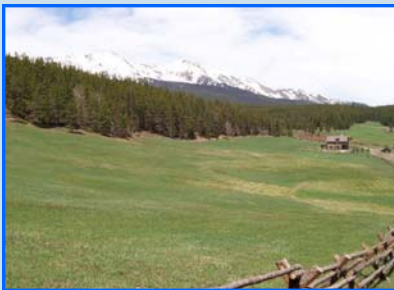




# PROJECT DESCRIPTION SHEET



**GEOTECHNICAL AND WATER  
RESOURCES ENGINEERING**



## **RED TAIL RANCH DAM, BRECKENRIDGE, CO TOWN OF BRECKENRIDGE**

RJH performed a reconnaissance-level engineering study and cost estimate for a new dam and reservoir north of the Town of Breckenridge, Colorado. During the study RJH performed site visits to develop a generalized geologic map of the project site and performed a preliminary wetlands delineation. Included with the engineering study were the following preliminary analyses:

- Reservoir capacity
- Hazard classification
- Inflow design flood
- Spillway sizing
- Seismic evaluation
- Environmental constraints analysis to identify potential permitting issues and permits that could be required

The proposed embankment would be an earthen embankment 45 feet high with a crest length of 270 feet. The spillway would be a concrete structure on the left abutment 3 feet wide and 5 feet deep. The outlet works would be a 14-inch-diameter high density polyethylene pipe with an upstream gate. If bedrock is shallow below the right abutment, a roller-compacted concrete structure could potentially be constructed to reduce both embankment quantities and costs. The Town is reviewing the Red Tail Ranch dam site and other locations for the new reservoir.

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