

WILLOW CREEK DAM

Fact Sheet

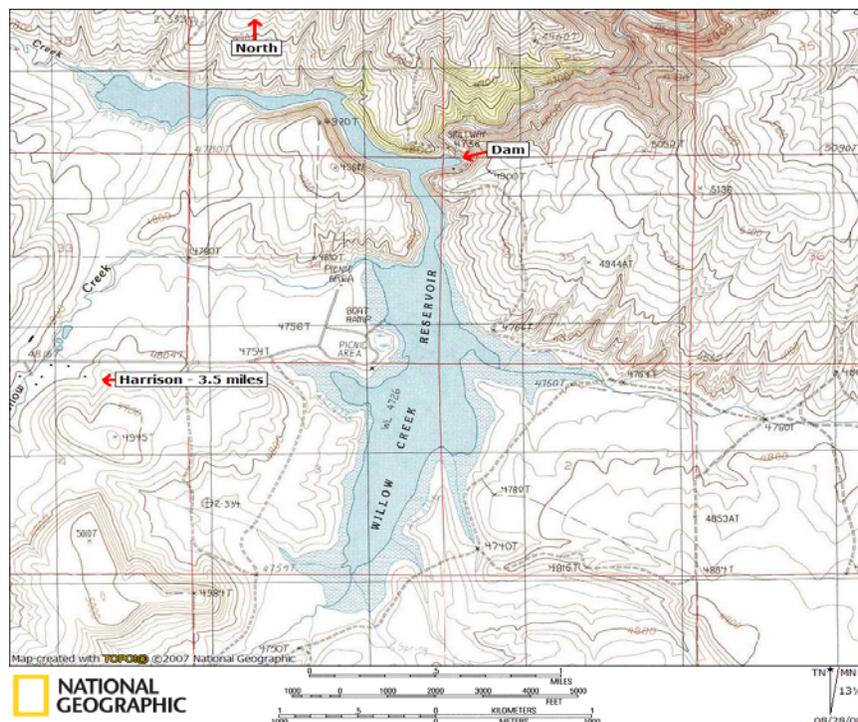
PROJECT DESCRIPTION

- ◆ Located in Madison County, 3.5 miles east of Harrison; impounds Willow, Dry Hollow, and Norwegian Creeks
- ◆ Construction completed in 1938
- ◆ Owned by DNRC and managed by SWPB
- ◆ Operated by Willow Creek Water Users Association since 1938
- ◆ Project consists of:
 - 105 foot-high, 453 foot- long, zoned earth and rock fill dam
 - Uncontrolled ogee crest concrete chute spillway
 - 60-inch horseshoe shaped 362 foot-long concrete outlet conduit
 - One 54-inch main butterfly operating gate and one 54-inch guard gate
- ◆ Storage at full pool is 18,000 acre-feet, covering 885 surface acres
- ◆ The dam is a “high hazard” structure which means that its failure could cause loss of life. Farms, ranches, roads, bridges, and utilities are located in the flood plain.



WATER USE

- ◆ 149 contracts for 11,885 acre-feet of water
- ◆ Water is primarily used for irrigation; however, the reservoir is also used for water-based recreation. MT Fish, Wildlife, and Parks manages a fishing access site on the west shore of the reservoir under a DNRC lease.



REHABILITATION SUMMARY

- ◆ Various maintenance activities are ongoing.

FUTURE NEEDS

- ◆ The spillway does not meet current safety standards and is not capable of passing the design flood event. Concrete deterioration exists in the spillway wall and floors. The spillway will require replacement in the near future. Estimated costs to be determined based on pending feasibility study.
- ◆ The road around the reservoir that is used to access the dam and gate tower is difficult and sometimes impossible to navigate in the spring. An RRGL Grant Application has been submitted for improving the access road around the reservoir. Project Cost: \$139,000
- ◆ Investigations are ongoing to determine whether the embankment meets seismic stability criteria.



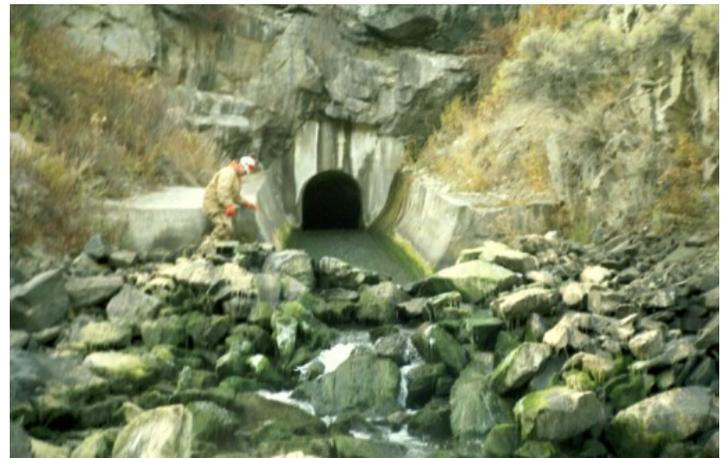
Upstream face



Downstream face



Spillway



Outlet