COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	Florida Consolidated Ditch Company
Name of Water Project	Florida Canal Diversion Structure Rehabilitation Project Phase 2
Grant Request Amount	**$115,000.00**
Primary Category	$115,000.00
Agricultural Projects	
Total Applicant Match	**$528,919.00**
Applicant Cash Match	$528,919.00
Applicant In-Kind Match	$0.00
Total Other Sources of Funding	**$482,993.00**
The Nature Conservancy	$52,600.00
CWCB Grant Package (CWCB Grant CTGG1 21-2418)	$430,393.00
Total Project Cost	**$1,126,912.00**

Applicant & Grantee Information

Name of Grantee: Florida Consolidated Ditch Company
Mailing Address: 691 County Road 233 Ste B1A Durango CO 81303
FEIN: 840,204,321

Organization Contact: Darren Rowley
Position/Title: Operations Manager
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Organization Contact - Alternate: Shirley Sells
Position/Title: Office Manager
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Grant Management Contact: Darren Rowley
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Engineering Contact: Peter Foster
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Description of Grantee/Applicant

The Florida Consolidated Ditch Company (FCDC) is composed of the Florida Farmers Ditch Company, the Florida Canal Company, the Florida Canal Enlargement Company, and the Florida Co-Operative Ditch Company. The FCDC is a mutual ditch company that provides water to 293 shareholders serving between 15,000 and 18,000 acres of irrigated Agriculture through the Florida Farmers Ditch, the Florida Canal, and the Florida Co-operative Ditch. Additionally, the FCDC provides water to Pastorius Reservoir, a State Wildlife Area. In total, the FCDC operates 86.5 miles of canals, ditches and laterals, and delivers approximately 43,250 acre-feet of water per year.

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	37.312869
Longitude	-107.772065
Lat Long Flag	Precise coordinates: Project coordinates are readily definable and precisely define the location of the project
Water Source	Florida River
Basins	Southwest
Counties	La Plata
Districts	30-Animas River Basin

Water Project Overview

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

Description

Phase 2 of the Florida Canal Rehabilitation Project (the Project) includes the engineering design, environmental, services during bidding, construction, and engineering services during construction for repairs to the Florida Canal Diversion Structure (Diversion Structure). Engineering design and environmental tasks through bidding are generally complete, and the construction Phase of the Project is ready to start at the end of the 2023 irrigation season. However, the Project does not currently have enough construction funding secured to fully fund all components of the Project.

The FCDC publicly solicited and received a bid for construction of the Project from a qualified Contractor on February 16, 2023. The bid from the Contractor came in higher than anticipated, and currently secured construction phase Project funding does not allow the FCDC to construct all Project components. This WPG application is intended to help close the funding gap so that the FCDC can construct all of the Project's multi-purpose components. The following provides a summary of the Project, and its multi-purpose components.

The Diversion Structure delivers pre-Compact irrigation water rights to the Florida Canal headgate for irrigation of approximately 6,400 acres on the Florida Mesa. The current Diversion Structure is a low head dam that impedes upstream fish and aquatic organism passage. Issued for bid level design drawings, contract documents and technical specifications (Project Documents) for the Project based on the preferred conceptual design alternative selected during Phase 1. The Project Documents include the following multi-purpose components for rehabilitation of the Diversion Structure:

1. Provide a more reliable Diversion Structure to protect pre-compact water rights decreed for irrigation.
2. Reduce drowning hazard potential and increase river safety.
3. Provide a more reliable source of water for Pastorius Reservoir, a CPW State Wildlife Area.
4. Enhance the aquatic habitat in the natural stream corridor by promoting fish passage and aquatic connectivity.
5. Reduce the amount of sediment and debris entering the canal by improving existing headgate structure immediately upstream of the Diversion Structure to reduce operations and maintenance costs and disturbances to the river from these activities.

This WPG application is targeting the Agricultural Project funding category to help fund the construction cost of the improvements to the existing headgate structure immediately upstream of the Diversion Structure (multi-purpose component 5 listed above).

Measurable Results

	New Storage Created (acre-feet)
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive
295	Existing Storage Preserved or Enhanced (acre-feet)
	New Storage Created (acre-feet)
60,720	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

Other

48.8 Acres of State Wildlife Area protected by maintaining water deliveries to Pastorious Reservoir.
12,284 AF of irrigation water protected (average annual irrigation water delivered by Florida Canal).
The 295 AF of storage preserved is associated with Pastorious Reservoir.

Water Project Justification

The Florida Canal Diversion Structure Rehabilitation Project is listed on the Southwest Basin Roundtable Identified Projects and Processes (IPP) list. The Florida Canal Diversion Structure Rehabilitation Project IPP name and number is – Florida Consolidated Ditch Companies - Project 00109.

Goals and strategies identified in the January 2022 Southwest Basin Roundtable Basin Implementation Plan (BIP) that are in line with the Florida Canal Diversion Structure Rehabilitation Project include the following:

BIP Goal A: Balance all needs and reduce conflict (see BIP Page 22).

BIP Strategy A1: Support projects important to maintaining the quality of life in this region by pursuing community-directed projects that address single and/or multiple water needs, for example municipal, industrial, E&R, agricultural, risk management, and compact compliance water needs.

BIP Strategy A2: A2: Support dialogue and foster cooperation, collaboration, and conflict resolution among water interests in every subbasin, between basins, and at the Southwest BRT for the purpose of implementing strategies to mitigate risk and build resiliency for Southwest Colorado’s and Colorado’s water supply challenges.

BIP Goal B: Support the needs of agriculture (see BIP Page 22).

