



Colorado Water Conservation Board

## Water Plan

### Water Project Summary

Name of Applicant	Town of Berthoud	
Name of Water Project	Town of Berthoud Water Efficiency Plan	
Grant Request Amount		<b>\$41,423.00</b>
Primary Category		\$41,423.00
<i>Conservation &amp; Land Use Planning</i>		
Total Applicant Match		<b>\$36,773.26</b>
<i>Applicant Cash Match</i>		\$29,895.00
<i>Applicant In-Kind Match</i>		\$6,878.26
Total Other Sources of Funding		<b>\$0.00</b>
Total Project Cost		<b>\$78,196.26</b>

### Applicant & Grantee Information

Name of Grantee: Town of Berthoud	
Mailing Address: 807 Mountain Avenue Berthoud Colorado 80513	
Organization Contact: Ken Matthews	
Position/Title: Utilities Director	Email: kmatthews@berthoud.org
Phone: 970-532-3754	
Organization Contact - Alternate: Marie Mitchell	
Position/Title: Administrative Water Utilities Tech	Email: mmitchell@berthoud.org
Phone: 970-344-5816	
Grant Management Contact: Ken Matthews	
Position/Title: Utilities Director	Email: kmatthews@berthoud.org
Phone: 970-532-3754	
Grant Management Contact - Alternate: Marie Mitchell	
Position/Title: Administrative Water Utilities Tech	Email: mmitchell@berthoud.org
Phone: 970-344-5816	

### Description of Grantee/Applicant

Town of Berthoud. A small community which endeavors to provide the quality of life enjoyed by past and present generations while ensuring its position for the future within the dynamic Front Range economic corridor. A town that is planning for future growth while preserving and enhancing its rural character and natural resources. Economists forecast substantial and continued regional growth over the next several decades. CWCB funding opportunities provides assistance for our municipality to plan for and positively manage anticipated growth and development in the Berthoud area, while meeting the initiatives of the Colorado Water Plan and the South Platte Basins Roundtable water supply gap priorities.

### 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	40.300000
Longitude	105.050000
Lat Long Flag	Municipal centroid: Coordinates based on centroid of municipal boundary
Water Source	Berthoud has 5,403 water taps with water supplies consisting of CBT and Windy Gap water along with water rights in the Big Thompson River and irrigation ditch shares.
Basins	South Platte
Counties	Weld; Larimer
Districts	2-South Platte: Denver Gage to Greeley; 4-Big Thompson River

### Water Project Overview

Major Water Use Type	Municipal
Type of Water Project	Planning
Scheduled Start Date - Design	4/15/2024
Scheduled Start Date - Construction	
Description	Berthoud's proposed updated Water Efficiency Plan (Plan) will follow State regulations, forging a foundational platform to build on past conservation efforts and implement a successful water efficiency program. Berthoud has

5,403 water taps with water supplies consisting of CBT and Windy Gap water along with water rights in the Big Thompson River and irrigation ditch shares. Berthoud is projected for significant near-term and projected growth. Questions explored and addressed during the Plan development include:

Can Berthoud incentivize and promote water efficiency among Town leadership and within the local community, and bring an appropriate balance between regulations and ordinances when necessary?

Can Berthoud leverage regional partnerships (e.g. Northern Water, Little Thompson Water District, Thompson School District R2, Resource Central, South Platte Basin Roundtable, HOAs and Metro Districts)?

What method(s) to lower peak-day water demand during the summer to help address water treatment capacity constraints?

Can Berthoud further integrate water efficiency in land use planning efforts (including recently passed SB 24-005)?

Can Berthoud incorporate and promote water efficient AMI technology once it is rolled out to customers?

Can Berthoud implement and promote non-potable water usage for irrigation usage with HOA, Metro Districts and Thompson School District?

### 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)

60,000 Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning

13,600 Number of Coloradans Impacted by Engagement Activity

Other

Efficiency savings will be evaluated with development of the Plan

### Water Project Justification

The update of Berthoud's Water Efficiency Plan supports the goals of the Colorado Water Plan and accompanying Technical Update as well as the South Metro/Metro Basin Implementation Plan and State's education efforts. This is described in further detail below.

South Platte/Metro BRT Basin Implementation Plans

The following bullets highlight the goals in the South Platte/Metro BIP that specifically related to Berthoud's Water Efficiency Plan. Applicable BIP strategies for each corresponding goal are parenthetically cited.

