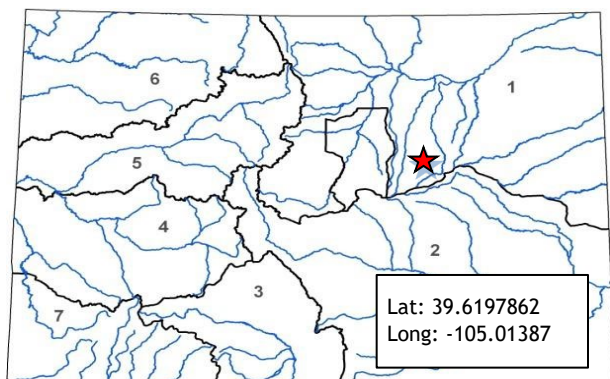


Water Plan Grant Application



L O C A T I O N	
County/Countries:	Arapahoe
Drainage Basin:	Metro

D E T A I L S	
Total Project Cost:	\$280,000
Water Plan Grant Request:	\$210,000
Recommended amount:	\$0
Other CWCB Funding:	
Other Funding Amount:	\$0
Applicant Match:	\$70,000
Project Type:	Study, Planning, Design and Construction
Project Category:	Conservation and Land Use Planning
Measurable Result:	650,000 Coloradans impacted by engagement and water saving

Arapahoe County has requested funding to finalize planning, verify means and methods best suited to each site, and implement planned water conservation landscape and irrigation system modifications at four County facilities. These sites represented four of the five highest County facility irrigation water usages in 2019. Each site will be a combined study, design and implementation project to decrease landscape water use and reduce nonfunctional turf.

The project objectives are: 1) to reduce potable water irrigation for modified spaces to contribute to target of overall 13% reduction, 2) to demonstrate environmental stewardship and leadership at County facilities by planning and implementing water-conserving landscape design across its facilities by promoting each project within the community using means appropriate to that site, including signage, newsletter postings, and through project partners or supporting organizations (such as Denver Water Public Affairs and the City of Aurora), 3) to set new maintenance practices in place that support the shift in maintenance focus from tending to lawns to active maintenance and monitoring of irrigation systems, supporting the health of trees and new site landscape, and invasive/weed control (to support acceptance of the new landscape).

Through this project, the County seeks to extend its progress from 2022 as a model in water conservation for citizens of the County. In 2022, the County successfully collaborated with Denver Water Public Affairs to position its turf to native conversion for acceptance through its outreach to citizens demonstrating the need to reduce potable water use for irrigation. A crucial element of this project is the study to learn about best practices through experience and then incorporate those into County's facilities design and construction standards for implementation at other sites. County acts as a resource to and actively shares its lessons learned across jurisdictions and to other stakeholder groups.

Funding Recommendation: Staff is not recommending funding to Arapahoe County for the County Irrigation Water Conservation Study, Planning, and Implementation project. Although this project was deemed worthy, due to funding constraints this project could not be funded this cycle. Staff has discussed with the applicant about resubmitting this project for the July 1, 2023 cycle.



Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	Arapahoe County	
Name of Water Project	COUNTY IRRIGATION WATER CONSERVATION STUDY, PLANNING AND IMPLEMENTATION	
Grant Request Amount		\$210,000.00
Primary Category		\$210,000.00
<i>Conservation & Land Use Planning</i>		
Total Applicant Match		\$70,000.00
<i>Applicant Cash Match</i>		\$70,000.00
<i>Applicant In-Kind Match</i>		\$0.00
Total Other Sources of Funding		\$0.00
Total Project Cost		\$280,000.00

Applicant & Grantee Information

Name of Grantee: Arapahoe County	
Mailing Address: 1610 Littleton Blvd #100 Littleton Colorado 80120	
FEIN: 84,600,740	
Organization Contact: Lisa VanderHeyden	
Position/Title: Senior Project Manager	Email: lvanderheyden@arapahoegov.com
Phone: 720-415-9614	
Organization Contact - Alternate: Ken Morris	
Position/Title:	Email: kmorris@arapahoegov.com
Phone:	
Grant Management Contact: Lisa VanderHeyden	
Position/Title: Senior Project Manager	Email: lvanderheyden@arapahoegov.com
Phone: 720-415-9614	

Description of Grantee/Applicant

Arapahoe County is one of Colorado's fastest growing counties, with more than 650,000 residents. The County incorporates 13 cities and towns, nine school districts and 450 local improvement and special service districts.

Arapahoe County is undertaking a long-term water conservation initiative to reduce its use of this key resource county-wide, and has developed a Water Action Plan that promotes reduction measures for all facility water uses.

Arapahoe County Public Works is also in a process of modifying its land development codes to promote new policies and regulations related to water conservation design, efficiency and reuse, and to provide both flexibility and clarity for the public to understand specific landscape requirements.

