



**COLORADO**

Colorado Water  
Conservation Board

Department of Natural Resources

**Colorado Water Conservation Board**

## Water Plan

### Water Project Summary

Name of Applicant	Pueblo, City of	
Name of Water Project	Lake Minnequa Restoration	
Grant Request Amount		<b>\$112,500.00</b>
Primary Category		\$112,500.00
<i>Water Storage &amp; Supply</i>		
Total Applicant Match		<b>\$37,500.00</b>
<i>Applicant Cash Match</i>		\$37,500.00
<i>Applicant In-Kind Match</i>		\$0.00
Total Other Sources of Funding		<b>\$0.00</b>
Total Project Cost		<b>\$150,000.00</b>

### Applicant & Grantee Information

Name of Grantee: Pueblo, City of  
Mailing Address: 1 City Hall Place Pueblo CO 81003

Organization Contact: Luanne Martinez  
Position/Title: Grant and Development Administrator      Email: lmartinez@pueblo.us  
Phone: (719) 568-7726

Grant Management Contact: Luanne Martinez  
Position/Title: Grant and Development Administrator      Email: lmartinez@pueblo.us  
Phone: (719) 568-7726

### Description of Grantee/Applicant

No description provided

### 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 38.228337  
 Longitude -104.633864  
 Lat Long Flag Precise coordinates: Project coordinates are readily definable and precisely define the location of the project  
 Water Source  
 Basins Arkansas  
 Counties Pueblo  
 Districts 14-Arkansas: Portland to Fowler

### Water Project Overview

Major Water Use Type Municipal  
 Type of Water Project Planning  
 Scheduled Start Date - Design 5/1/2025  
 Scheduled Start Date - Construction  
 Description  
 Lake Minnequa is a popular recreation spot for walking, bicycling, horseback riding, playing basketball, flying kites, fishing, picnics, sports, and more. It is surrounded by natural vegetation to improve bank stability and aesthetic appeal. The lake is shallow, which is determinantal to the health of fish and the wildlife that call the lake their home if not properly maintained.  
 Lake Minnequa serves as a water detention facility for the entire south portion of the City of Pueblo; over 20% of the storm water within the City drains into lake Minnequa. Water is diverted to the lake by a network of natural drainageways and underground pipes connecting storm drains to the pond. By capturing and retaining stormwater runoff, the rate of the runoff from storm water is slowed, protecting surrounding neighborhoods from flooding. An existing mechanical outlet controls the out-flow of water as needed to maintain the desired water level. The process allows for pollutants to be removed naturally as they settle to the bottom of the lake before reaching the Arkansas River. Water is processed downstream for reuse.  
 Colorado Parks and Wildlife have stocked Lake Minnequa with fish: thousands of half-inch redear sunfish, two-inch bluegill and eight-inch catfish, and catchable rainbow trout about ten inches in length. The lake is surrounded by natural vegetation to improve bank stability and aesthetic appeal. Varieties of waterfowl occupy the lake. Its banks are home to toads and frogs, garter snakes, turtles, and moles. Lizards, roadrunners, and foxes run across the natural ground at all times of day. Mule deer can be seen at dusk and dawn.

Factors that have negatively impacted the Lake include decreasing lake levels, heavy phosphorus and nitrogen loading, uncontrolled algal blooms, loss of habitat to invasive plant species, and loss of aquatic plant species. Instead of a clean, clear-water lake, Lake Minnequa is now a turbid, hypereutrophic lake with significantly degraded water quality. This not only presents significant challenges from a water supply standpoint, but also heavily impacts the native terrestrial and aquatic species that utilize Lake Minnequa.

The City of Pueblo is committed to collaboration with Pueblo Urban Renewal Authority (PURA), which has endeavored to eliminate and prevent blight in the Lake Minnequa Urban Renewal Area. The City and PURA, with the cooperation of private enterprise and other public bodies, have developed the area to eliminate the conditions of blight identified more than a decade ago. The plan, adopted by City Council, plans the facilitation of arterial commercial mixed-use development; and special development areas encompassing Lake Minnequa itself where there appear to be multiple possibilities for development. They are undeveloped lands and/or open space potential in strategic locations that suggest the need for careful, location-specific plans for infrastructure and private development.

