



Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	Town of Frederick
Name of Water Project	Frederick Water Reuse Plan
Grant Request Amount	\$180,450.42
Primary Category	\$180,450.42
<i>Conservation & Land Use Planning</i>	
Total Applicant Match	\$91,392.60
<i>Applicant Cash Match</i>	\$90,225.21
<i>Applicant In-Kind Match</i>	\$1,167.39
Total Other Sources of Funding	\$90,225.21
<i>CWCB</i>	\$90,225.21
Total Project Cost	\$362,068.23

Applicant & Grantee Information

Name of Grantee: Town of Frederick
Mailing Address: PO Box 435 Frederick CO 80530

Organization Contact: Sarah Watson
Position/Title: Email: swatson@frederickco.gov
Phone: (720) 382-5603

Organization Contact - Alternate: Kylie Couch
Position/Title: Water Conservation Specialist Email: kcouch@frederickco.gov
Phone: 720-382-5612

Grant Management Contact: Sarah Watson
Position/Title: Email: swatson@frederickco.gov
Phone: (720) 382-5603

Grant Management Contact - Alternate: Traci Garcia
Position/Title: Grants Administrator Email: tgarcia@frederickco.gov
Phone: 7203825509

Description of Grantee/Applicant

Utility - Water utility associated with a municipal government

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 40.099150
 Longitude -104.937200
 Lat Long Flag Default/Proponent headquarters: If the location cannot be defined with flags above, use location of project proponent headquarters
 Water Source Northern Integrated Supply Project water, Windy Gap, Lower Boulder Ditch Company shares, local Junior storage.
 Basins South Platte
 Counties Weld
 Districts 6-Boulder Creek; 2-South Platte: Denver Gage to Greeley

Water Project Overview

Major Water Use Type Municipal
 Type of Water Project Study
 Scheduled Start Date - Design 4/1/2025
 Scheduled Start Date - Construction
 Description
 The Town of Frederick (the Town) seeks funding for the development of a Water Reuse Study; the study will provide a vision for the Town of Frederick reusable water supplies and serve as a guide for the strategic development of a reuse system.
 Components of study will include:

- Recommendations for existing and future investments in the potable and non-potable water systems.
- Recognize evolving technology and future trends in water reuse, the comprehension of reusable water resources in the Town's portfolio are intended to be used meet irrigation demands currently met by native water

rights.

- Treatment for the native water rights for potable use. These needs and the Town's reusable supplies were identified in the Town's Long Term Water Resources Study and this proposed Reuse Plan will extend those planning efforts to prepare the Town for future implementation of a Reuse system. Water demands were estimated with a climate change adjustment factor based on the Colorado Water Plan Technical Update.
- Effectively leverage reusable supplies will help the Town address the challenges of facilitating growth in a strategic manner, within the reasonable fiscal constraints of the Town's budget and limited state and federal funding, and in a manner responsive to anticipated changes.

Measurable Results

850	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)
13,374	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
13,374	Number of Coloradans Impacted by Engagement Activity
Other	

This project may result in the creation of additional storage if expansion of Milavec Reservoir is identified as a place of storage of reuse water.

Water Project Justification

This application is for the creation of a Reuse Study for the Town of Frederick. This study will provide the Town with a plan for capturing, storing, conveying, and treating its future reusable supplies that are intended to be used to meet a portion of its non-potable demands.

South Platt Basin Implementation Plan:

Goal 4 of the South Platt Basin implementation plan (South Platt BIP, Volume 2, Section 6, pg. 77) is to Maintain and Promote Reuse. The goal will be advanced by the proposed study by providing the Town of Frederick with an understanding of its options for capturing and using reusable supplies available to the Town to meet a portion of its non-potable demands. Using reusable supplies to meet a portion of the non-potable demands, the current non-potable supplies can then be used to meet a portion of the Town's potable demands, reducing the Town's potable water supply gap by proving efficient use of water supplies.

This study effort falls under the 4.A Strategy to "support and promote opportunities to increase current levels of municipal and industrial water reuse" (South Platt BIP, Volume 2, Section 6, pg. 77).

This study will aid the Town in developing a plan for the use of Northern Integrated Supply Project reusable yield which is identified as an In-Basin IPP, Table 4-15.

Colorado Water Plan (CWP):

The 2023 Colorado Water Plan lists reuse as a project type to be funded with Colorado Water Plan grants under conservation and land use planning (Chapter 3: State Context pg. 63).

As identified in the Colorado Water Plan Basin Framework Section Conceptual Framework Principles, "Colorado

will continue its commitment to improve conservation and reuse” (pg. 75). This study builds on the Town’s Water Resources Plan which proposes using the Town’s future reusable water supplies to meet a portion of its non-potable demands allowing the Town to efficiently use its supplies.

Water Reuse is listed as a Tool for Action in the CWP (pg. 10, pg. 168).

A tool for resiliency identified under drought response is water reuse (pg. 39). To diversify the Town’s water supplies and aid in drought resiliency, the study will identify how the Town can capture its municipal wastewater associated with its reusable supplies. The reuseable water will be used as an additional non-potable irrigation water source freeing the current non-potable supplies to be used to meet some potable demands.

Colorado Water Plan Partner Actions:

The Town’s proposed Water Reuse Study will help Frederick sustain a Vibrant Community for its residents and businesses by using the water rights available to it for meeting the potable and non-potable demands as the community continues to grows.

Meeting Future Water Needs – This study will provide needed guidance to the Town for use of its future reusable supplies to meet non-potable demands allowing the Town to then use existing non-potable supplies to meet future potable demands through efficient use of its future reusable supplies.

Wise Water Use – By leveraging the Town’s reuseable water supplies, we are making use of the wastewater flows attributed to the Town’s water rights. This will allow the Town to use all of the water available to it to meet potable and non-potable demands. The Town is investing in water reuse and will invest in future infrastructure needed to use the supply.

Thoughtful Storage – The place of storage will be analyzed with the study to determine the most beneficial location for storage considering water quality, location, including potential expansion of the Town owned Mialvec Lake, conveyance, and land use. Reusable water will be used in the Town’s non-potable system requires storage of the reusable supplies when available for use in the irrigation season highlighting the need for storage and conveyance analysis.

Related Studies

This project is related to the Town of Frederick's 10-Year aka Short Term Water Resources Plan, Long-Term Water Resources Plan, and Water Efficiency Plan.

Taxpayer Bill of Rights

This activity would not be subject to TABOR since enterprise activity is not subject to TABOR.