

COLORADO Colorado Water Conservation Board

Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Kirk Russell, P.E., Finance Section Chief

DATE: September 18-19, 2019 Board Meeting

AGENDA ITEM: 21. Rio Grande Reservoir Rehabilitation Project

Introduction (This is for information only and no action is necessary)

Background

Rio Grande Cooperative Project

The Rio Grande Reservoir Rehabilitation Project is a component of the State's funding of the Rio Grande Cooperative Project which also included financial support for Colorado Parks and Wildlife's repairs to the Beaver Park Reservoir, located on a tributary of the Rio Grande. The Cooperative Project received a funding authorization of \$30 million from the General Assembly in the 2012 Projects Bill (SB12S-002) and an increase in authorization to \$40 million in the 2017 (HB17-1248).

The Cooperative Project's objective was to develop a partnership between the State and the San Luis Valley Irrigation District to achieve multiple benefits through coordination of the Reservoir's releases to enhance the environment; provide recreational flows; increase supplies and utilize the State's share of Rio Grande water while assuring Compact compliance deliveries to New Mexico. The District committed to working with the CWCB to develop a 10,000 acre-feet storage pool to be used by the CWCB to facilitate the Cooperative Project's objectives.

Rio Grande Reservoir Rehabilitation

The original dam was constructed to a height of 100 feet in 1914 to store 46,000 acre-feet. The earthen-rockfill dam almost immediately sustained damage due to vibration and erosion from the outlet works. The dam was modified on several occasions after the initial construction. In 1982, the dam crest was raised to its current height of 111 feet, which increased the Reservoir's capacity to store its decreed storage right. The outlet gate structure was repaired in 1983 and 1987. Modifications and repairs to the outlet continued into the 90's.

In 2015, the District began final design of modifications to the outlet works. In early 2018, the DWR's Dam Safety Branch approved the Deere & Ault Consulting engineering plans for the rehabilitation of the outlet structure. In mid 2018, the District contracted with Moltz Civil LLC to perform the work. The District is in its second season of construction on the outlet repairs. The outlet construction (aka phase 2) is funded by a \$10 million CWCB grant and a \$15 million loan. The outlet work is approximately 50% complete.

Rob Phillips, San Luis Valley Irrigation District Superintendent will present a status report to the Board.



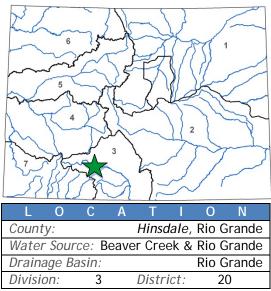


Rio Grande Reservoir Rehabilitation Project

San Luis Valley Irrigation District

LOAN DETAILS	
Project Cost:	\$25M
Funding Package: \$10M Grant & \$15	5M Loan
Loan Term and Interest Rate: 30 years	@1.65%
Funding Source: Const Fund & NonReimb	oursable
BORROWER TYPE	
Agriculture Municipal Com	mercial
100% 0% Low - 0% Mid - 0% High	0%
PROJECT DETAIL	S
Project Type: Reservoir Rehabilitation	
Preserved Storage: 5	1,113 AF

The San Luis Valley Irrigation District is applying for a loan and grant for the Rio Grande Reservoir Rehabilitation - Phase 2 (Project). The purpose of the Project is to rehabilitate the outlet works of the onchannel Rio Grande Reservoir Dam. The Reservoir has a capacity of 51,113 acre-feet and delivers water to nearly



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62,000 acres of agricultural land in the San Luis Valley. The Reservoir's outlet has long been a limiting factor in the administration of the Rio Grande.

This Project is vital to the basin and region as it will provide operational efficiencies by better managing the timing of water stored and released from the Reservoir. This will result in improved stream health and utilization of Rio Grande water by the District, the State of Colorado, and the many other water users in the basin.

The total Project cost estimate (Phase 1 & 2) is \$30,000,000. The District received a \$5,000,000 grant in Projects Bill SB12S-002 for Phase 1, which included seepage control improvements, a U.S. Forest service land exchange, and final design of the outlet works. SB12S-002 also included an appropriation for a loan and grant funding package of \$15,000,000. A subsequent Projects Bill in 2017 (HB17-1248) increased this loan/grant funding package to \$25,000,000.

The District, is requesting a loan from the CWCB for 60% of the Phase 2 Project costs and a grant for 40% of the Phase 2 Project costs.



Water Project Loan Program - Project Data Sheet