

COTTONWOOD DAM

Fact Sheet

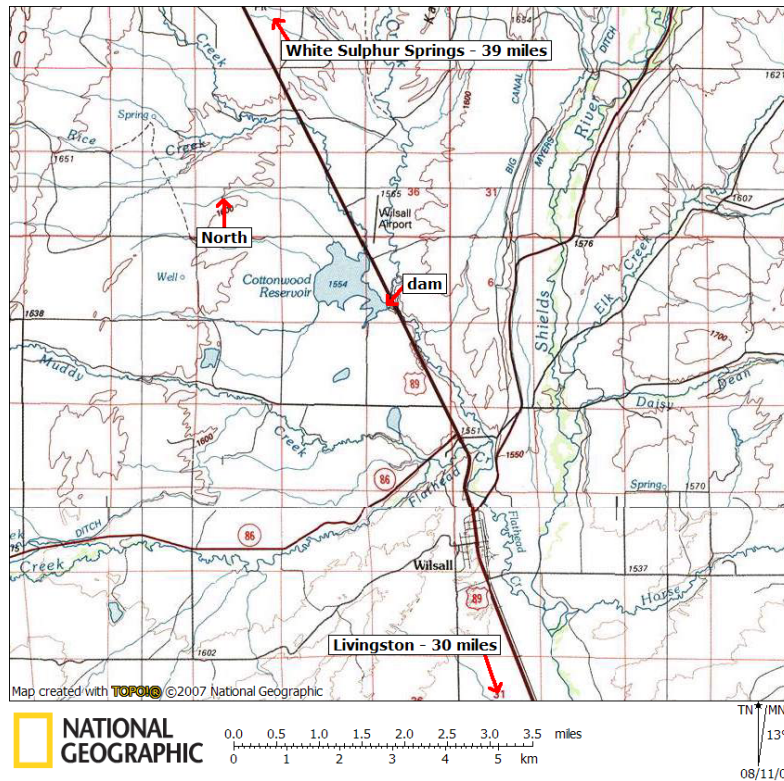
PROJECT DESCRIPTION

- ◆ Impounds Cottonwood Creek in Park County, Located approximately 3.5 miles northwest of Wilsall
- ◆ Construction completed in 1953
- ◆ Owned by DNRC & managed by SWPB
- ◆ Operated by the Shields Canal Company since 1953
- ◆ Project consists of:
 - Earthen embankment dam, 39 feet high, 610 feet long
 - Earthfill dike, 8 feet high, 825 feet long
 - Ogee crest spillway with upstream guard dike and baffled chute
 - 36-inch, 197 foot-long corrugated steel pipe outlet with 36-inch vertical slide gate in a rectangular wet tower
- ◆ Reservoir capacity is 1,905 acre-feet at spillway crest, covering 235 surface 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

- ◆ 1,379 acre-feet is under contract with the Shields Canal Company
- ◆ Primary water use is irrigation; reservoir also used for water-based recreation



REHABILITATION SUMMARY

In 1986, the dam underwent a spillway rehabilitation project that increased the capacity of the spillway. The project also constructed a guard dike, a new baffled apron chute and increased the height of the chute sidewalls.

FUTURE NEEDS

- ◆ Outlet conduit is deteriorating and at the end of its design life. The outlet conduit will require replacement in the future.
- ◆ Spillway complies with current minimum dam safety standards with zero freeboard. Either the spillway will need to be replaced or the freeboard increased to meet current industry recommendations.



Spillway



Outlet