

EAST FORK OF ROCK CREEK DAM

Fact Sheet

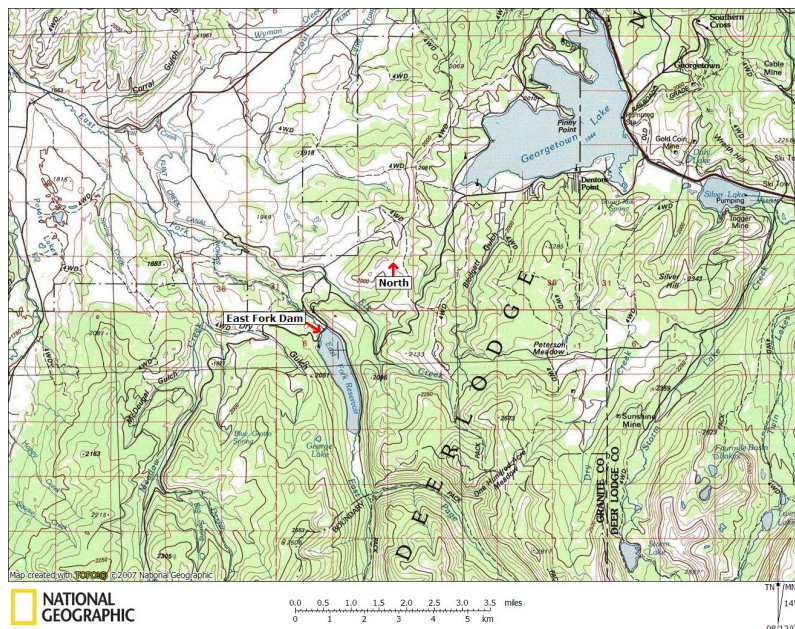
PROJECT DESCRIPTION

- ◆ Located on the East Fork of Rock Creek 15 miles south of Philipsburg on the Beaverhead-Deerlodge National Forest in Granite County
- ◆ Construction completed in 1938
- ◆ Owned by DNRC & managed by SWPB under a U.S. Forest Service Special Use Permit
- ◆ Operated by Flint Creek Water Users Association since 1938
- ◆ Project consists of:
 - Earthen Embankment Dam, 88 feet high, 1,083 feet long
 - Concrete lined chute spillway with flip bucket energy dissipater
 - 54-inch horseshoe-shaped 472 foot-long reinforced concrete outlet tunnel, with one 54-inch diameter butterfly operating gate and one 54-inch diameter slide guard gate
 - 7-foot diameter gate tower located on the dam crest
- ◆ Project includes the Main, Metcalf, East, Marshall, and Allendale Canals, totaling 46.59 miles. All but the 7.7 mile-long Main canal are proposed for transfer to the water users association.
- ◆ A new diversion and vertical panel fish screen was constructed in 2014. The fish screen protects endangered bull trout and other fish species from entrapment in the canal.
- ◆ Reservoir stores 16,040 acre-feet at normal full pool covering 390 acres
- ◆ The dam is a “high hazard” structure, which means that its failure could cause loss of life. Farms and ranches, roads, bridges, and utilities are located in the flood plain.



WATER USE

- ◆ Provides irrigation water for 53 farms and ranches through 67 contracts for 27,180 acre-feet of water
- ◆ Reservoir also used for water-based recreation



REHABILITATION SUMMARY

In 1996 a sinkhole formed on the downstream face of the dam. Downstream areas were evacuated, the reservoir drained and an extensive system of dewatering wells, drains and a new stability berm constructed. The cost of the emergency repairs was approximately \$2,000,000.

FUTURE NEEDS

- ◆ Spillway capacity is inadequate based on past US Forest Service dam safety standards. The rehabilitation feasibility study, completed in 2020 recommended:
 - ◆ Spillway replacement
 - ◆ Seepage control
 - ◆ Spillway approach bridge replacement
 - ◆ Outlet works rehabilitation
 - ◆ Instrumentation improvements
 - ◆ Upstream face riprap repair



Spillway



Outlet



Downstream face



Main Canal Vertical Panel Fish Screen