

FRENCHMAN DAM

Fact Sheet

PROJECT DESCRIPTION

- ◆ Impounds Frenchman Creek in Phillips County.
- ◆ Located approximately 20 miles north of Saco.
- ◆ Owned by DNRC & managed by SWPB.
- ◆ Operated by Frenchman Water Users Association since 1952.

- ◆ Project consists of:
 - ◆ Earthen Embankment Dam, 44 feet high, 2,100 feet long.
 - ◆ Reinforced concrete spillway, 119 feet-wide, with uncontrolled ogee crest.
 - ◆ 60-inch, 230 foot-long reinforced concrete outlet with 2, 60-inch slide gates (one emergency and one operating).

- ◆ Original construction completed in 1951; the dam failed during a flood in 1952 and was subsequently rebuilt.
- ◆ Reservoir storage design capacity was 7010 acre-feet at spillway crest (see deficiencies), covering an estimated 800 to 1,000 surface acres .
- ◆ 19 water users, irrigates approximately 7000 acres.

PROJECT DEFICIENCIES

- ◆ Voids underneath the spillway and offset joints indicate progressive deterioration.
- ◆ Sedimentation has greatly diminished the storage capacity by about 50% (based on aerial photography the existing capacity is estimated at 3752 acre-feet).

PROPOSED REHABILITATION

A feasibility study was funded by the 2007 Legislature to determine the best alternatives for rehabilitation. The rehabilitation would include the following:

- ◆ Replace the spillway with a new structure.
- ◆ Restore lost storage capacity.

Estimated cost: \$5,000,000



Downstream face



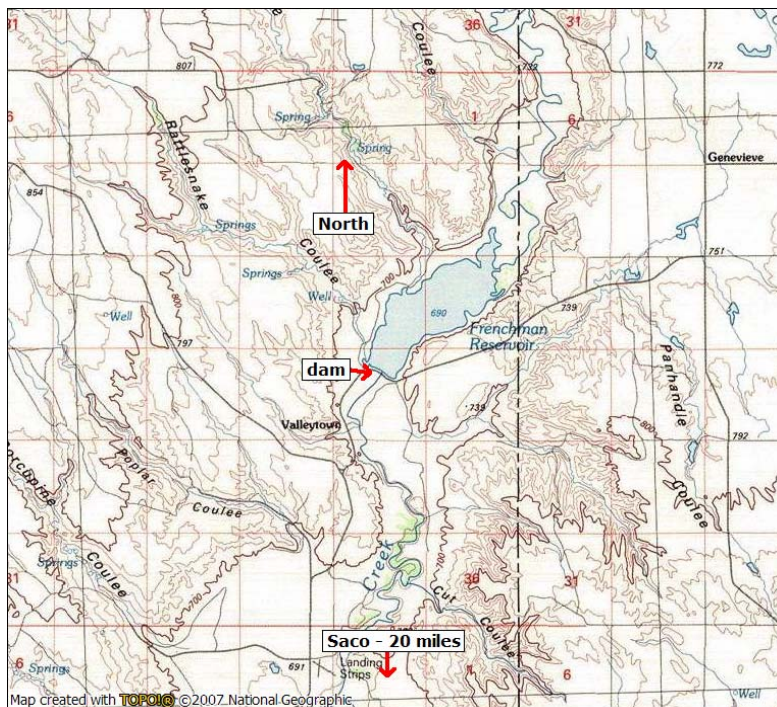
Outlet



Spillway and county road bridge



Upstream face



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 miles
0 1 2 3 4 5 km

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