



COLORADO

Colorado Water
Conservation Board

Department of Natural Resources

Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	Rocky Mountain Section American Water Works Association
Name of Water Project	Statewide Commercial, Industrial and Institutional Water Efficiency Program
Grant Request Amount	\$318,625.00
Primary Category	\$318,625.00
<i>Conservation & Land Use Planning</i>	
Total Applicant Match	\$0.00
<i>Applicant Cash Match</i>	\$0.00
<i>Applicant In-Kind Match</i>	\$0.00
Total Other Sources of Funding	\$191,000.00
<i>City of Greeley</i>	\$25,000.00
<i>City of Longmont</i>	\$10,000.00
<i>Northern Water</i>	\$25,000.00
<i>City of Loveland</i>	\$25,000.00
<i>Denver Water</i>	\$5,000.00
<i>City of Aurora</i>	\$5,000.00
<i>RMSAWWA Conservation Committee</i>	\$81,000.00
<i>City of Fort Collins</i>	\$10,000.00
<i>Colorado Springs Utilities</i>	\$5,000.00
Total Project Cost	\$509,625.00

Applicant & Grantee Information

Name of Grantee: Rocky Mountain Section American Water Works Association

Mailing Address: 4777 National Western Drive Denver CO 80216

FEIN: 237,026,165

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Position/Title: RMSAWWA Executive Director

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Organization Contact - Alternate: Erin Ridolfo

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Description of Grantee/Applicant

The Rocky Mountain Section of the American Water Works Association (RMSAWWA) is a non-profit (501c3), scientific and educational membership association dedicated to managing and treating water.

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	39.783600
Longitude	-104.974000
Lat Long Flag	Default/Proponent headquarters: If the location cannot be defined with flags above, use location of project proponent headquarters
Water Source	
Basins	Arkansas; Colorado; Gunnison; Metro; Yampa/White/Green; Rio Grande; South Platte; Southwest; Nort...
Counties	Adams; Cheyenne; Clear Creek; Alamosa; Arapahoe; Chaffee; Boulder; Archuleta; Baca; Broomfield; Bent
Districts	

Water Project Overview

Major Water Use Type	Municipal
Type of Water Project	Planning
Scheduled Start Date - Design	7/1/2024
Scheduled Start Date - Construction	

Description

This collaborative project between the Rocky Mountain Section of the American Water Works Association (RMSAWWA) and multiple water providers will initiate an imperative shift to prioritize Commercial, Industrial, and Institution (CII) water efficiency by developing a formal Colorado CII program framework.

The RMSAWWA is committed to forging a visionary, sustainable future for water, integrating technology, economics, governance, and social demographics. The American Water Works 2050 initiative and the RMSAWWA Strategic Plan, aligned with the Colorado Water Plan, underscores the need for collaborative, balanced, and solution-oriented approaches. Within RMSAWWA, the active 53-member Conservation Committee has established a dedicated working group led by the City of Greeley and City of Longmont’s water conservation teams to address challenges within the CII sectors. Leveraging insights from a comprehensive literature review, interactions with fellow water providers, and experiences gained from the 2018 State CII training session in the City of Fort Collins, the RMSAWWA Conservation Committee is committed to its aim to develop a Statewide CII water efficiency program.

RMSAWWA, with the Conservation Committee through the City of Greeley and the City of Longmont, has secured funding and support from Water Now Alliance, Wester Resource Advocates, 16 Colorado water providers and three Basin Roundtables across Colorado encompassing both the West and East slopes.

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)
- 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
- Number of Coloradans Impacted by Engagement Activity

Other

Through our summer 2023 preliminary survey results, conducted across multiple providers, we found the potential total savings to be more than 5,000 acre feet and the number of CII customers impacted to be over 500,000. As the project nears completion and the resources are made available to all providers, the implementation phase will exponentially grow the water efficiency savings and number of Coloradoans impacted, transferring from CII customers to the general rate paying population.

Water Project Justification

Commercial, Industrial and Institutional (CII) water use not only impacts the amount of water needing to be treated and provided to customers, but also the long-range growth of communities and vibrant economies.

