



COLORADO

Colorado Water
Conservation Board

Department of Natural Resources

Colorado Water Conservation Board

Water Supply Reserve Fund

Water Project Summary

Name of Applicant	Greeley Irrigation Company		
Name of Water Project			
Basin Account Request Subtotal			\$59,122.00
Applicant Cash Match			\$30,000.00
Applicant In-Kind Match			\$15,000.00
Basin Requests			
Sources of Funding			

Grant Details

Water Project Justification

1. Increased Efficiency – Irrigation efficiency technologies can reduce losses in ditches, aid in water use tracking, and identify sections of the canal that require maintenance or improvement to optimize efficiency.
2. Building resilience – Increased efficiency and collaboration between irrigators, municipal users, industrial and commercial shareholders, and augmentation demands will aid in addressing drought and climate change.
3. Multi-Purpose Project – The Greeley Canal No. 3 allows for the vibrant community of the City of Greeley to work hand in hand with the agricultural community and other users, including the Central Colorado Water Conservancy District. This collaboration provides a unique opportunity for multi-purpose projects like the proposed efficiency upgrades to allow multiple water uses to thrive within a single ditch system.
4. Stormwater Risk Management –The Greeley No. 3 runs through the center of the City of Greeley with housing, commercial, and industrial development encroaching on the canal. Currently, development surrounds approximately 60% of the length of the Canal, and in some cases backyards are 10 to 15 feet from the nearest bank of the Canal. As farmlands turned to developed lands, rain and precipitation events have had a greater impact on the level and flow in the Canal, creating situations in which overtopping can occur in a matter of minutes, if not properly managed. Installing automation and reporting technology throughout the course of the Canal will allow Ditch Company personnel to monitor and react in real time to the impacts of stormwater and mitigate flooding risks to nearby properties and landowners.

Applicant & Grantee Information

Name of Grantee: Greeley Irrigation Company
Mailing Address: PO Box 445 Greeley CO 80632
FEIN: 840,217,060

Organization Contact: Leah Hubbard
Position/Title: Board Member
Phone: 970-391-5640
Email: lhubbard@gicditch.com

Organization Contact - Alternate: Donna Coble
Position/Title: Office Manager
Phone: 9703536121
Email: ditchoffice@gicditch.com

Grant Management Contact: Leah Hubbard

Position/Title: Board Member

Email: lhubbard@gicditch.com

Phone: 970-391-5640

Agency Information

Agency Type	Ditch Company
Current Assessment	\$540.00
Number of Shareholders or Customers	109
Number of Shares	525.00
Number of Taps	
Average Monthly Water Bill	
Annual Water Delivery (acre-feet)	11,824

Description of Grantee/Applicant

Greeley Irrigation Company controls 5/8ths of the Greeley Number 3 canal which runs through the City of Greeley, and parts of Weld County.

Location of Water Project

Latitude	0.000000
Longitude	0.000000
Lat Long Flag	
Water Source	
Basins	
Counties	
Districts	

Water Project Overview

Major Water Use Type	
Type of Water Project	
Scheduled Start Date - Design	4/30/2024
Scheduled Start Date - Construction	4/30/2024
Description	

Measurable Results

0	New Storage Created (acre-feet)
0	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive
0	Existing Storage Preserved or Enhanced (acre-feet)
0	New Storage Created (acre-feet)
0	Length of Stream Restored or Protected (linear feet)
0.00	Length of Pipe, Canal Built or Improved (linear feet)
\$0	Efficiency Savings (dollars/year)
0	Efficiency Savings (acre-feet/year)
0	Area of Restored or Preserved Habitat (acres)
0	Quantity of Water Shared through Alternative Transfer Mechanisms or water sharing agreement (acre-feet)
0	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
0	Number of Coloradans Impacted by Engagement Activity

Other

No additional measurable results provided

Greeley Irrigation Company Data Accuracy Project

Scope of Work

1. Project Overview

The Greeley Canal No. Three Ditch, originally dug in 1870, has been a vital irrigation resource for Greeley Irrigation Company (GIC), City of Greeley (City), Central Colorado Water Conservancy District (Central), irrigators, and augmentation users. This project aims to improve the ditch's efficiency and resilience by installing measurement structures and data logging at 11 sites along the ditch.

2. Objectives

- Improve irrigation efficiency and water use tracking.
- Enhance resilience against drought and climate change.
- Foster collaboration between various water users.
- Manage stormwater risks and mitigate potential flooding.
- Installation of measurement structures and data logging technology at 11 designated sites
- Regular monitoring and maintenance of the installed structures

3. Water Plan Justification

1. Increased Efficiency – Irrigation efficiency technologies can reduce losses in ditches, aid in water use tracking, and identify sections of the canal that require maintenance or improvement to optimize efficiency.
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4. Stormwater Risk Management –The Greeley No. 3 runs through the center of the City of Greeley with housing, commercial, and industrial development encroaching on the canal. Currently, development surrounds approximately 60% of the length of the Canal, and in some cases backyards are 10 to 15 feet from the nearest bank of the Canal. As farmlands turned to developed lands, rain and precipitation events have had a greater impact on the level and flow in the Canal, creating situations in which overtopping can occur in a matter of minutes, if not properly managed. Installing automation and reporting technology throughout the course of the Canal will allow Ditch Company personal to monitor and react in real time to the impacts of stormwater and mitigate flooding risks to nearby properties and landowners.

