

Colorado State Conservation Board 2007 Matching Grants Project:
Bookcliff Conservation District: Grass Valley Canal Project (completed 2009)

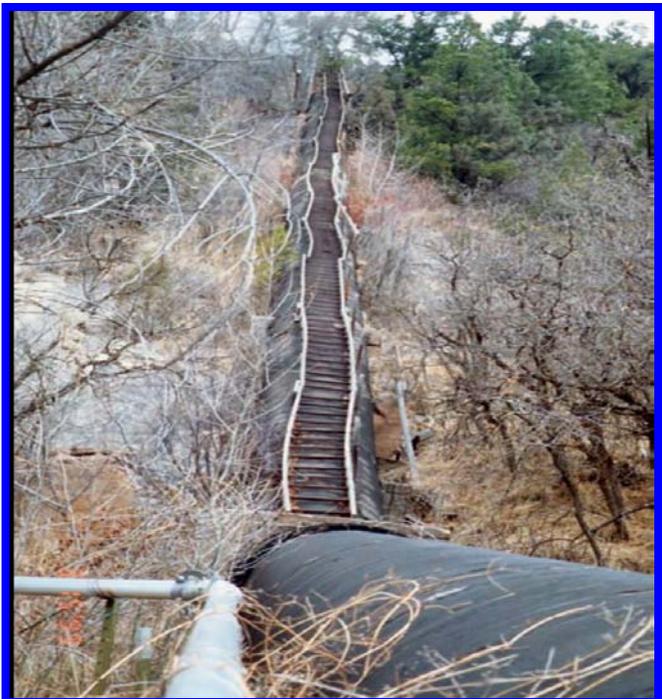
What natural resource problem(s) did the project address?

The Grass Valley Canal runs across over six miles of steep-sided terrain to carry water from East Rifle Creek to Harvey Gap Reservoir in Garfield County. The Silt water Conservation District and Farmers Irrigation Company serve farmland with irrigation water from this water source. Part of the canal involves a **42" diameter 570 foot-long siphon that was last replaced in 1938**. Originally engineered to deliver 60cfs of water, landslides, ditch bank settlement and thinning pipe walls now result in wasted water through seepage, and the siphon is in danger of failing. **If it were to fail, not only would crops relying on the irrigation water be in jeopardy, but considerable property damage to homes near the siphon would result.**

The engineering complexity of replacing the siphon was significant and it took several years to raise funds and implement the project. As feasibility studies took place, the projected cost of the project increased by about \$400,000 and the **Bookcliff Conservation District contributed \$25,000 in Matching Grant Funds** to help make this increasingly important and costly project possible.

What was achieved?

- **New siphon designed and 54" diameter, 1,185ft steel pipe installed** to prevent water loss and potential failure of old siphon.
- **5,915 acres of irrigated farmland served by siphon and nearby homes protected from siphon failure.**
- **Silt Water Conservancy District secured \$1.67m dollars to fund the project** - much of it through a Colorado Water Conservation Board loan.
- **Bureau of Land Reclamation** provided much of the early feasibility studies. Firm of **Schmueser, Gordon and Meyers** employed for final design and installation by **High Country Pipeline** following open bid processes.



Last replaced in 1938, this siphon on the Grass Valley Canal was losing water and in danger of failing. It has been replaced by an underground siphon.