Colorado is expected to continue experiencing population growth and with limited resources and conservation initiative hardening at the residential level, CII water use is the next identifying source for continued conservation efforts to meet future demands. Currently there are few publications relative to CII and many of them approach CII from an overarching perspective of what CII is and the primary types of CII water use rather than on the individual provider level. There is little to no documentation on how to develop and implement a CII program at the local water provider level, which is what this project aims to achieve. By developing a scalable guidance document, conducting in-person training, and providing a resource library as tools that providers can use to develop a CII program in their respective territories, this project will be able to bridge that gap on a statewide level.

The Colorado Water Plan serves as a comprehensive blueprint for the responsible and sustainable management of the state's water resources. At its core, the plan aims to address pressing challenges such as increasing demand, climate variability, and environmental conservation. In this context, the CII project plays a pivotal role in supporting the Colorado Water Plan by translating its strategic goals into tangible actions. Through the promotion of efficient water use and advancing conservation measures, this project aligns with the objectives of the plan, contributing to the overall resilience and reliability of Colorado's water systems. The CII project directly addresses the plan's priorities in the following ways that aid the vision of a secure and sustainable water future for the state:

Supporting the Colorado Water Plan

The overall Colorado Water Plan organization components of A.C.T (Action Areas, Colorado Vision, and Tools for Action) are all supported by the project (pg. 8-10). Action areas that are supported include Vibrant Communities and Resilient Planning through the Colorado Vision lens, and Tools for Action directly related to the project include:

- Public outreach and education
- Data collection and sharing
- Collaboration Groups
- Water Efficiency and conservation programs
- Innovation & equity

With a scalable approach that aims to include all communities of different sizes, the CII project is vital to supporting Vibrant Communities through meeting future water needs, wise water use, and engaged partners. The statewide CII project supports this section of the CWP by emphasizing the intricate connection between water resources and community well-being and promoting the vitality of local communities. Through this approach, both the CWP and CII project aim to promote economic development and ensure equitable access to water resources.

- “Local projects that explore and research emerging strategies, pilot programs, and new ways of doing more with less help demonstrate strategies that others can implement” (pg. 181)
- This innovative project focuses on both the local and statewide level and how new techniques and methodologies can be implemented to help support Vibrant Communities throughout the state.
- “The CWCB will fund and participate in the development of a framework that includes target metrics and definitions for water-saving communities. Doing so will set a benchmark for resilience that can drive municipal water operations, planning, and management.” (pg. 182)
- Statewide CII program will help to benchmark indoor commercial water savings and develop tools and resources to incorporate in programmatic efforts to reduce indoor water use.
- From the case studies and benchmarking methodologies implemented in the project will provide a framework for water providers in their management and planning of water resources into the future.

- “The CWCB will develop a report on reuse best practices that summarizes effective projects that have been developed and promotes the responsible and targeted adoption of reuse that will seek to identify barriers and opportunities” (pg. 186)
- Statewide CII program can help identify “effective projects” and “identify barriers and opportunities” for CII water users that have explored or implemented reuse/reclaimed water projects.

Recognizing the increasing pressures on water resources due to population growth, climate change, and competing demands, the CWP emphasizes the need for adaptive and resilient approaches. Resilient Planning within the CWP involves integrating innovative water management practices, fostering collaboration among diverse stakeholders, and implementing flexible strategies that can adapt to changing conditions. The CII project is a collaborative effort across multiple providers focusing on new avenues of water conservation that will further bolster water security by providing accessible water conservation programs and incentives and creating a capacity-building hub to provide accessible educational opportunities.