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	39.619786
Longitude	-105.013870
Lat Long Flag	Other: Coordinates based on other boundaries or locations
Water Source	Multiple - Denver Water, ACWWA/Cherry Creek Basin/Aurora
Basins	Metro
Counties	Arapahoe
Districts	

Water Project Overview

Major Water Use Type	
Type of Water Project	Design & Construction
Scheduled Start Date - Design	3/30/2023
Scheduled Start Date - Construction	3/30/2023
Description	
PROJECT TO INCLUDE THE FOLLOWING:	

Finalize planning, verify means and methods best suited to each site, and implement planned water conservation

landscape and irrigation system modifications at four County facilities including:

- Arapahoe County Administration (East side), 5334 S Prince St., Littleton CO, approximately 3 acres ornamental turf under irrigation through Denver Water.
- Centrepont Plaza, 14980 E Alameda Ave., Aurora CO, approximately 3 acres mixed irrigated site (approximately 1.8 acres turf; 1.2 acres xeric) under irrigation with Aurora Water.
- Arapahoe County Justice Center campus, 7305-7325 S. Potomac St., Centennial CO, approximately 4.7 acres mixed irrigated site (approximately 4.23 acres turf; .5 acres xeric) in ACWWA jurisdiction.
- Lima Campus, 6904-6984 S Lima St., Centennial CO, approximately 2.6 acres mixed irrigated site (approximately 1.6 acres turf; .9 acres xeric) in ACWWA jurisdiction

These sites represented four of the 5 highest facility irrigation water usages in 2019. Each project will be a combined study, construction project to develop and, to the extent funded, implement appropriate water conservation modifications to maintain functionality of any turf areas that are utilized by staff or the public and aesthetic appeal of site while decreasing landscape water use and reducing nonfunctional turf. County's water action plan calls for a long-term reduction of at least 13% as compared to 2019 baseline, so that will be our overall "minimum" target across the zones targeted on these sites (we will use baseline 2020 for measures, updated from 2019). If approved, the funds will be prioritized among the sites based on highest-water conserving impact, with any unfunded scope planned for future funding availability.

An important element of these projects is the "study" element – to learn about best practices through experience and then incorporate those into County's (internal) facilities design and construction standards for implementation at other sites. County acts as a resource to and actively shares its lessons learned across jurisdictions and to other stakeholder groups. As an example, the 3-acre grass conversion product conducted as a 2022 grant study is being documented for use as a case study for a coalition creating a native grass conversion manual that will be available to citizens, to help increase the chances for success in such conversions.

Measurable Results

	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)
	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)
650,000	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
650,000	Number of Coloradans Impacted by Engagement Activity
Other	
Reduce landscape irrigation at zones impacted to target water use of 12 gallons/sq ft/yr average; Share large-scale irrigation water reduction landscape project means, methods and outcomes widely.	

Water Project Justification

This project directly supports the Water Plan's goals for vibrant and sustainable cities by significantly and permanently reducing potable water irrigation, conserving those resources for other uses. Colorado's water plan seeks a reduction of 400,000 acre-feet of municipal and industrial water conservation by 2050 as well as the water plan goal to engage Coloradans on key water challenges by 2030. County's water action plan specifies a

goal to contribute to the State's water plan reduction, and the County's Public Works department is modifying land use restrictions to promote water conservation in design. Through this project, the County seeks to extend its progress from 2022 as a model in water conservation for citizens of the County. In 2022 the County successfully collaborated with Denver Water Public Affairs to position its turf to native conversion for acceptance through its outreach to citizens demonstrating "the why" – the need to reduce potable water use for irrigation. Subsequent proposed projects will demonstrate other options for irrigation water reduction and will be developed in collaboration with the appropriate water jurisdiction (pending design).

The Metro Roundtable has provided a letter of support for this application.

This project also directly supports the South Platte Basin Implementation Plan by reducing the fertilizers needed for turf grass. Cherry Creek Reservoir in Cherry Creek State Park is impaired for nutrients and the reduction of fertilizers needed for turf grass in the watershed will help Cherry Creek Reservoir continue to support recreational activities.

Related Studies

The projects proposed in this application fit closely with the efforts of Arapahoe County Public Works in realigning landscape and land development code. Arapahoe County is in the process of updating the Landscaping and Screening section of the County's Land Development Code (LDC) to promote new policies and regulations related to water conservation design, efficiency and reuse, and to provide both flexibility and clarity for the public to understand specific landscape requirements. By implementing projects of this type, the County helps to set a positive example of the implementation of such practices.

With such intense focus on water basins and drought, increasing periods of drought and a drying climate, growing water demands and rising water costs, the County's new regulations intend to reduce the amount of water used in landscapes.

As a part of its effort, in 2021/22 County staff conducted a survey requesting input from 109 developers, landscape design professionals, local plant nurseries, water districts and applicable agencies on the landscape section of the LDC, and received a 44% response rate. The results showed that there is strong support and interest in conserving and reusing water. County Public Works is actively working to update its landscape standards and establish water conservation measures, and has a goal to work with and support local water districts to provide a cohesive front within the County to reduce water usage.

In addition, the County's municipal stormwater program is incorporating water conservation messaging in its existing stormwater education and outreach activities.

Taxpayer Bill of Rights

None. Arapahoe County removed all TABOR limitations related to grant funds through voter approval of a 1995 ballot question.