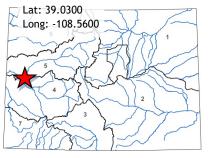


# Gunnison River Reservoirs Project City of Grand Junction

September 2022 Board Meeting

# Water Plan Grant Application



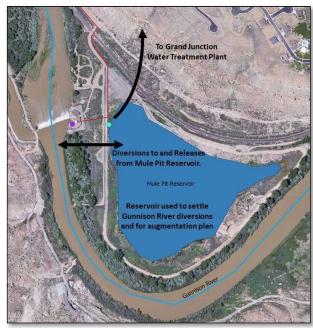
L	0	С	Α	Т	0	N	
County:					1	Mesa	
Drainage Basin:					Gunr	nison	

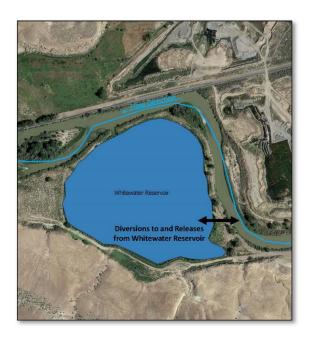
	D E	T A	l L	S	
Total Project Co	ost:				\$351,932
Water Plan Grai	nt Reques	t:			\$263,949
Other CWCB Fui	nding:				\$0
Other Funding A	mount:				\$0
Applicant Match	1:				\$87,983
Project Type(s):			Study		
Project Categor	y:		Water	Stora	ge & Supply
Measurable Resi	ılt:	1	1,700 a	cre-fe	eet created

The City of Grand Junction (City) has numerous water and storage rights on the Grand Mesa, as well as water rights in the Gunnison and Colorado Rivers. These rights can be used to provide for the municipal water supply needs of a portion of the City. Due to poor water quality, however, the water rights on the Gunnison and Colorado Rivers are largely unused.

The project will develop 30% design plans for the conversion of two gravel pits (Mule Pit and Whitewater) to reservoirs with approximately 1,700 AF of storage capacity. Primarily the reservoirs will provide direct municipal use by settling Gunnison River water to be pumped to the City's treatment plant through an upgraded pump station and existing pipeline. The project will also include multi-beneficial outcomes through the potential for interconnection with Clifton Water District, which will provide both systems access to Gunnison River supplies, and Orchard Mesa Irrigation District, which will provide water to the lower part of their delivery system. The applicant may also be able to provide augmentation for the City's junior municipal supplies, thereby allowing the City to continue to divert when they are out of priority.

Funding Recommendation: Staff recommends approval of the full request in the amount of \$263,949 from the Water Storage and Supply Category. This is approximately 75% of total costs. This project aligns with the Water Plan's measureable goal of creating 400,000 AF of water storage by 2050 by providing new storage in the Gunnison basin.







### **Colorado Water Conservation Board**

## **Water Plan**

	Water Project Summary	
Name of Applicant	City of Grand Junction	
Name of Water Project	Gunnison River Reservoirs Project	
Grant Request Amount		\$263,949.00
Primary Category		\$263,949.00
Water Storage & Supply		
Total Applicant Match		\$87,983.00
Applicant Cash Match		\$87,983.00
Applicant In-Kind Match		\$0.00
Total Other Sources of Funding		\$0.00
Total Project Cost		\$351,932.00

## **Applicant & Grantee Information**

Name of Grantee: City of Grand Junction

Mailing Address: 250 N. 5th Street Grand Junction CO 81501

FEIN: 846,000,592

Organization Contact: Randi Kim

Position/Title: Utilities Director Email: randik@gjcity.org

Phone: 970-244-1492

Organization Contact - Alternate: Mark Ritterbush

Position/Title: Water Services Manager Email: markri@gjcity.org

Phone: 970-256-4185

Grant Management Contact: Randi Kim

Position/Title: Utilities Director Email: randik@gjcity.org

Phone: 970-244-1492

## **Description of Grantee/Applicant**

City of Grand Junction Water Utility

Type of Eligible Entity
Public (Government)
Public (District)
Public (Municipality)
Ditch Company
Private Incorporated
Private Individual, Partnership, or Sole Proprietor
Non-governmental Organization

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.

**Covered Entity** 

Location of Water Project			
Latitude	39.030000		
Longitude	-108.560000		
Lat Long Flag	Reservoir location: Coordinates based on location of reservoir		
Water Source	Gunnison River		
Basins	Colorado; Gunnison		
Counties	Mesa		
Districts	42-Lower Gunnison River		

	Water Project Overview		
Major Water Use Type	Municipal		
Type of Water Project	Planning (e.g. watershed)		
Scheduled Start Date - Design	2/6/2023		
Scheduled Start Date - Construction			
Description			
The City of Grand Junction's Gunnison River Reservoirs Project will provide approximately 1,700 acre-feet of			
water storage by converting two gravel pits along the Gunnison River to water storage reservoirs. The reservoirs			
will have a variety of uses, including direct municipal use, Colorado River Compact protection, irrigation use, and			
environmental benefits.			