BIP Strategy B2: Support implementation of efficiency measures to maximize beneficial use and production.

BIP Strategy B3: Support implementation of projects that work toward meeting agricultural water supply shortages and address delivery concerns created by aging infrastructure.

BIP Strategy B5: Recognize and support the benefits of agriculture to the environment and recreational activities.
BIP Goal D: Meet recreational water needs (see BIP Page 23).

BIP Strategy D1: Maintain, protect, and enhance recreational values that support local and regional economies derived from recreational water uses, such as fishing, hunting, wildlife watching, camping, and hiking.

BIP Goal E: Meet environmental water needs (see BIP Page 24).

BIP Strategy E2: Support efforts to protect, maintain, monitor, and improve the condition and natural function of streams, lakes, wetlands, and riparian areas to promote self-sustaining fisheries, support native species and functional habitat (aquatic and terrestrial ecosystems) in the long term, and adapt to changing conditions.

BIP Goal F: Promote healthy watersheds (See BIP Page 24).

BIP Strategy F2: Support efforts to enhance and maintain watershed health by protecting and/or restoring watersheds to ensure sustainable water supply, water quality, critical infrastructure, and/or environmental and recreational areas.

BIP Goal G: Manage risk associated with Colorado River Compact (See BIP Page 25).

BIP Strategy G1: Plan and help preserve water supply options for all existing and new uses and values.

BIP Strategy G2: Support viable strategies to build resiliency and manage Compact risk.

Vision and actions for addressing Colorado's Risks summarized in the January 2023 Colorado Water Plan (CWP) that are in line with the Florida Canal Diversion Structure Rehabilitation Project include the following:

Robust Agriculture to Meet Future Water Needs.

1. Replacing diversion structures: Inefficient diversion structures can prevent irrigators from diverting all of the water to which they are entitled. In addition, many structures block the passage of fish and are unsafe for recreation. Replacing aging and inefficient diversion structures, and where possible enhancing their design, can provide additional supplies to irrigators while benefiting habitat and safer recreation on rivers and streams (see CWP Page 194).

2. Conveyance efficiency improvements: Improvements to agricultural diversion and conveyance infrastructure can increase water delivery to farms and increase predictability of deliveries. The benefits of these improvements must be weighed against the reliance on return flows by water users and riparian areas (see CWP Page 194).

Integration Across Action Areas.

Water conservation and efficiency improvements for agriculture have the potential to benefit the environment and recreation sectors by providing fish passage or safer structures, especially when coupled with diversion structure and other improvements (see CWP Page 194).

Thriving Watersheds to Meet Future Water Needs.

Improving fish passage through replacement of agricultural headgates: Retrofitting or replacing agricultural diversions and headgates that have historically inhibited fish passage can increase habitat connectivity for fish and can also lead to improved water use efficiency for the agricultural user. Safety can also be improved on streams with agricultural and recreational users. Stakeholders can, in advance, prepare fish and/or safer reconstruction designs for diversion structures that are vulnerable to flood or other damage (see CWP Page 205-206).

Thriving Watersheds for Healthy Lands.

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 (see CWP Page 206).

The Florida Canal Diversion Structure Rehabilitation Project (Project) aligns with may of the goals and actions listed above in the BIP, and CWP. The following provides more generalized descriptions for how the Project

meets the goals of the BIP and CWP:

The Project is a specific and unique multi-purpose project that will address multiple consumptive and non-consumptive needs on the Florida Mesa and within the Florida River watershed. The Project will protect pre-Compact water rights entitlement by rehabilitating the Diversion Structure allowing for reliable delivery of pre-Compact water rights through the Florida Canal.

The Project will promote sustainability and watershed health through improving aging infrastructure that maintains open space and provides recreational opportunities throughout La Plata County. More specifically, the Project increase the reliability of water supply to Pastorius Reservoir, which is an important State Wildlife Area with recreational opportunities including fishing, non-motorized boating, hunting, hiking, and wildlife viewing. Rehabilitation of the Diversion Structure firms up agricultural irrigation supply and promotes agricultural viability and productivity, as well as providing increased drought resistance for the Florida Mesa during dry years.

Non-consumptive environmental and recreational needs will be addressed through restoration of the Diversion Structure. The Project will replace the existing low head dam with a structure that is safer for river users. The Florida River is an important fishery in the Southwest Basin as the CWCB holds two ISF water rights that extend from below Lemon Dam downstream to the Confluence with the Animas River. The reach where the Project is located is identified as special value waters in Statewide Water Supply Initiative because of the CWCB ISF water rights. The Project will provide connectivity for a reach of The Florida River that is approximately 11.5 miles by providing a fish passage as part of the project design and implementation. Pastorius Reservoir is a State Wildlife Area that relies on water delivered from the Florida River, and is an important state recreation area.

Multiple entities and stakeholders were involved during Phase 1 to collaborate efforts and provide technical support. These stakeholders will continue with their involvement including The Nature Conservancy, Trout Unlimited, Colorado Parks and Wildlife, the Florida Water Conservancy District, and the Florida Consolidated Ditch Company (FCDC) (see Financial Section of this Application).

The FCDC has secured a CWCB loan to fund the project. The Project will promote cost effectiveness by providing viable financing mechanisms, including private, local, and state funding and financing. In addition, flow enhancement alternatives and concepts were evaluated to potentially augment the ISF water rights and assist in financing the Project.

Related Studies

1. Florida Project Water Conservation and Management Plan.
2. Florida Canal Diversion Structure Rehabilitation Project – CWCB Loan Feasibility Study.

Taxpayer Bill of Rights

TABOR is not applicable to the Florida Consolidated Ditch Company.