

## Lake No. 4 Outlet Pipeline Repair

St. Vrain and Left Hand Water Conservancy District

Substantially Complete March 1, 2021



## **Project Description**

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the St. Vrain and Left Hand Water Conservancy District's Lake No. 4 Outlet Pipeline. During the flood, St. Vrain Creek breached above the Lake. The unlined gravel pits above the Lake were flooded, causing their earthen embankments to fail, sending flood water into the Lake. The Lake filled and eventually overtopped, breaching its eastern embankment. The purpose of the Project was to repair the pipeline to so that augmentation deliveries directly to St. Vrain Creek could resume. Dewatering work by Kirkland Construction began in fall 2019. Construction continued through spring of 2020 in conjunction with repairs on the gravel pits which were also damaged in the flooding. Work was largely completed by fall 2020 with only final punch list items to complete throughout winter of 2020/21. Cost sharing with Boulder County allowed the District's contribution to be well below the original estimate.

PROJECT DATA			
Sponsor: St. Vrain and Left Hand Water Conservancy District	County: Boulder		Water Source: St. Vrain Creek
Type of Project: Reservoir Rehabilitation		Board Approval Date: July 2014	
Loan Terms: (Original) \$864,560.00 @ 2.85% for 30 years (Final) \$236,154.57			
Design Engineer: Engineering Analytics			
Contractor: Kirkland Construction			