

RUBY DAM

Fact Sheet

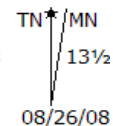
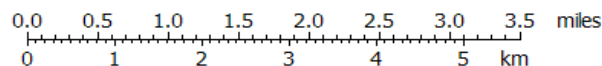
PROJECT DESCRIPTION

- ◆ Located on the Ruby River in Madison County, 7 miles south of Alder
- ◆ Construction completed in 1938
- ◆ Owned by DNRC & managed by SWPB
- ◆ Operated by Ruby Water Users Association since 1938
- ◆ Project consists of:
 - Earthen Embankment Dam, 112.5 feet high, 846 feet long
 - Reinforced concrete chute spillway with 3-cycle labyrinth weir crest
 - 90 inch reinforced concrete outlet conduit upstream of gates; 72 inch steel conduit downstream of gates
 - 60-inch and 18-inch jet flow operating gates and 72-inch knife guard gate
- ◆ Storage at full pool is 37,642 acre-feet, covering 970 surface acres.
- ◆ The dam is a “high hazard” structure which means that its failure could cause loss of life. Farms, ranches, numerous homes, roads, bridges, and utilities are located in the flood plain.



WATER USE

- ◆ 194 contracts for 38,845 acre-feet of water delivered through two canals: West Bench (12 miles long) and Vigilante (26 miles long) Canals
- ◆ Water is primarily used for irrigation; reservoir also used for water-based recreation and regulation of stream flows



REHABILITATION SUMMARY

A major rehabilitation of the Ruby Dam began in August 2010.

- ◆ Phase 1 of the rehabilitation included removing and replacing the spillway, and the development of a new maintenance access road. Phase 1 was completed in December 2011.
- ◆ Phase 2 of the project included constructing a new outlet works conduit, operating gates, gate operating system, and gate house. The majority of the construction was completed in the summer of 2014.
- ◆ Funding for the rehabilitation project came from numerous sources including: Hydropower Revenue, Water Storage Account, RRGL Grant and Loan, and the Ruby Water User's Association.
- ◆ Project costs (engineering and construction): \$16,970,000.

FUTURE NEEDS

The rehabilitation project brings the dam into full compliance with current dam safety standards. No deficiencies currently exist.



Labyrinth weir spillway and footbridge



Spillway



Outlet works under construction



Outlet Works Operational Test