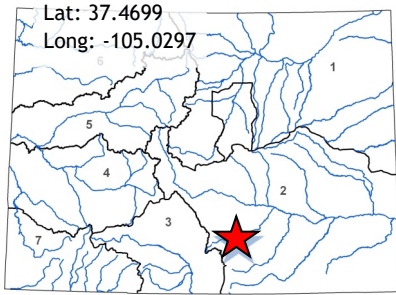




**Water Plan Grant Application**



D E T A I L S	
Total Project Cost:	\$345,000
Water Plan Grant Request:	\$172,500
Other CWCB Funding:	\$0
Other Funding Amount:	\$0
Applicant Match:	\$172,500
Project Type(s):	Construction
Project Category:	Water Storage and Supply
Measurable Result:	1,200 AF created

L O C A T I O N	
County/Countries:	Huerfano
Drainage Basin:	Arkansas

The Huerfano County Water Conservancy District (HCWCD or District), formed by court decree in 1971, responds to local and regional needs by protecting and stabilizing the Huerfano County water resources, including the Huerfano and Cucharas Rivers, tributary streams and groundwater. The District participates in the Cucharas Basin Storage Collaborative, including federal, state and local agencies and water users. The purpose of the Collaborative is to identify the most effective manner of meeting storage needs within the basin, including the construction of new storage or the rehabilitation/enlargement of existing storage structures.

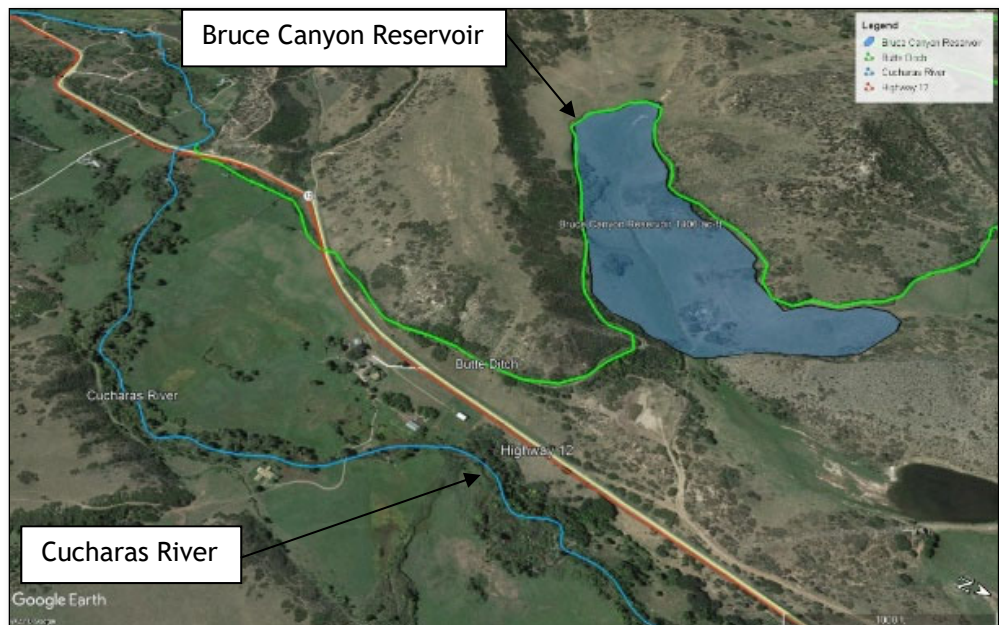
Major Cucharas River water users formed the Cucharas Basin Storage Collaborative to identify and construct cost-effective water storage for their needs. With the assistance of WSRF and WPG funding plus local match, the Collaborative has quantified storage needs, conducted a yield analysis with DSS consistent modeling, evaluated over 50 potential storage sites, and conducted feasibility level design on five preferred sites. At the end of 2021, 50% design was completed for Bruce Canyon Reservoir, which is one of these preferred sites.