Direct municipal use can be accomplished through upgraded pump station facilities and the existing pipeline to the Grand Junction water treatment plant. One of the reservoirs is located near Grand Junction's decreed Gunnison River water right and would be used to settle Gunnison River water prior to pumping. (See attached Figure 1 and Figure 2)

Colorado River Compact protection can be accomplished through using the reservoirs as a source of augmentation. This would allow Grand Junction to operate its junior water rights in Kannah Creek during a

Compact call and provide augmentation to the Colorado River system. Both reservoirs could be used for this purpose. (See attached Figure 1 and Figure 3)

A pipeline from the reservoirs to the Orchard Mesa Irrigation District will allow for enhanced irrigation system efficiency and simultaneously provide for additional flow to be delivered into the Colorado River's environmentally sensitive 15-Mile Reach at the Orchard Mesa hydropower plant. This pipeline can be further extended to the City of Clifton's water treatment plant as a redundant water source for the City of Clifton and Grand Junction. (See attached Figure 1 and Figure 4)

	Measurable Results	
1,700	New Storage Created (acre-feet)	
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
	Existing Storage Preserved or Enhanced (acre-feet)	
1,700	New Storage Created (acre-feet)	
79,200	Length of Stream Restored or Protected (linear feet)	
\$25,000	Efficiency Savings (dollars/year)	
1,700	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)	
30,000	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning	
	Number of Coloradans Impacted by Engagement Activity	
Other		
2 water utilities provided with redundant water supply.		

### **Water Project Justification**

The City of Grand Junction's Gunnison River Reservoirs Project will provide approximately 1,700 acre-feet of water storage by converting two gravel pits along the Gunnison River to water storage reservoirs. The reservoirs will have a variety of uses, including direct municipal use, Colorado River Compact protection, irrigation use, and environmental benefits. Grand Junction derives its primary water supply from Kannah Creek, which is tributary the Gunnison River. Components of this project will be located in the Colorado River Basin and the Gunnison River Basin. Attached Figures 1 through 4 show a map of the project components and schematics of how various components would work. The purpose of the grant funds sought herein is to further develop these components to a 30% design level.

As noted in Chapter 10, Colorado's Water Plan sets a measurable objective of attaining 400,000 acre-feet of water storage to manage and share conserved water. This project would provide approximately 1,700 acre-feet of storage toward this goal. This project would address a diverse set of needs (municipal, irrigation, and environmental) through partnership with the Orchard Mesa Irrigation District. This project would also address several of the goals in the Gunnison Basin Implementation Plan addressing agricultural and municipal water shortages and encouraging relationships among agricultural and environmental uses.

The Colorado River BIP identifies addressing the municipal gap, Colorado River Compact shortages, the importance of the Upper Colorado River Endangered Fish Recovery Program, and increasing higher system efficiency for irrigation systems (Colorado BIP, Figures 15 and 16). The proposed project would address all three of these issues by improving Grand Junction and Clifton Water District's access to the Gunnison River source of water, developing a plan for Grand Junction to operate its junior water rights during a Compact Call, delivering water into the 15-Mile Reach, and simultaneously assisting the Orchard Mesa Irrigation District deliver water to

the lower end of its system. This project directly addresses several of the Colorado Basin Implementation Plan themes and goals (Assure dependable basin administration, Sustain agriculture, Secure Safe Drinking Water). This project includes components of the Identified Project ID CO-2020-0089 (Retrofit of Grand Valley Gravel Pit(s) for Water Storage, although the focus has shifted to gravel pits available in the Gunnison River basin.

This project also conforms with the Gunnison Basin Implementation Plan (Improve agricultural water supplies to reduce shortages; Identify and address municipal and industrial water shortages; Quantify and protect environmental and recreational water uses; and Restore, maintain, and modernize critical water infrastructure, including hydropower).

#### **Related Studies**

Summary of Water Supply System: City Grand Junction (2018)

City of Grand Junction Water Supply Modeling (2019)

City of Grand Junction Water Marketing Strategy Report (2021)

Options Assessment for the City of Grand Junction Water Supply (2021)

## **Taxpayer Bill of Rights**

The City of Grand Junction has voter authorization to receive and expend all revenues over the amount which it would be permitted to collect under Article X, Section 20 of the Colorado Constitution.