



Figure 1 - Dam Embankment Before Construction



Figure 2 - After Construction

Project Description

Hallenbeck Reservoir No. 1 is one of the City of Grand Junction's 14 reservoirs. It has a capacity of 699 acre-feet. In 2014 the City of Grand Junction developed plans to mitigate seepage through the dam; however, during the evaluation process, seepage increased and an 80-foot crack developed on the downstream face of the dam. Water was immediately released from the reservoir in an effort to relieve hydrostatic pressure within the dam. The City completed a forensic evaluation of the dam that included a geotechnical investigation and structural evaluation.

With this project, the City repaired the dam to allow the City to use all of the storage capacity. Construction involved removal of several feet of material on the downstream face of the dam, removal of the existing toe drain system, installation of a blanket filter on the downstream face, installation of a new toe drain system, installation of a buttress on the downstream face, and installation of new piezometers and monuments. Construction began in August 2016 and was completed in December 2016.

P R O J E C T D A T A		
Sponsor: City of Grand Junction	County: Mesa	Water Source: Kannah Creek
Type of Loan: Reservoir Rehabilitation	Board Approval Date: March 2016	
Loan Terms: 2.65% for 20 years (Original) \$1,010,000 (Final) \$764,820.93		WSRF Funding: \$100,000
Design Engineer: AECOM		
Contractor: M.A. Concrete Construction, Inc.		