The grant will help to fund a survey, geotechnical and engineering analyses, a dam hazard classification, 90% design, construction plans and specifications, a cost estimate, permitting, an emergency action plan, a Butte Ditch enlargement design, and an application to the State Engineer’s Office for approval.

**Funding**

**Recommendation:**

Staff recommends approval of the full request in the amount of \$172,500 from the Water Storage and Supply Category. This is approximately 50% of the total project cost. This project aligns with the Water Plan’s measurable goal of creating 400,000 AF of water storage by 2050 by providing new storage in the Arkansas basin.





**COLORADO**

Colorado Water  
Conservation Board

Department of Natural Resources

## Colorado Water Conservation Board

# Water Plan

### Water Project Summary

Name of Applicant	Huerfano County Water Conservancy District
Name of Water Project	90% Design, Bruce Canyon Reservoir
Grant Request Amount	<b>\$172,500.00</b>
Primary Category	\$172,500.00
<i>Water Storage &amp; Supply</i>	
Total Applicant Match	<b>\$172,500.00</b>
<i>Applicant Cash Match</i>	\$172,500.00
<i>Applicant In-Kind Match</i>	\$0.00
Total Other Sources of Funding	<b>\$0.00</b>
Total Project Cost	<b>\$345,000.00</b>

### Applicant & Grantee Information

Name of Grantee: Huerfano County Water Conservancy District

Mailing Address: PO Box 442 La Veta CO 81055

FEIN: 840,935,026

Organization Contact: Carol Dunn

Position/Title:

Email: hcwcdistrict@gmail.com

Phone: 719-742-5581

Organization Contact - Alternate: Scott King

Position/Title: President

Email: scottdking44@gmail.com

Phone: 7197423124

Grant Management Contact: Carol Dunn

Position/Title:

Email: hcwcdistrict@gmail.com

Phone: 719-742-5581

### Description of Grantee/Applicant

No description provided

### 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	37.469900
Longitude	-105.029700
Lat Long Flag	
Water Source	Cucharas River
Basins	Arkansas
Counties	Huerfano
Districts	16-Cucharas River

### Water Project Overview

Major Water Use Type	Municipal
Type of Water Project	Design
Scheduled Start Date - Design	12/1/2022
Scheduled Start Date - Construction	

#### Description

Major Cucharas River water users formed the Cucharas Basin Storage Collaborative to identify and construct cost-effective water storage for their needs. With the assistance of WSRF and WPG funding plus local match, the Collaborative has quantified storage needs, conducted a yield analysis with DSS-consistent modeling, evaluated over 50 potential storage sites, and conducted feasibility level design on five preferred sites. In 2017, a water court application for storage and exchange rights was filed (March 2020 trial date).

At the end of 2019, 30% design was completed for three of the preferred sites, including a new 1,200 a.f. Bruce Canyon Reservoir. At the end of 2021, 50% design was completed for Bruce Canyon Reservoir.

Bruce Canyon Reservoir 90% design project will include: topographic survey by registered professional land surveyor; geotechnical analysis with field exploration, laboratory analysis, and engineering analyses; formal hazard (Rule 4.13) and hydrologic hazard (Rule 4.15) classifications; final 90% design; construction drawings;

construction specifications; Engineer’s Opinion of Probable Cost; SEO application submission; emergency action plan (Rule 13.7); Butte Ditch enlargement design; Clean Water Act Section 404 Wetlands Survey and recommendation for permitting process.

### Measurable Results

1,200	New Storage Created (acre-feet) New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive Existing Storage Preserved or Enhanced (acre-feet)
1,200	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) Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
5,300	Number of Coloradans Impacted by Engagement Activity
Other	

Besides creating 1200 a.f. of new storage, Bruce Canyon Reservoir will provide opportunities for multiple entities within the Cucharas Basin Storage Collaborative, including storage for agriculture, municipal and industrial use for residents of the basin, plus non-consumptive needs including fishing and non-motorized boating.

