

HENRYLYN IRRIGATION DISTRICT HORSE CREEK AND PROSPECT RESERVOIR REHABILITATION PROJECT



Prospect Reservoir Dam pre-project debris (inset) and the rehabilitated Horse Creek Reservoir outlet flume

Project Description

The Henrylyn Irrigation District, formed in 1907, utilizes Horse Creek and Prospect Reservoirs in the annual delivery of more than 19,000 acre-feet of irrigation water to over 32,000 acres of agricultural land in Weld County. The reservoirs, which are separated by 25 miles, are in-line reservoirs fed by the Denver-Hudson Canal. For Horse Creek Reservoir the project consisted of lining the outlet works, installing additional toe drain, and resurfacing/re-grading the dam crest. Rehabilitation efforts for Prospect Reservoir, which is currently under a 1.5-foot storage restriction due to stability concerns, consisted of a lining for the outlet works, toe drain rehabilitation and improvements, resurfacing of the dam crest, regrading the dam embankment, and rehabilitating the face of the dam. The project will restore the storage capacity of Prospect Reservoir while increasing the efficiencies of both outlet works and providing addition stability and maintenance access.

Project Data

Borrower: Henrylyn Irrigation District

County: Weld

Water Source: Denver-Hudson Canal

Substantial Completion: February 1, 2013

Terms of Loan (Contract #C150252): approved for \$2,184,327 (\$2,150,597.05 drawn) for 30 years @ 2.25%

Design Engineer: Smith Geotechnical, Fort Collins, CO

Contractor: Zak Dirt, Inc., Longmont, CO

Project Elements: Rip-rap lined outlet channel and concrete headwall/flume, toe drain installation and repair, dam embankment fill placement, toe drain pump installation, piezometer installation, concrete dam rehabilitation