COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	Blue River Valley Ranch Lakes Association
Name of Water Project	Blue River Valley Ranch Lakes Association Smart Water Meter Installation
Grant Request Amount	**$235,271.00**
Primary Category	$235,271.00
Conservation & Land Use Planning	
Total Applicant Match	**$25,000.00**
Applicant Cash Match	
Applicant In-Kind Match	$25,000.00
Total Other Sources of Funding	**$235,271.00**
SRF/CWPDA	$235,271.00
Total Project Cost	**$495,542.00**

Applicant & Grantee Information

Name of Grantee: Blue River Valley Ranch Lakes Association
Mailing Address: PO Box 31 Silverthorne CO 80498

Organization Contact: Bruce Chameroy
Position/Title: HOA Trustee
Phone: 303-947-6698
Email: bhchameroy@yahoo.com

Organization Contact - Alternate: Pete Rubin
Position/Title: President
Phone: 216-440-2073
Email: pete44r@gmail.com

Grant Management Contact: Bruce Chameroy
Position/Title: HOA Trustee
Phone: 303-947-6698
Email: bhchameroy@yahoo.com

Grant Management Contact - Alternate: Pete Rubin
Position/Title: President
Phone: 216-440-2073
Email: pete44r@gmail.com

Description of Grantee/Applicant

Blue River Valley Ranch Lakes Association has an application submitted for SFR loan funding for water system improvements, including a storage tank, a new well, emergency interconnect and individual service meters. We would like to apply for grant funding for the installation of water meters to encourage water conservation. There are currently no individual meters in the water system.

Type of Eligible Entity

- [ ] Public (Government)
- [ ] Public (District)
- [ ] Public (Municipality)
- [ ] Ditch Company
- [x] 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	39.751729
Longitude	-104.992107
Lat Long Flag	Precise coordinates: Project coordinates are readily definable and precisely define the location of the project
Water Source	Blue River Valley Ranch Lakes Association owns the tributary well which is the domestic water supply for the 46 residences in the association. The well was decreed in 1973 for municipal purposes with an appropriation date of November 1, 1962.
Basins	Colorado
Counties	Summit
Districts	36-Blue River Basin

Water Project Overview

Major Water Use Type	Municipal
Type of Water Project	Design & Construction
Scheduled Start Date - Design	6/1/2023
Scheduled Start Date - Construction	5/1/2026

Description

Blue River Valley Ranch Lakes Association has been approved for SFR loan funding for water system improvements; including a storage tank, a new well, fire hydrants and individual service line curb stops and water

meters. This application is for grant funding for the installation of smart water meters to provide a means to bill for consumption, encourage water conservation, detect system losses and isolate service line leaks. There are currently no individual meters in the water distribution system.

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)
$2,000	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)
30,500	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
115	Number of Coloradans Impacted by Engagement Activity
Other	

Installing smart water meters will provide BRVRLA the ability to determine and correct water system losses, encourage conservation and reduce system consumption which will ultimately preserve the Blue River Basin alluvium.

Water Project Justification

The smart water meter installation project is an essential part of the broader domestic (potable) water system improvement initiative, as it facilitates precise water usage tracking and helps reduce water waste.

This project aligns with the Colorado Water Plan by addressing key goals, themes and objectives. Specifically, Section 4 of Volume1 for the Colorado Basin Theme #6 to encourage a high Level of basin wide conservation. The key efficiency and conservation measures of this project will include:

• Radio (cellular) read meters, which can detect leakage or red flag water usage
• Leak detection and correction programs
• Water loss tracking
• Increasing block rate structures (tiered rates), which encourage conservation
• Voluntary and/or mandatory outdoor watering restrictions (often with increasing restrictions triggered by drought or water supply conditions)
• Limiting potable water use for outside irrigation
• Education and outreach

The installation of individual smart water meters will provide BRVRLA the tools to quickly detect leaks and alert the system and the customer of high water usage, helping to reduce water bills and prevent damage. Individual curb stops will allow for quick isolation of service lines, facilitating repairs without impacting the entire distribution system, thus ensuring consistent water supply and reducing operational costs.

Installing individual service line water meters will enable BRVRLA to use the American Water Works Association (AWWA) Water Loss Audit software program to compare total water production with metered usage. This will allow for tracking system losses and help determine when distribution system repairs and replacements are

necessary.

The installation of individual water meters will enable BRVRLA to bill customers based on their consumption through a tiered rate structure. This will involve charging higher rates for increased usage levels, thereby promoting conservation. Following the installation of the meters and subsequent analysis of consumption data, a tiered rate structure will be developed. This structure will then be presented to BRVRLA for approval and implementation.

BRVRLA has a separate irrigation water right available for outside irrigation. By installing individual water meters on the potable water system, we can track and bill for usage. This will encourage the use of the available irrigation water right through voluntary or mandatory watering restrictions.

The project, once completed, will promote water efficiency by encouraging the installation of water-efficient fixtures. It aims to enhance water conservation planning efforts through the detection of excessive water usage within households. The initial stage involves the installation of individual water meters, which is fundamental for implementing water conservation and efficiency measures, as well as facilitating water loss and drought planning programs. Following the installation of these meters, local water conservation, efficiency, and drought management plans can be effectively executed.

The water system improvements are based in part on recurring recommendations from the CDPHE Sanitary Survey to install individual water meters.

Related Studies

A Project Needs Assessment was completed by Merrick & Company Engineering Firm and submitted to CDPHE Drinking Water Revolving Fund program.

Taxpayer Bill of Rights

N/A