



Tunnel Rehabilitation

New Gate House



Piping to New Gate House



Project Description

The dam was originally constructed in 1914 and almost immediately sustained damage due to vibration and erosion from the outlet works. The dam has been modified on several occasions and is currently a height of 111 feet (51,113 AF). The outlet gate structure was repaired on multiple occasions to correct problems with vibrations caused by pressures and release rates. The Reservoir's outlet has long been a limiting factor in the administration of the Rio Grande. This Project 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.

This project included a new intake structure and guard gates; the lining of the intake tunnel, new outlet gates in a new gate house downstream of the dam; a 70ft reinforced lined bypass tunnel around the abandoned in-place old slide gates. The existing outlet tunnel was lined with a ten-foot diameter steel pipe extending the outlet 150ft to the twin 84-inch fixed cone valves and a 36-inch low flow valve.

The total Project cost for Phase 1 & 2 was \$30,000,000. The District received a total of \$15,000,000 in state grant funding which included seepage control improvements, a Forest Service land exchange, Phase 2 final design and 40% of the Phase 2 construction costs.

PROJECT DATA

<i>Sponsor:</i> San Luis Valley Irrigation District	<i>County:</i> Hinsdale	<i>Water Source:</i> Rio Grande
<i>Type of Project:</i> Reservoir Rehabilitation	<i>Board Approval Date:</i> November 2011	
<i>Terms of Loan:</i> 2.45% for 30 years	<i>(Original)</i> \$23,230,000	<i>(Final)</i> \$23,230,000
<i>Design Engineer:</i> Deere & Ault Consultants, DiNatale Water Consultants		
<i>Contractor:</i> Moltz Civil, LLC		