



Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	San Luis Valley Irrigation District
Name of Water Project	Rio Grande Reservoir Low-Flow Pipe Design
Grant Request Amount	\$102,595.00
Primary Category	\$102,595.00
<i>Watershed Health & Recreation</i>	
Total Applicant Match	\$92,595.00
Applicant Cash Match	\$87,595.00
Applicant In-Kind Match	\$5,000.00
Total Other Sources of Funding	\$10,000.00
San Luis Valley Water Conservancy District	\$10,000.00
Total Project Cost	\$205,190.00

Applicant & Grantee Information

Name of Grantee: San Luis Valley Irrigation District	
Mailing Address: 296 Miles Street Center CO 81125	
Organization Contact: Rob Phillips	
Position/Title: Superintendent	Email: robert@slvid.org
Phone: 719-754-2254	
Organization Contact - Alternate: Rob Phillips	
Position/Title: Superintendent	Email: robert@slvid.org
Phone: 719-754-2254	
Grant Management Contact: Rob Phillips	
Position/Title: Superintendent	Email: robert@slvid.org
Phone: 719-754-2254	
Grant Management Contact - Alternate: Rob Phillips	
Position/Title: Superintendent	Email: robert@slvid.org
Phone: 719-754-2254	

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	37.721500
Longitude	-107.266490
Lat Long Flag	Precise coordinates: Project coordinates are readily definable and precisely define the location of the project
Water Source	Rio Grande
Basins	Rio Grande
Counties	Hinsdale
Districts	20-Rio Grande

Water Project Overview

Major Water Use Type	Agricultural
Type of Water Project	Design / Engineering
Scheduled Start Date - Design	10/1/2024
Scheduled Start Date - Construction	

Description

The project activities include design and preliminary engineering of a low-flow pipe at Rio Grande Reservoir. The reservoir underwent significant repairs, which were completed in 2021 and included new outlet valves. During two seasons of winter operations, significant and potentially hazardous ice build-up occurred on the discharge pipes. It has been determined that the fixed cone valves, which were chosen to dissipate energy from the stream exiting the tunnel and projecting to the valve house access road on the left side of the river, cause a mist which then freezes to the outlets during the extremely cold temperatures that occur at this high elevation dam. The Dam Safety engineers recommended extreme caution. As such, the need exists for adaptive management and the

addition of a low-flow pipeline and control valves. This will allow the reservoir to release in the winter, which is a high priority of local stakeholders for Compact compliance flexibility and ecological benefits of increasing winter flows. The SLVID has engaged Schnabel Engineering, who has created a handful of options for the SLVID to consider. Through the project, the chosen alternative will be taken to 50% designs.

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

The project includes the design of a low-flow pipe and valve at Rio Grande Reservoir. Once constructed, the project will benefit the downstream ecosystems, fisheries, and wildlife habitat, and, therefore, the economy of the San Luis Valley for residents as well as the thousands of visitors that flock to the region each year to enjoy fishing and other recreation in the region.

Water Project Justification

The project addresses priorities identified in the Robust Agriculture, Thriving Watersheds, and Vibrant Communities action areas of the Colorado Water Plan. Within the Robust Agriculture action area, the project supports the partner actions, "support storage to provide supply and flexibility for augmentation plans," as many SLVID partners store augmentation water in Rio Grande Reservoir. The project also addresses the action, "rehabilitate aging agricultural storage facilities and diversion structures" because the project continues a decades-long endeavor to rehabilitate the 112 year-old reservoir for multiple benefits. The project will implement the Thriving Watersheds partner action, "enhance streamflows using a variety of available tools," including the basin's Winter Flow Program and cooperative efforts to enhance summer time low flows. Finally, the project meets the Vibrant Communities partner actions of "develop strategically located storage projects that meet multiple needs" and "optimize investments in infrastructure and increase efficiency and conservation." By designing and eventually building a low-flow pipe and valve, the project partners will have the ability to release winter flows, which will improve the downstream habitat and health of the fishery, which will positively impact the community.

Related Studies

This multi-benefit project addresses four of five of the Rio Grande Basin Implementation Plan Goals:

- Healthy watersheds that provide critical ecosystem services, are resilient to disturbances, and benefit from ongoing efforts to protect water sources, improve water quality, enhance aquatic, riparian, wetland, and upland habitat, and maintain connected ecosystems.
- Vibrant and resilient agriculture, recreation, municipal, and industrial economies that support thriving communities.

- Water administration that is adaptive, flexible, and creative while complying with state statutes and the doctrine of prior appropriation, and fully utilizing Colorado's compact entitlements under the Rio Grande and Costilla Creek compacts.
- Engaged and informed citizens who understand the scope and urgency of local, state, and regional water issues and participate in robust and diverse educational opportunities.

The project also directly meets the goals of the Rio Grande Stream Management Plan (SMP). The SMP included flow recommendations for each river reach. Rio Grande Reservoir is required to pass inflows during the irrigation season because there are many senior water rights downstream. As such, the irrigation season hydrograph is close to natural flows. However, the flows during the winter storage season are altered. As such, the ability for SLVID and partners to release flows in the winter would benefit the ecosystem and river function.

Taxpayer Bill of Rights

The SLVID is not subject to TABOR limitations.