

COONEY DAM

Fact Sheet

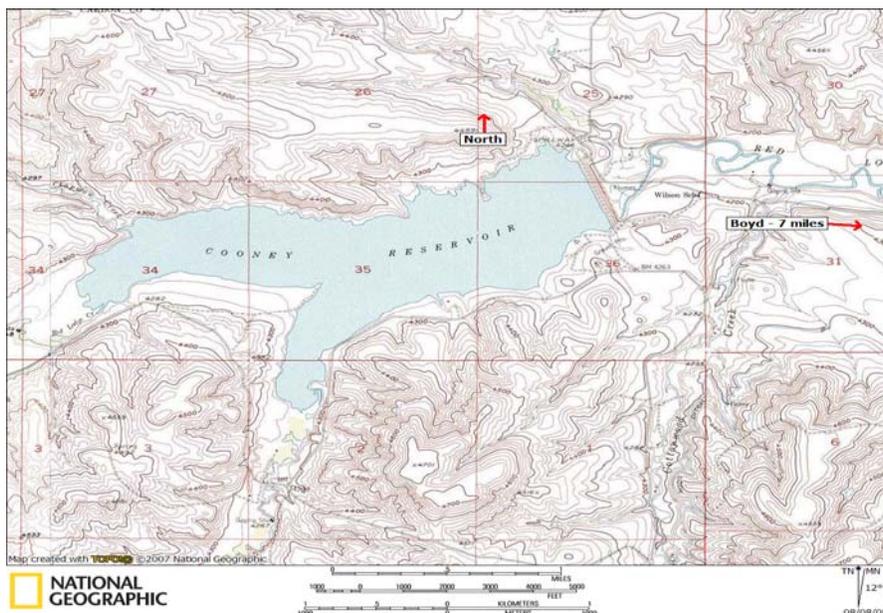
PROJECT DESCRIPTION

- ◆ Impoundment on Red Lodge Creek; also obtains water from Willow Creek
- ◆ Located approximately 7 miles west of Boyd in Carbon County.
- ◆ Construction completed in 1937
- ◆ Owned by DNRC & managed by SWPB
- ◆ Operated by Rock Creek Water Users Association (RCWUA) since 1937
- ◆ Project consists of:
 - Earthfill Dam, 102 feet high, 2,369 feet long
 - Ogee crest principal spillway with upstream guard dike and concrete drop structure in left abutment; fuse plug auxiliary spillway
 - 6-foot horseshoe-shaped 630 foot-long concrete outlet, with two 60-inch diameter gates (butterfly operating gate and slide guard gate), in series
- ◆ Stores 28,230 acre-feet at guard dike crest; surface area at normal full pool is 1,078 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. The towns of Boyd and Joliet are immediately downstream.



WATER USE

- ◆ One of two reservoirs that provide 21,770 acre-feet of water for the RCWUA
- ◆ Provides irrigation water on approximately 20,000 acres
- ◆ Reservoir is a popular recreation site with Cooney State Park, through managed lease by the MT Fish, Wildlife and Parks.



REHABILITATION SUMMARY

In 1982, the Cooney Dam was rehabilitated. The rehabilitation project included:

- ◆ Raising the dam embankment five feet resulting in raising the water surface and increasing storage by 4,200 acre-feet
- ◆ Replacing the upper portion of the principal spillway and adding a baffled drop to the lower principal spillway channel
- ◆ Adding a guard dike in the spillway approach channel
- ◆ Adding a fuse plug auxiliary spillway
- ◆ Replacing the wooden bridge over the principal spillway with a concrete bridge
- ◆ Installing additional drains
- ◆ Rehabilitation cost (1982): \$1,288,065

FUTURE NEEDS

- ◆ The project was rehabilitated in 1982 and meets or exceeds current dam safety standards. No deficiencies currently exist.
- ◆ The original principal spillway drop is beginning to deteriorate and will require replacement.
- ◆ The concrete outlet conduit energy dissipation structure is beginning to deteriorate and will require replacement.
- ◆ The downstream weir is scheduled for replacement in 2015.



Upstream Face



Spillway