Goal 1: Encourage implementation of projects – Berthoud has a project on the South Platte Basin Identified Projects List involving further development of its water supply portfolio to meet growing water demands. Water conservation plays a strategic role in furthering Berthoud's efforts in achieving a sustainable water supply for its growing service area. In addition, State approved water conservation plans are necessary to qualify for additional State funds and loans that may be of further assistance in developing Berthoud's water supplies. (Strategies 1.A, 1.B).

Goal 2: Maximize development of native South Platte supplies – Berthoud’s planned future water supplies include a variety of collaborative efforts and multi-purpose projects to fully utilize its native South Platte supplies through direct diversion, storage, exchange, agricultural leasing arrangements, incentives to promote non-potable use, and reuse of its Windy Gap water and native ditch rights. Berthoud collaborates with many stakeholders in the region for operational purposes and to foster information sharing and data transfer. Some of these include Northern Water, Little Thompson Water District, Thompson School District R2, Resource Central, ditch companies, and local farmers (Strategies 2.A, 2.B, 2.C).

Goal 3: Maintain and promote municipal and industrial conservation and efficiency - Key areas in where Berthoud’s Plan will intersect with the Goal 3 BIP strategies include the following:

- o During the Plan development, Berthoud will develop water conservation goals and target water savings based on desired outcomes. Historical demand data will also be assessed to develop a baseline for measuring future water savings. (Strategy 3.A).
- o Berthoud is actively engaged with regional partners on water efficiency efforts. These efforts in addition to new opportunities will be explored during Plan development. (Strategy 3.B).
- o During Plan development, Berthoud will develop lessons learned from its current water efficiency program, expand existing measures, and adopt newer more innovative water efficiency measures. This includes how water efficiency may be integrated with land use planning. (Strategy 3.C).
- o One of Berthoud’s planning objectives is to “identify multi-pronged opportunities associated with water efficiency measures such as climate resiliency, watershed health, and community benefits.” These opportunities will be identified and considered in selecting water efficiency measures that capitalize on the benefits of urban landscapes and green spaces. (Strategy 3.D, 3.E, and 3.F).

Goal 4: Maintain and promote reuse – Berthoud is in the process of developing the water rights and operational mechanisms necessary to reuse its Windy Gap water and reusable portion of its ditch shares. This will ultimately result in indirect potable reuse and enable Berthoud to fully utilize its water supply portfolio. (Strategy 4.F).

Goal 5: Maintain and improve irrigated agriculture – As Berthoud continues to develop its water supply to meet growing demands, it is working with others in developing lease-back arrangements with farmers to keep agricultural lands in production and preserve open spaces. This is actively reducing traditional buy-and-dry water right acquisitions. Berthoud is also engaging in other methods (water efficiency and reuse) to meet growing demands, reducing the amount of necessary agriculture to M&I transfers. (Strategies 5.A, 5.B, 5.F).

Goal 6: Protect and enhance watershed function - Berthoud’s water efficiency planning effort will identify opportunities where watershed health benefits can be coupled with water efficiency measures. For example, urban landscaping can be both water wise and fire resistant. Also, educational outreach on water efficiency can be coupled with practices to address watershed health (Strategies 6.A.3, 6.A.4, 6.A.5).

Goal 7: Protect and enhance environmental attributes – Berthoud aims to maintain a corridor of conserved land along the Little Thompson River through town, providing water quality and environmental benefits. The Water Efficiency Plan will contribute to this effort by fostering education and dialogue on the value of water and watershed health among Town leadership, staff, and the public. (Strategies 7.A, 7.C).

Goal 8: Protect and enhance recreational attributes – Berthoud’s service area includes open space and areas of aquatic habitat. Urban parks are also a critical component to existing and future development. Discussions will be held to address potential policy opportunities of integrating water with land use planning considering recreational attributes (Strategy 8.A).

Goal 9: Support collaborative development and management of supply options outside of the South Platte Basin

- Berthoud relies on regional collaboration for a significant portion of its water supplies consisting of CBT and Windy Gap water and therefore has a vested interest in collaborative strategies between water providers on both the east and west slope. Berthoud supports municipal water efficiency and views this continual support as a significant contribution to the east/west collaborative effort. (Strategy 9.A).

