



COLORADO

Colorado Water
Conservation Board

Department of Natural Resources

Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	Gunnison, City of	
Name of Water Project	City of Gunnison Project 1: Raw Water and Infiltration Gallery Infrastructure Improvements	
Grant Request Amount		\$1,500,000.00
Primary Category		\$1,500,000.00
<i>Water Storage & Supply</i>		
Total Applicant Match		\$0.00
<i>Applicant Cash Match</i>		
<i>Applicant In-Kind Match</i>		
Total Other Sources of Funding		\$2,865,550.00
<i>DOLA EAIF Tier II</i>		\$1,000,000.00
<i>City of Gunnison</i>		\$128,550.00
<i>Congressional Direct spending</i>		\$1,200,000.00
<i>City of Gunnison</i>		\$387,000.00
<i>CO River District</i>		\$150,000.00
Total Project Cost		\$4,365,550.00

Applicant & Grantee Information

Name of Grantee: Gunnison, City of
Mailing Address: 1100 W Virginia Ave Gunnison CO 81230
FEIN: 846,000,673

Organization Contact: David Gardner
Position/Title: Email: dgardner@gunnisonco.gov
Phone: 970-641-8322

Organization Contact - Alternate: Mike Rogers
Position/Title: Water/Wastewater Superintendent Email: mrogers@gunnisonco.gov
Phone: (970) 641-8020

Grant Management Contact: David Gardner
Position/Title: Email: dgardner@gunnisonco.gov
Phone: 970-641-8322

Grant Management Contact - Alternate: Mike Rogers
Position/Title: Water/Wastewater Superintendent Email: mrogers@gunnisonco.gov
Phone: (970) 641-8020

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	38.566876
Longitude	-106.937486
Lat Long Flag	
Water Source	Gunnison River
Basins	Gunnison
Counties	Gunnison
Districts	62-Upper Gunnison River

Water Project Overview

Major Water Use Type	Municipal
Type of Water Project	Construction / Implementation
Scheduled Start Date - Design	1/1/2024
Scheduled Start Date - Construction	10/1/2024

Description

The City of Gunnison is planning several major capital improvement projects to begin in 2024, which are outlined in supporting documents for this application. There are three priority areas identified in the planning documents the City has developed in partnership with its engineering contractors. Priority A consists of three projects (1-3).

The funds from CWCB will be used to fund project 1: the Infiltration Gallery and Wells – which includes permitting, design, and construction of an infiltration gallery and associated wetwell, three groundwater wells, and a surface water diversion structure off the Gunnison River and associated wetwell.

Measurable Results

2,152	<ul style="list-style-type: none"> 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) Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
6,695	<ul style="list-style-type: none"> Number of Coloradans Impacted by Engagement Activity
Other	
No additional measurable results provided	

Water Project Justification

The City's current water system consists of nine groundwater wells with wellhead disinfection; however, shallow well depths cause the City's water supply to be susceptible to drawdown, contamination, and noncompliance. The proposed infrastructure projects will increase the City's water system operational flexibility and resiliency with the ability to treat water from a variety of raw water sources.

The City of Gunnison (City), which has a service area of 6,695 residents, plans to upgrade its potable water infrastructure by designing and constructing a series of three projects: raw water development of an infiltration gallery (IG), surface water diversion, and three new groundwater wells; raw water and distribution conveyance/piping; and a new Water Treatment Plant (WTP). This application is to alleviate the project financial burden to its disadvantaged residents; thus, the City is requesting CWCB funds to assist with the construction costs of the raw water development of an IG, surface water diversion, and new groundwater wells. The City is looking to leverage both local and state funding for the overall project through a variety of funding sources.

The project serves to support the Colorado Water Plan 2022 Gunnison Basin Implementation Plan Goals:

Protect existing water uses in the Gunnison Basin: A key component to this goal is to “maintain and improve existing infrastructure to avoid the loss of water rights to involuntary abandonment or loss of water availability in response to infrastructure deterioration.” By constructing the IG and raw water diversion structure, the City will be able to exercise one of its earliest water rights, the Gunnison Town Pipeline, with a priority date of April 01, 1883 (CA 2021) for 15 cfs of water from the Gunnison River. The City’s existing groundwater wells exercise water rights with priority dates from 1965-1981 (CA 81CW307) which are junior compared to the proposed surface water right that will be used for this project. It is imperative to get the Gunnison Town Pipeline water right back in service. This water right along with the three new wells will be the main water supply.