4. Tasks and Deliverables

- Conduct a site survey and identify suitable locations for the installation (Complete)
- Install measurement structures and data logging technology (Started in 2023)
- Feed measurements into already function GIC Dashboard ([Greeley Ditch No. 3 Daily Flows Summary | Greeley Irrigation Company \(cowaterinfo.com\)](#))

5. Timeline and Milestones

- Site survey and location identification: March 2023
- Installation of structures and technology: 2023-2025

6. Roles and Responsibilities

- GIC: Provide access to the ditch, assist in site survey, and participate in installation of structures.
- Central: Provide labor and expertise in installing measurement devices and running datalogging.
- City: Submit grant application and aid in installation of measurement devices.

7. Budget and Payment Terms

- See budget worksheet. All labor is in-kind.

8. Reporting and Communication

- Regular progress updates will be provided to GIC.
- Any issues or delays will be communicated immediately.

9. Assumptions and Dependencies

- Access to the ditch and cooperation from GIC
- Favorable weather conditions for installation work

10. Acceptance Criteria

- Successful grant funding to aid in efficiency project.
- Successful installation of measurement structures and data logging technology at all 11 sites.

Site #	Location	Description	Work to be done	List of materials	Material Cost	Labor & Programming	Total
1 Greeley #3 Canal							
		Main Flume	Main Flume Data (already have that?)	Modem / Antenna / Datalogger	\$2,911	\$2,000	\$4,911
		River Diversion Radar	Send Notice when GIC is Sweeping the river	Radar	\$1,122		\$1,122
			Record 15 minute flow data	Pipe and Wire	\$1,212		\$1,212
							Subtotal
							\$7,245
2 F-Street Bypass / Aug Station							
		Record F-Street Deliveries	Send remote data of water delivery	Datalogger	\$1,199	\$1,500	\$2,699
			Record 15 minute flow data	Modem	\$539		\$539
				Antenna	\$67		\$67
							Subtotal
							\$3,305
3 City of Greeley's 35th Ave							
		Record Deliveries	Send remote data of water delivery	Datalogger	\$1,199	\$1,500	\$2,699
			Record 15 minute flow data	Modem	\$539		\$539
				Antenna	\$67		\$67
							Subtotal
							\$3,238
4 23rd Ave / 4th St / Clarkson Return							
		Rubicon Gate	Send remote data of water delivery	Datalogger	\$1,199	\$1,500	\$2,699
		Operate Greeley's Flood Gates?	Record 15 minute flow data	Modem	\$539		\$539
				Antenna	\$67		\$67
				Misc. Materials Equipment	\$512		\$512
							Subtotal
							\$3,818
5 23rd Ave & 4th St							
		New Canal Flume	Send remote data of water delivery	Use Existing DC Power	\$125	\$2,500	\$2,625
			Record 15 minute canal flow data	SDR	\$1,852		\$1,852
				Pipe / Wire	\$325		\$325
				Datalogger	\$1,199		\$1,199
				Modem	\$539		\$539
				Antenna	\$67		\$67
				Misc. Materials Equipment	\$439		\$439
				Stilling Well & Recorder Box	\$950		\$950
							Subtotal
							\$7,996
6 8th Ave							
		Radar to monitor for flooding	Record Live water level data	completed in 2023 no other equipment needed?			\$0
							\$0
							\$0
7 Orange St. Lateral							
	Material Cost estimate	\$12,545.91	Send remote data of water delivery	Datalogger & SDR	\$3,051	\$1,500	\$4,551
			Record 15 minute canal flow data	Modem	\$539		\$539
				Antenna	\$67		\$67
				Misc. Materials Equipment	\$439		\$439
				Stilling Well & Recorder Box	\$950		\$950
				Flume Construction	\$7,500		\$7,500
							Subtotal
							\$14,046
8 10st Trash Rack							
	Material Cost estimate		Radar to monitor for flooding	Use Existing DC Power	\$25		\$25
			Record Live water level data	Radar	\$1,122		\$1,122
				Datalogger	\$1,199		\$1,199
				Modem	\$539		\$539
				Antenna	\$67		\$67
				Misc. Materials Equipment	\$1,039		\$1,039
							Subtotal
							\$3,991
9 2nd Ave In-Ditch Flume							
		New Canal Flume	Send remote data of water delivery	Use Existing DC Power	\$125	\$2,500	\$2,625
			Record 15 minute canal flow data	SDR	\$1,852		\$1,852
				Pipe / Wire	\$325		\$325
				Datalogger	\$1,199		\$1,199
				Modem	\$539		\$539
				Antenna	\$67		\$67
				Misc. Materials Equipment	\$439		\$439
							Subtotal
							\$7,996
10 Jackson Spillway							
		Automate - Rotork Operator	Control remotely the spillway gate	Datalogger	\$1,199	\$1,500	\$2,699
				Modem	\$539		\$539
				Antenna	\$67		\$67
				Misc. Materials Equipment	\$439		\$439
							Subtotal
							\$3,744
11 16th St							
		Record Deliveries	Utilize existing SDR @ Parshall Flume	Datalogger	\$1,199	\$1,500	\$2,699
				Modem	\$539		\$539
				Antenna	\$67		\$67
				Misc. Materials Equipment	\$439		\$439