



Diversion Structure Repair Project

Lupton Bottom Ditch Company
Substantially Complete October 1, 2018



Figure 1 - Diversion repair on North side of diversion structure and Lupton Bottom headgate.



Figure 2 - Diversion repair on South side of diversion structure.



Figure 3 - Diversion structure.



Figures 4 & 5 - Bank stabilization upstream and downstream of diversion structure.



Figure 6 - Lupton Bottom Ditch headgate.

Project Description

The Lupton Bottom Ditch Company diverts water from the South Platte River near Wattenberg in Weld County. The original check dam was built in 1949 and the gates were replaced in 2001. Damage to the structure began when high river flows overtopped the rock dam and scoured a large hole on the downstream side and subsequently extended that scour into the structure. The structure was initially damaged during September 2013 flooding and further damaged in subsequent high river flows. This repair work was completed in a two-stage process due to the requirement for construction to occur during low flow conditions within the river. During the first stage, upstream stabilization and installation of sheet piling and the construction of a concrete apron occurred. The downstream side of the structure was stabilized with grouted boulders. The second stage included rebuilding the rock dam on the southern side of the diversion structure.

With this project, the Company repaired and improved the diversion and intake structures, provided water deliveries to the shareholders, and improved operation safety. Design commenced in 2017, project construction occurred in early 2018 through summer 2018 and construction is complete.

P R O J E C T D A T A		
<i>Sponsor:</i> Lupton Bottom Ditch Company	<i>County:</i> Weld	<i>Water Source:</i> South Platte
<i>Type of Loan:</i> Diversion Structure Repair		<i>Board Approval Date:</i> January 2018
<i>Loan Terms:</i> 1.6% for 10 years (Original) \$606,000 (Final) \$561,832		
<i>Design Engineer:</i> Civil Resources, LLC		
<i>Contractor:</i> Zak Dirt, Inc.		