- “Water conservation and incentive programs are sometimes not used because residents do not know about them, cannot afford them, or are unable to effectively use them. These programs can have greater reach and impact if they are translated, and a focus is placed on residents who are not typically engaged in water issues” (pg. 218)
- While this section speaks to residents, the Statewide CII program seeks to produce an accessible guidance document that would dramatically increase the number of conservation programs and incentives available to water customers across the State of Colorado
- “The CWCB will develop an online educational hub that can serve as a resource for training on critical water issues for stakeholders or individuals who would like to take actions that implement the vision of the Water Plan” (pg. 220)
- The guidance document and additional resources in the resource library could be added to the capacity-building hub

Basin Implementation Plans

This project is poised to have a profound and far-reaching impact, extending its influence across all eight basin roundtables in Colorado. As per the recently updated Basin Implementation Plan (BIP) in January 2022, each of these basins anticipates a discrepancy between water supplies and demands for municipal and industrial sectors. They are all committed to endorsing strategies aimed at mitigating these projected water gaps. The specific objectives outlined in the Basin Implementation Plans (BIPs) pertinent to this project are as follows:

Arkansas Basin: Support regional endeavors to find cost-effective solutions for local water supply gaps (p.14). Increase diversion demand for municipal and industrial purposes to meet water needs (p.14).

Colorado Basin: Emphasize basin-wide conservation efforts (p.13) and advocate for sustained municipal and industrial conservation measures (p.20).

Gunnison Basin: Identify and resolve municipal and industrial water shortages (p.13). Foster active, relevant, and comprehensive public education, outreach, and stewardship processes in the six sectors of the Gunnison Basin (p.18).

North Platte Basin: Augment economic development and diversification through strategic water use and development (p.8).

Rio Grande Basin: Strive for a robust and resilient economy in agriculture, recreation, municipal, and industrial

sectors that bolsters thriving communities. Encourage informed and engaged citizens who comprehend the gravity and urgency of local, state, and regional water issues, actively participating in diverse educational opportunities (p.18).

South Platte /Metro Basin: Uphold and enhance municipal and industrial conservation and efficiency efforts (p.2). Broaden communication, outreach, and educational programs in the South Platte Basin (p.25).

Southwest Basin: Address municipal and industrial water needs (p.21). Promote judicious and effective water utilization by implementing municipal conservation and efficiency strategies to curtail future water requirements (p.23).

Yampa-White-Green Basin: Identify and resolve municipal and industrial water shortages (p.13). Implement robust conservation measures to accommodate growth and anticipate future water needs (p.8).

Related Studies

Environmental Protection Agency (2021, January 11). Tools for CI facilities. EPA.

<https://www.epa.gov/watersense/tools-ci-facilities>

Commercial, industrial, and institutional water use. Alliance for Water Efficiency. (n.d):

<https://www.allianceforwaterefficiency.org/resources/cii>

Chinnasamy, C. V., Arabi, M., Sharvelle, S., Warziniack, T., Furth, C. D., & Dozier, A. (2021). Characterization of Municipal Water Uses in the Contiguous United States. *Water Resources Research*, 57(6).

<https://doi.org/10.1029/2020WR028627>

Water Research Foundation. (2015, August 19). Methodology for evaluating water use in the commercial, institutional, and industrial sectors. Water Research Foundation.

<https://www.waterrf.org/research/projects/methodology-evaluating-water-use-commercial-institutional-and-industrial>

National Survey of Commercial, Industrial and Institutional Water Efficiency Programs. American Water Works Association. (2016).

<https://www.awwa.org/Portals/0/AWWA/ETS/Resources/Technical%20Reports/AWWAsUtilitySurveyofCIIWaterEffi>

Northern Water - Brendle Group. (2023, January 7). Northern Water Indoor Water Audits for Commercial and Institutional Customers.

<https://www.northernwater.org/getmedia/5b81cc81-5bc3-4143-93f9-87e5ce6e278c/Northern-Water-CII-Pilot-Report>

U.S. Environmental Protection Agency. (2012, October). Watersense at Work: Best Management Practices for Commercial and Institutional Facilities.

<https://www.epa.gov/sites/default/files/2017-01/documents/ws-commercial-water-sense-at-work-ci.pdf>

Geurts, J. (2018, June 28). Citizen's Guide to Colorado Water Conservation. Water Education Colorado.

<https://www.watereducationcolorado.org/publications-and-radio/citizen-guides/citizens-guide-to-colorado-water-con>

Taxpayer Bill of Rights

N/A