic Water Plan
Grant Request Amount	\$95,975.00
Primary Category	\$95,975.00
<i>Agricultural Projects</i>	
Total Applicant Match	\$32,000.00
<i>Applicant Cash Match</i>	\$32,000.00
<i>Applicant In-Kind Match</i>	\$0.00
Total Other Sources of Funding	\$0.00
Total Project Cost	\$127,975.00

Applicant & Grantee Information

Name of Grantee: Colorado Canal Company
Mailing Address: 331 Main Street Ordway CO 81063

Organization Contact: Stacey Sober
Position/Title: General Manager
Phone: 719-267-4411

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Organization Contact - Alternate: Jill Henderson
Position/Title:
Phone:

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Grant Management Contact: Stacey Sober
Position/Title: General Manager
Phone: 719-267-4411

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Grant Management Contact - Alternate: Scott Lorenz
Position/Title:
Phone:

Email: slorenz@csu.org

Description of Grantee/Applicant

The Colorado Canal Company is a private water company owned by municipal and individual shareholders. We operate a water collection, delivery and storage system as part of a larger system that includes the Twin Lakes Reservoir and Canal Company, Lake Meredith Reservoir and Lake Henry Reservoir. Our company and its staff are responsible for operation and maintenance of canals, reservoirs, diversions, dams and other properties and facilities. This includes storage and distribution of water for our shareholders and extensive record keeping to comply with water rights and laws.

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	38.245200
Longitude	-104.311600
Lat Long Flag	Ditch diversion structure location: Coordinates based on ditch's diversion structure
Water Source	Arkansas River
Basins	Arkansas
Counties	Crowley; Pueblo
Districts	17-Arkansas: Fowler to Las Animas; 14-Arkansas: Portland to Fowler

Water Project Overview

Major Water Use Type	Agricultural
Type of Water Project	Planning
Scheduled Start Date - Design	1/1/2025
Scheduled Start Date - Construction	
Description	The Colorado Canal Company will develop a strategic water management plan to assess opportunities for: (1) improving canal system operations and agricultural water deliveries through capital infrastructure enhancements and (2) introducing new water management and operational strategies to ensure economic viability and long-term sustainability for company shareholders. The project will include the following components: 1. Review of ditch system operations to identify water delivery service needs

2. Survey of farm shareholders about company operations and future direction
3. Economic analysis of current farm operations in the company service area
4. Analysis of capital projects and operational concepts that provide water and economic benefits to the company
5. Development of a strategic plan to guide the company's efforts and investments

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)
1,100	Efficiency Savings (acre-feet/year)
	Area of Restored or Preserved Habitat (acres)
1,900	Quantity of Water Shared through Alternative Transfer Mechanisms or water sharing agreement (acre-feet)
120	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
120	Number of Coloradans Impacted by Engagement Activity

Other

All outcomes listed above are estimates and are dependent upon strategies defined in the project plan. These outcomes are not guaranteed to be part of the project plan. Estimates calculated as follows:

- * Coloradans impacted by engagement: 20-30 people likely involved in the survey element of the project. There are currently about 60 individual (non municipal) shareholders x 2 people per share impacted = 120 people
- * Coloradans impacted by water saving: estimated as the same number of people as impacted by engagement. These impacts would only occur if the project plan includes infrastructure and operational changes to reduce losses and spills and to improve water deliveries to farms and ranches.
- * Efficiency savings (AF/year): If the project plan includes infrastructure and operational changes to reduce losses and spills, then this will be achieved. Calculated as 3,800 acres active x 3 AF/acre delivery x 10% efficiency savings
- * Water Shared Alt. Transfer (AF): If the project plan includes a water sharing agreement as an operational concept, then this outcome will be achieved. Calculated as 3,800 acres active x 1.5 AF/acre transferable x 33% of year operated

Water Project Justification

Summary: The proposed strategic planning project is very much aligned with the goals of the Colorado Water Plan and the Arkansas Basin Implementation Plan. The underlying objective of the planning effort is to evaluate the most sustainable and resilient future for the Colorado Canal Company and its shareholders. This canal company has been a focal point for the permanent “buy and try” challenges identified in the Water Plan, and the company is seeking assistance from CWCB to create an informed plan of action for the canal company to preserve its agricultural service area in the face of significant risks and challenges.

Support for Colorado Water Plan Goals: The proposed project targets several of the specific Risks and Challenges stated in the Water Plan and supports the specific Visions and Actions identified in the Water Plan. In each section below, page numbers reference specific pages of the Water Plan.

* Risks & Challenges: In the Arkansas River Basin, one prominent challenge is the concern over permanent agricultural transfers and the effects on rural economies, specifically in the Lower Arkansas River (p.80).

Agricultural dry-up has occurred at a significant and well-documented scale in the Colorado Canal Company and in Crowley County, which has impacted the local economy, local communities, and canal company operations (p.147). The canal company is also facing aging infrastructure challenges across a reduced number of active water users along the canal (p.150). The proposed project does not aim to avoid these well-known risks and challenges, but rather is a critical effort to best deal with the effects of these risks through proper planning.