Goal 10: Utilize scenario planning to better manage uncertainty of future water needs - Berthoud incorporates scenario planning and climate change in its water supply modeling and planning efforts. The development of water conservation goals for the Plan update will also include scenarios with and without active water conservation. (Strategy 10.A.)

Goal 11: Broaden South Platte communications, outreach, and education programs – Berthoud’s Plan will provide a framework for communications between Berthoud, its customers, and collaborative partners. This includes incorporating an active role in collaborating with the South Platte BRT on mutually beneficial educational efforts and communicating such efforts to Berthoud’s customers. (Strategies: 11.E, 11.F).

#### Colorado Water Plan

Berthoud’s water efficiency planning efforts coincide with many aspects of the Colorado Water Plan’s vision and action area. The following discussion describes and calls out the specific partner action categories that Berthoud’s Plan will address.

Vibrant Communities – Berthoud’s water efficiency planning effort will explore one-water concepts and identify multi-beneficial opportunities such as green infrastructure; climate appropriate resilient landscapes that are healthy; vehicles for engaging, educating stakeholders and the public on the value of water and stewardship; integrating water efficiency and land use planning, and fostering dialogue among Berthoud departments around water which is important for implementation of a successful water efficiency program. (Partner action categories: meeting future water needs, water wise use, healthy lands, engaged partners, integration with other water sectors).

Robust Agriculture – As discussed above, as Berthoud continues to develop its water rights portfolio to meet growing demands. Berthoud is working with private landowners in developing lease-back arrangements with farmers to keep agricultural lands in production and preserve open spaces. This is actively reducing traditional buy-and-dry water right acquisitions. Berthoud is also engaging in other methods (water efficiency and reuse) to reduce the amount of water right purchases necessary to meet future demands. (Partner action categories: meeting future water needs, water wise use, healthy lands, engagement and education, integration with other sectors).

Resilient Planning – Berthoud views water efficiency as an important vehicle necessary for sustainable and resilient communities. Through its water conservation planning effort, Berthoud will investigate ways in which water efficiency can mitigate the vulnerability of natural hazards, identify multi-pronged solutions that support water efficiency and other critical elements of sustainability, promote climate appropriate landscapes, explore mutually beneficial partnerships, and identify opportunities for elevating education on water efficiency and its multi-benefits at the customer level. (Partner action categories: meeting future water needs, water wise use, healthy lands, engagement and education, integration with other sectors).

Thriving Watersheds – As Berthoud’s service area continues to develop, wise water use and natural and climate appropriate landscapes and maintenance practices will play a key role in overall watershed health. Berthoud’s Water Efficiency Plan will address this critical intersection, promoting low water use landscapes that provide

benefits to the watershed. The Plan will also promote education practices that emphasize the watershed and community benefits of sustainable water-wise landscaping (Partner action categories: meeting future water needs, water wise use, healthy lands, engaged partners, integration with other sectors).

### Related Studies

Related studies and supporting documents include:

Colorado WaterWise. 2024. Colorado WaterWise Best Practices Guidebook  
CWCB. 2012. Municipal Water Efficiency Plan Guidance document.  
CWCB. 2019. Best Practices for Implementing Water Conservation & Demand Management Through Land Use Planning Efforts.  
JVA, Inc. 2011. Water System Master Plan for the Town of Berthoud.  
LRE Water. 2020. Town of Berthoud Water Resources Master Plan (WRMP).  
LRE Water. 2021. Town of Berthoud WRMP Memorandum-5 Year Plan  
LRE Water. 2023 Town of Berthoud Water Supply vs Demand Outlook (WRMP)  
Town of Berthoud. 2007. Berthoud Water Conservation Plan.  
Town of Berthoud. 2011. Water Conservation Plan.  
Town of Berthoud. 2020. Colorado Growing Water Smart Team Action Plan.  
Town of Berthoud. 2021. Comprehensive Plan.  
Town of Berthoud. 2021. Draft Town of Berthoud Water Shortage and Drought Resiliency Plan.  
Town of Berthoud. 2023. Town of Berthoud Landscape Design Guidelines.

This project is complementary to CWCB's efforts in providing technical assistance to municipalities on water efficiency planning. The Plan will be aligned with CWCB's municipal water efficiency planning guidelines. The Plan will also utilize the CWCB template and the worksheets provided in the guidelines.

### Taxpayer Bill of Rights

There are no relevant TABOR issues with the Town of Berthoud that will affect this grant fund request.