### Water Project Justification

This application concerns desperately needed storage – 90 percent design of Bruce Canyon Reservoir. Storage has been a major theme in local, regional (Roundtable) and State (Colorado Water Plan) water planning.

Local. In 2013 the Division Engineer recommended that a shortage of storage in the Cucharas River basin could be resolved by collaborative storage projects. Leading up to the formation of the Cucharas Basin Storage Collaborative in 2015, an investigation by HCWCD concluded that, since WWII, the basin had lost 70% of its storage capacity. Further study by the Collaborative demonstrated in 2017 that the storage gap in the Cucharas basin was about 2,000 a.f. for municipal uses and about 15,000 a.f. for agriculture.

Roundtable. In April 2015, the Arkansas Basin Implementation Plan concluded, "Increasing available storage is seen as fundamental to all solutions to the Arkansas Basin's needs." Executive Summary, p. 9. Its first priority was, "Increasing available storage." Sec. 1, p. 5. Its primary theme was "Increased water storage ... capacity is critical to all solutions." Sec. 1, p. 6. Finally, its storage goal was to "Increase surface storage available within the basin by 70,000 acre-feet by the year 2020." Sec. 1, p. 10.

Statewide. The Colorado Water Plan (2015) contained similar goals:

- Key measurable objective of “attaining 400,000 ac-ft of water storage to manage and share conserved water and the yield of IPPs by 2050.” Section 10.2 (Measurable Objectives and Adaptive Management), p. 10-6.
- Storage is a critical goal identified in Section 10.3 (Critical Goals and Actions), p. 10-11. It stresses prioritizing grants to support implementation of BIP-identified multipurpose storage projects.”

This project, identified in the Arkansas BIP (ARK-2015-007), aims to develop 1200 a.f. of new storage with Bruce Canyon Reservoir. The storage generated will provide opportunities for multiple entities within the Cucharas Basin Storage Collaborative, including storage for agriculture, municipal and industrial use for a basin population of approximately 5,300 people, plus non-consumptive needs including fishing and non-motorized boating.

### Related Studies

- WSRF 2015 grant. Grant recipient: Huerfano County Water Conservancy District. Water activity name: Cucharas Basin Collaborative Storage Study. Approving RT: Arkansas. CWCB board meeting date: September 2015. Contract #: CTGG1 2016-1053.
- WSRF 2018 grant. Grant recipient: Huerfano County Water Conservancy District. Water activity name: Cucharas Collaborative Storage Study Geotechnical Investigation. Approving RT: Arkansas. CWCB board meeting date: March 2018. Contract #: POGG1,PDAA,201800000917.
- WSRF 2019 grant. Grant recipient: Huerfano County Water Conservancy District. Water activity name: Cucharas Collaborative Storage Phase 3. Approving RT: Arkansas. CWCB board meeting date: March 2019. Contract #: POGG1,PDAA, 201900002916.
- WRP 2019 grant. Grant recipient: Huerfano County Water Conservancy District. Water activity name: Collaborative Storage 30 percent Design. Approving RT: Arkansas. CWCB board meeting date: March 2019. Contract #: POGG1,PDAA,202000000010.
- WSRF & Water Plan grants combined 2020. Grant recipient: Huerfano County Water Conservancy District. Water activity name: Maria Stevens Reservoir 50% Design. Approving RT: Arkansas. CWCB board meeting date: March 2020. Contract #: POGG1,PDAA,202100002187.
- WSRF 2020 grant. Grant recipient: Huerfano County Water Conservancy District. Water activity name: Bruce Canyon Reservoir 50% Design. Approving RT: Arkansas. CWCB board meeting date: March 2020. Contract #: POGG1,PDAA,202000002982.
- WPG 2021 grant. Grant recipient: Huerfano County Water Conservancy District. Water activity name: Maria Stevens Reservoir Dredging Feasibility Study. Approving RT: Arkansas. CWCB board meeting date: September 2021. Contract #: POGG1,PDAA,202200003026.

### Taxpayer Bill of Rights

There are no relevant TABOR issues affecting the applicant.