COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	City of Loveland	
Name of Water Project	City of Loveland Water AMI Project	
Grant Request Amount		**$2,200,000.00**
Primary Category		$2,200,000.00
Conservation & Land Use Planning		
Total Applicant Match		**$2,200,000.00**
Applicant Cash Match		$2,200,000.00
Applicant In-Kind Match		$0.00
Total Other Sources of Funding		**$0.00**
Total Project Cost		**$4,400,000.00**

Applicant & Grantee Information

Name of Grantee: City of Loveland
Mailing Address: 200 North Wilson Avenue Loveland CO 80537

Organization Contact: Bryan Easterly
Position/Title: Water Metering Supervisor and AMI Project Manager
Phone: 970-962-3749
Email: bryan.easterly@cityofloveland.org

Organization Contact - Alternate: Michelle Erickson
Position/Title:
Phone: (970) 646-8062
Email: micheller.erickson@cityofloveland.org

Grant Management Contact: Bryan Easterly
Position/Title: Water Metering Supervisor and AMI Project Manager
Phone: 970-962-3749
Email: bryan.easterly@cityofloveland.org

Grant Management Contact - Alternate: Tena Mose
Position/Title: Accounting Manager
Phone: 970-962-2313
Email: tena.mose@cityofloveland.org

Description of Grantee/Applicant

The City of Loveland water and Power Department. Utilities for Loveland Colorado.

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.
- [x] 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	40.397762
Longitude	105.074981
Lat Long Flag	Municipal centroid: Coordinates based on centroid of municipal boundary
Water Source	Big Thompson River Basin and Colorado - Big Thompson Project (C-BT), Windy Gap Units
Basins	South Platte
Counties	Larimer
Districts	4-Big Thompson River

Water Project Overview

Major Water Use Type	Municipal
Type of Water Project	Construction / Implementation
Scheduled Start Date - Design	1/1/2026
Scheduled Start Date - Construction	2/1/2026

Description

The Loveland Advanced Metering Infrastructure (AMI) Project is a forward-looking initiative designed to enhance water efficiency, reduce waste, empower customers, and support long-term sustainability through smarter monitoring and conservation technologies.

The AMI system promotes water conservation through real-time usage monitoring, early leak detection, and faster response times. In 2024, confirmed leaks identified by City of Loveland staff accounted for over 14 million gallons of lost water. With AMI, response times to leaks will drop from an average of 30 days to just 8-48 hours,

significantly reducing waste.
AMI also empowers consumers to monitor and adjust their usage, supports utility demand management, and improves system maintenance through detailed data insights.

Due to budget limitations and the need for careful planning, the project will roll out in phases. The project is set to begin in early 2026, with Phase 1 focusing on the largest water users in the service area. Phase 1, running through 2027, will prioritize high-demand customers by replacing outdated meters with advanced AMI technology. Phase 2 will begin in 2027, expanding AMI deployment to the remaining customer base. The project represents a major step toward sustainable water management, operational efficiency, and improved service for all customers.

Measurable Results

200	New Storage Created (acre-feet)
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive
	Existing Storage Preserved or Enhanced (acre-feet)
200	New Storage Created (acre-feet)
	Length of Stream Restored or Protected (linear feet)
	Length of Pipe, Canal Built or Improved (linear feet)
$208,999	Efficiency Savings (dollars/year)
1,380	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)
92,000	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
92,000	Number of Coloradans Impacted by Engagement Activity
Other	

