

Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	Julesburg Irrigation District	
Name of Water Project	Julesburg Reservoir Enlargement Feasibility Study	
Grant Request Amount		\$67,237.00
Primary Category		\$67,237.00
Water Storage & Supply		
Total Applicant Match		\$22,412.00
Applicant Cash Match		\$22,412.00
Applicant In-Kind Match		\$0.00
Total Other Sources of Funding		\$0.00
Total Project Cost		\$89,649.00

Applicant & Grantee Information

Name of Grantee: Julesburg Irrigation District Mailing Address: 315 Cedar Street, Ste 150 Julesburg CO 80737 FEIN: 846,000,185

Organization Contact: Larry Frame Position/Title: Phone:

Email: larryframe1@yahoo.com

Grant Management Contact: Larry Frame Position/Title: Phone:

Email: larryframe1@yahoo.com

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 \square **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. \square **Engagement & Innovation Activities** Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website. \square Watershed Restoration & Recreation Projects that promote watershed health, environmental health, and recreation. Water Storage & Supply Projects that facilitate the development of additional storage, artificial aguifer 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 Longitude Lat Long Flag Water Source Basins Counties Districts

-102.652694 South Platte South Platte Sedgwick

40.930386

Water Project Overview

Major Water Use Type Type of Water Project Scheduled Start Date - Design Scheduled Start Date - Construction Description

Julesburg Irrigation District (JID) would like to address existing dam safety concerns and enlarge Julesburg Reservoir from approximately 20,200 acre-feet up to 28,178 acre-feet of storage. When considering improvements at Julesburg Reservoir, it is important to distinguish between

Agricultural

Planning 5/1/2024

DWR design requirements for dam safety improvements versus those for a dam enlargement.

Dam safety improvements that do not increase storage can usually be completed in phases over time, with the assumption that each project incrementally increases safety of the dam. A reservoir enlargement, however, is treated like a new dam. DWR Dam Safety Rules require an enlargement project to bring essentially all aspects of the dam up to current standards prior to approving the additional storage. This study will include inflow hydrology and reservoir routing, seepage and stability calculations, civil site and geotechnical design, drawings, dam safety requirements, and cost opinions. This will hopefully allow JID to being the long process of planning how to fund the design and eventual construction of enlarging the reservoir. The information will be critical to apply for federal funding programs and identifying partners for the enlargement of the reservoir.

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

Study will be the first step to allow Julesburg Irrigation District to apply for funding to create 7,972 acre-feet of storage that is lost to sedimentation

Water Project Justification

Rehabilitating and enlarging Julesburg Reservoir advances several measures in the Colorado Water Plan, South Platte Implementation Plan, and the Platte River Recovery Implementation Program. The project meets the goals of "maintaining and improving irrigated agriculture" in the South Platte Basin Implementation Plan and rehabilitating aging storage of agricultural water in the Colorado Water Plan. When the reservoir is enlarged, there will be nearly an additional 8,000 acre-feet of storage water that can be used by irrigators. Additionally, the 8,000 acre-feet is still under the reservoir's original decree and would fill under the same 1907 priority date. In dry years, water from Julesburg reservoir is critical to irrigators in the district. In 2022, water levels declined significantly and irrigation deliveries ended in August, causing a significant impact on crop yields. Increased storage in the reservoir, will provide more water for irrigation in dry years.

However, Julesburg Reservoir provides a few significant benefits beyond agriculture, and enlarging the reservoir will help safeguards those recreational and environmental benefits. The reservoir is a destination for boating for fishing, providing a valuable economic benefit for the local economy in the summer. In dry years like 2022, Colorado Parks and Wildlife called for an emergency public fish salvage because water levels declined to a point that would result in a loss of the entire fishery resource. Water levels were so low that there was no boating access either. Protecting and enhancing recreational attributes of the basin is another goal of the South Platte Basin Implementation Plan.

Julesburg Reservoir and Julesburg Irrigation District also provide one last and significant environmental benefit. The return flows from irrigation throughout the district come back to the South Platte, providing valuable water supplies that allow the state of Colorado to meet our obligations under the Platte River Recovery Program. To be clear, Julesburg Reservoir and Julesburg Irrigation District are not obligated under the program to provide water to the program. The historical return flows have become part of the base flows that provide water for the endangered and threatened species.

It will also be critical have more storage in the Lower South Platte before the state line, if the state of Nebraska moves forwards with the construction of the Perkins County Canal. The Perkins County Canal is not entitled to return flows from the Colorado Big Thompson Project. Any diversions will have to bypass these return flows, and it will be beneficial to have as much storage as possible within the state to ensure the use of those waters in Colorado and not Nebraska.

Related Studies

No Related Studies provided

Taxpayer Bill of Rights

No Tax Bill of Rights provided