Identify and address municipal and industrial water shortages: Raw water collected by the existing groundwater wells is currently considered to be groundwater by the Colorado Department of Public Health and Environment

(CDPHE) and therefore only requires disinfection prior to distribution. One of the greatest threats to the City's ability to supply potable water is if the existing wells are reclassified as Groundwater Under Direct Influence (GWUDI) of surface water by CDPHE in the future due to shallow groundwater depths less than 100 feet. If a well is classified as GWUDI, additional surface water treatment techniques would be required for compliance. CDPHE expects to use its GWUDI screening tool on all groundwater sources in Colorado in the near future, which checks for a score > 40 to determine a GWUDI source. Once classified as GWUDI, corrective action may be required for the system as the existing decentralized disinfection treatment is insufficient for surface water treatment. Only a few of the wells could be re-drilled to maintain a groundwater designation; therefore, a surface WTP is needed. All nine wells have a depth under 50 ft, eight of the nine wells are located within 500 ft from surface water, and four of the nine wells are 50 ft from surface water. Due to shallow well depth and proximity to surface water, future GWUDI designations could become likely. By constructing three additional groundwater wells and diverting surface water (via new diversion structure and IG) to a new surface water treatment plant, the City will be able to meet existing and future potable water demands (regardless of GWUDI determination) and mitigate localized aquifer draw down.

Restore, maintain, and modernize critical water infrastructure: The proposed project looks to increase the City's resiliency towards the impacts of climate change. The 2023 Colorado Water Plan prioritizes resilient planning for climate extremes as an action area for the future.

In 2022, the City developed a climate change planning initiative, entitled "Gunny CARES 2030: Climate Action, Resiliency, & Environmental Sustainability." As part of this initiative, the City plans to prioritize the provision of adequate domestic water supply while supporting a healthy aquatic ecosystem in the Gunnison River. To do so, the City writes: "The City of Gunnison is in the headwaters of the Gunnison River Basin, where water flows through the Gunnison River and through the City's irrigation ditch system during summer months, recharging our alluvial aquifer. With snowpack becoming more variable due to rising temperatures and climate change, the City needs to mitigate potential threats to decreasing water levels and adapt to imminent changes by way of more water storage and diversified water sources."

Wildfires and subsequent wildfire runoff are a contamination threat to the City's water supply. Climate change has increased the risk of wildfires that may occur within the watershed of the City's water sources. According to the Climate and Economic Justice Screening Tool, the City is in the 94th percentile for projected wildfire risk.

According to the City's 2007 Source Water Assessment Report, dispersed contaminant sources with Moderately High or High individual susceptibility to a dispersed contaminant source include commercial land cover, high intensity residential land cover, low intensity residential land cover, urban recreational grasses, row crops, pasture, deciduous forest, evergreen forest, septic systems, and road miles. In addition to dispersed contaminant sources, the Source Water Assessment Report lists discrete contaminant sources. If these dispersed and discrete contaminant sources were subject to wildfire, the impact on the groundwater sources could be severe.

Due to the shallow depths of the existing groundwater wells and aquifer, wildfires may also increase sulfate, fluoride, nitrogen, variability in pH, polycyclic aromatic hydrocarbons (PAHs), and metals such as iron, manganese, and chromium in groundwater.¹ Without a WTP to provide additional treatment to address these temporary water quality impacts, the City's current water system cannot adequately respond to the risk of

wildfires.

In the case of groundwater depletion due to rising temperatures or drought, the surface water source will provide safe drinking water to the City. In the case of wildfire runoff, degraded surface water or groundwater can be treated due to the robust treatment design of the WTP, a future phase of the project, outside of this funding request.

Related Studies

The proposed project dates back to 2010 when the Van Tuyl Ranch Management Plan was completed to develop a plan to manage competing priorities and best utilize the property while preserving the land for passive recreational use, sustainable agricultural production, protecting wildlife habitat, and the City's aquifer and recharge area. Followed by 4 subsequent studies/reports:

2012 Van Tuyl Ranch Annexation – PUD Zoning and Standards:

2021 Gunnison Water Master Plan

2022 Source Water Protection Plan

2023 Preliminary Design Report for Water System Improvements

Taxpayer Bill of Rights

The City has debruced on both tax and non-tax revenues and Tabor is not applicable.