No additional measurable results provided

Water Project Justification

The City of Loveland Water Utility treats approximately 4.38 billion gallons (13,441 acre-feet) of potable water each year, drawing from the Big Thompson watershed and the Colorado-Big Thompson (CBT) Project, which together provide about 4.52 billion gallons (13,870 acre-feet) of raw water. To address increasing demands on water resources and protect local ecosystems, Loveland is implementing an Advanced Metering Infrastructure (AMI) project aimed at improving water management through targeted conservation practices.
The AMI system is expected to achieve conservative water savings of 450 million gallons (1,380 acre-feet) annually. This reduction in water demand has the potential to keep a significant volume of water in natural stream flows, thereby helping restore environmental conditions and improve the ecological health of the Big Thompson Watershed. These benefits also contribute to the long-term sustainability of the broader Colorado River Basin.
The project focuses on improving meter accuracy, accelerating leak detection and repair, and enhancing public education and outreach. By enabling real-time water use tracking, AMI will streamline operations, increase billing accuracy, and reduce energy use in treatment and pumping systems. These efficiencies are expected to generate additional revenue and allow reinvestment in critical infrastructure upgrades, further strengthening system resilience.
Loveland will monitor the impact of these conservation efforts through annual water loss audits. The resulting data will feed into the city's Hydrozone Program, a framework that promotes equitable and efficient water use. These ongoing efforts are anticipated to create a positive feedback loop in which measurable conservation outcomes drive continued improvements and sustainable water management practices.
Annual Water Production: 4.38 billion gallons

Estimated Water Loss (Meter Under-Registration): 93 million gallons/year

Recovered Water via Increased Meter Accuracy (25%): 23.2 million gallons/year

Leak Response Time Improvement: Reduced from 30 days to 8 hours with AMI
Benefits of the upcoming AMI project include:
Estimated Water Saved from Leak Detection: 14 million gallons/year

Related Studies

Supporting Documents
From literature review in AWWA Opflow, the article "Detect Leaks and Conserve water with AMI" highlighted the benefits by the City of Fountain Valley, California with the installation of an AMI system for 55,000 residential customers and thousands of commercial customers. A City of Santa Barbara AMI Business Case study by Westin Engineering, Inc. stated "The industry-standard water conservation savings estimate for AMI systems is 20% water demand reduction of 20% of customers." In How AMI Systems Are Driving Water Conservation (San Jose Water), it was stated an AMI system can also alert water utilities about suspicious changes in water use and trigger early response. This helps identify leaks in the distribution network before water even reaches a residence or commercial location. Most utilities estimate that 10 percent to 30 percent of distributed water is lost before it even reaches customer meters due to leaks. In addition, AWIWIA's 2007 State of the Industry reported estimated losses at 10 to 20 percent in water distribution systems throughout the nation.
A case study published by the U.S. Environmental Protection Agency (EPA) highlights how the Albuquerque Public School (APS) System, in collaboration with the Albuquerque Bernalillo County Water Utility Authority, significantly reduced water consumption by implementing an Advanced Metering Infrastructure (AMI) system (EPA WaterSense, n.d.).
Before the AMI system was installed, APS averaged approximately 300 gallons of water use per hour. After a year of data-driven water management using AMI, that usage dropped to less than 25 gallons per hour—a reduction of over 90%. The success was attributed to real-time monitoring, quick leak detection, improved maintenance practices, and strong coordination between facility managers and the water utility (EPA WaterSense, n.d.).
This case exemplifies how facility managers can use AMI data to proactively manage water use, identify inefficiencies, and achieve substantial cost and resource savings.
Numbers supporting water conservation from the City of Loveland Annual Water Loss Audit. On average over the last 5-years, an estimated 93 million gallons per year have been lost due to customer metering inaccuracies and an additional 272 million gallons have been lost per year in real water losses with a good portion of that real water loss occurring on service line leaks.
Calendar Year 2017 2018 2019 2020 2021 2022 2023
Units (Unless otherwise specified) MG MG MG MG MG MG MG
Customer Metering Inaccuracies 81 82 70 88 103 110 93
Real Losses 569 436 219 173 398 294 274

Taxpayer Bill of Rights

City staff have reviewed annual revenues for the current and prior year and confirmed that if the City’s Water/Wastewater enterprise is awarded these grant funds, it would not be at risk of losing its “enterprise” classification under TABOR.