* Vision: The Water Plan vision for Robust Agriculture is the objective of the proposed project: a sustainable agricultural economy and culture where farms and ranches are profitable with a high quality of life for farming communities (p.176). As stated in the Water Plan: sustainable agriculture “means increasing profitable farm income, promoting environmental stewardship, enhancing the quality of life for farm families and communities, and increasing the production of food. Finding ways to maintain or increase agricultural economic output with fewer acres and less water will be critical.” (p.192). The Colorado Canal Company is facing a future with less water supply due to climate change and historical water transfers. At the same time, the canal company is facing infrastructure needs, water delivery challenges, and tough economic prospects. As stated in the Water Plan, the challenge of meeting future water needs in agriculture will require investment in infrastructure and planning for wise water use (p.194). The shareholders of the Colorado Canal Company want to plan for a more sustainable future and are seeking CWCB funding assistance to conduct this planning project as a critical first step down that path.

* Actions: The proposed project will develop a strategic plan for the Colorado Canal Company that will identify capital infrastructure projects and operational concepts that aim to enhance water service and farm economics for company shareholders. The exact projects and concepts are not known ahead of the planning effort, but a wide range of alternatives will be considered. The proposed project will:

- Evaluate collaborative water sharing agreements as one of the operational concepts (Action 2.3, p.197),
- Provide a strategic plan that can be integrated into local government planning (Action 2.5, p.199),
- Identify the most effective infrastructure investments for the canal company to help streamline future funding requests (Action 2.8, p.202),
- Seek to integrate water conservation through infrastructure improvements and operational changes to increase economic output for company shareholders (Action 2.10, p.203),
- Undertake a planning effort that builds resiliency for the agricultural lands served by the canal company (Action Area 4, p.216)

Support for Arkansas Basin Implementation Plan Goals: The proposed project will support several of the goals identified in the Arkansas River BIP (p.18-19) as summarized in the points below. As noted in the BIP, the agricultural water supply gap is relatively large in the Arkansas Basin (p.30) and the Lower Arkansas Basin has seen extensive dry up to support water transfers. The Arkansas Basin has also been at the forefront of developing water sharing projects (p.37) and the proposed project will leverage these past efforts. Page numbers reference specific pages of the BIP.

- Support projects within and outside the Arkansas Basin that will help meet the basin’s agriculture water supply gap, maintain existing supplies, better manage vulnerable supplies, and maximize use of water users’ entitlements. The proposed project targets this goal directly by seeking to maximize use of the Colorado Canal supplies and to best manage the vulnerable water supplies of the canal company.
- Sustain a productive agricultural economy in the Arkansas Basin that sustains viable rural, agricultural-based communities. The goal of the proposed project is to evaluate options and develop a plan that allows the Colorado Canal to continue to serve agricultural producers in a sustainable way. The project aims to ensure that critical water supplies are managed to maintain agricultural productivity and support the local community.
- Support the development of viable ATM/ water-sharing projects between agriculture and municipal interests to mitigate the impacts of drought, provide risk management for agriculture and municipal interests, and facilitate responsible and sustainable water-sharing arrangements. The proposed project is not focused specifically on a

water sharing project, but the strategic plan will include an evaluation of collaborative water sharing agreements as one of the operational concepts considered for future water management.

Related Studies

The proposed project is unique because it involves a canal company taking the initiative to develop a strategic water management plan for a canal company and its shareholders in the face of historic dry up of agricultural lands, continued water supply challenges, and economic pressures. While this effort is considered to be unique and important, there are several related and relevant studies that will help to inform the planning effort. These studies include:

Other projects that have evaluated water management and strategic planning for a ditch company:

- Bessemer Farmland Conservation Project. Palmer Land Conservancy led a project to evaluate the economic impacts of permanent dry up in the Bessemer Ditch service area due to water transfers and to explore alternatives to this dry up. One innovative solution involves the transfer of water from marginal farmland instead of the most productive farmland in the ditch system. <https://www.palmerland.org/BessemerProject>
- Thornton Northern Properties Stewardship Plan. In the late 1980s, the City of Thornton purchased a large fraction of agricultural lands and related shares in the Water Supply and Storage Company in Larimer and Weld counties. Since that time, most of these properties have continued in agricultural production but Thornton is continuing to advance its efforts to dry-up these agricultural lands to support a new water supply to the city. The Stewardship Plan is a voluntary and collaborative effort to develop a strategic plan for managing 18,000 acres of historically irrigated lands. <https://thorntonwaterproject.com/agricultural-benefits/>
- Lower Arkansas Valley Water Conservation District Activities. The LAVWCD has been actively developing and promoting water sharing concepts in the Lower Arkansas River for over 20 years. Specific studies and projects include: (1) 2011 report entitled Land Fallowing – Water Leasing in the Lower Arkansas Valley (2002 through mid 2011), (2) Catlin Canal rotational fallowing pilot project starting in 2015, and (3) promotion of conservation easements paired with water sharing arrangements. <https://www.lowerark.com/>
- New Cache Water Marketing Strategy. The New Cache la Poudre Irrigating Company contracted with a multi-disciplinary team to evaluate water marketing strategies that would provide for temporary water transfers out of the ditch while preserving the agricultural land base of the ditch company. Various land and water management strategies were evaluated as part of the marketing effort.

Link: https://watercenter.colostate.edu/wp-content/uploads/sites/33/2019/05/WLL_5-9-19_DanBrown.pdf

- Bent County IGA with Colorado Springs Utilities. In the Lower Arkansas River Basin, a unique Intergovernmental Agreement (IGA) was executed between Bent County and the City of Colorado Springs that provides terms and conditions for allowing water transfers out of Bent County to support municipal water supply. The terms and conditions provide specific requirements around

Taxpayer Bill of Rights

TABOR does not apply to the Colorado Canal Company.