Lake Minnequa has become significantly underutilized as a recreational destination, despite its easy accessibility by 150,000+ residents in Pueblo County. After restoration, it will be used by residents in the county and adjacent counties as part of Lake Minnequa Veteran's Memorial Park and Open Space – a destination park on approximately 270 acres. The park feels surprisingly not urban, even though it's located in the city and squarely in the middle of census tracts qualifying as Areas of Persistent Poverty.

Pueblo is majority-minority community composed of a broad diversity of residents with many linguistic, racial, ethnic, and cultural backgrounds. The U.S. Census Bureau 2020 reported the local Hispanic/Latinx residency to be 52.2%, the highest in all census places in CO with a population over 100,000. It is largely this same population that makes up much of the rate of Puebloans living in poverty - an alarming 24.4%, despite expanded federal aid in response to the COVID-19-induced recession. It is notable that, consistent with OMB's Interim Guidance for the Justice Initiative, Pueblo meets the definition of a Historically Disadvantaged Community. Of the 54 census tracts in Pueblo County, 28 are Areas of Persistent Poverty. Every census tract near Lake Minnequa is designated as an underserved community.

The cost basis for this project is based on a quote from E. Aylin Lewallen, National Practice Leader in Water Resources at Brown and Caldwell based in Denver, Colorado. The estimate was obtained by making no commitment to the vendor; pending funding, the City will prepare an RFP to qualified bidders and use a fair procurement process.

### Measurable Results

88	New Storage Created (acre-feet)
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive
342	Existing Storage Preserved or Enhanced (acre-feet)
88	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)
252	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
200,000	Number of Coloradans Impacted by Engagement Activity

Other

No additional measurable results provided

### Water Project Justification

This project will deliver a plan to preserve, protect, and restore Lake Minnequa to the vital role it plays in Pueblo, Colorado as a recreation area, freshwater ecosystem, and watershed basin. The Lake Minnequa Restoration Project Plan will be an end-to-end plan to transform the Lake from an impaired, nutrient-loaded waterway, dominated by invasive species and prone to algal blooms, into a clear-water lake with restored native submerged plant zones, native fish species, geese, and shore birds. Restoration will turn back the clock on decades of lake ecosystem degradation.

### Related Studies

#### Lake Minnequa Veteran's Memorial Park and Open Space Master Plan

Lake Minnequa was established in 1873 to supply water to the residents of the new town of South Pueblo. The City of Pueblo purchased the lake and surrounding area in 2009 and embarked on a series of improvements that became the largest recreational expansion in Pueblo's history. Aside from its recreation and nature draw, the master plan was prepared to integrate regional water quality and detention components. With a \$7million capital investment, Lake Minnequa serves as a water detention facility for the entire south portion of the City of Pueblo. North Star Engineering and Surveying, Inc., based in Pueblo, CO, developed a Master Plan that included civil/site design, architectural engineering, structural engineering, and construction administration, inspection, and staking services were included in the Master Plan.

#### Pueblo Stormwater Master Basin Planning Study

NorthStar Engineering and Surveying, Inc teamed with Sellards and Grigg, Inc of Denver to prepare a detailed Drainage Master Planning study for all drainage basins within the City of Pueblo and all areas tributary thereto. This study included an analysis of all existing and proposed drainage improvements within the City and identified a water gap associated with the population's size and projected growth. Engineers performed an analysis of existing and proposed development within the limits of the City's comprehensive Master Plan; a review and analysis of historic drainage issues and concerns; and a review and analysis of existing and proposed regional detention and conveyance facilities. Final planning studies and storm water models were prepared to work in conjunction with and be compatible with the County's Geographic Information System. The project also included detailed hydrologic and hydraulic modeling for preparation of DFIRM mapping for four major floodplains within the City.

#### Pueblo Urban Renewal Authority (PURA) for the Lake Minnequa Urban Renewal Project

In the Plan, PURA increased flood storage volume in Lake Minnequa through the grading and other site work around the lake. Improvements increased the one-hundred-year storm capacity of Lake Minnequa by 144-acre feet, protecting approximately 350 acres of existing neighborhoods from a one-hundred-year flood event.

### Taxpayer Bill of Rights

The City of Pueblo has voter authorization to receive and expend state grant funds without regard to TABOR revenue limitations. The voters of the City of Pueblo "De-Bruced" the City in the TABOR election held on 11-02-21