



Ritschard Dam and Wolford Mountain Reservoir Facts:

Year constructed: 1995

Cost: \$42 million for construction, design, permitting, mitigation and land acquisition

Dam construction materials: Rock fill surrounding a clay core

Dam dimensions: 1,900 feet long, 122 feet high, 25 feet wide at the crest

Crest level elevation: 7,501 feet above sea level

Reservoir capacity: 65,985 acre feet (325,851 gallons in one acre foot)

Surface area: 1,500 acres

Location: Muddy Creek in Grand County, about five miles north of the Town of Kremmling. The reservoir sits on the east side of Highway 40

Headwaters source: South side of Rabbit Ears Pass

Amenities: Campsites, day-use picnic facilities, boat ramp, marina, boat rentals and a popular fishery

Renovation solutions for Ritschard Dam at Wolford Mountain Reservoir to be developed this year to address materials settlement

KREMMLING, Colo. January 2015 -- The Colorado River District owns and operates the Ritschard Dam that forms Wolford Mountain Reservoir near Kremmling in Grand County, Colorado. It is a clay-core, rock-fill dam that has experienced settling beyond the amounts normally expected by engineers for a dam of this type.

The dam is safe and will continue to be safe in the future, according to the District's engineering staff. There is no near-term threat that it will become unsafe. Engineering consultants engaged by the Colorado River District to study the problem since 2009, as well as the Dam Safety Branch of the Colorado Division of Water Resources, agree that the dam is safe and poses no danger.



To maintain that standard, after an aggressive five-year investigation that continues to include installation and monitoring of sophisticated instruments to measure the movement, the Colorado River District will review renovation scenarios this year.

Consultants from engineering firm AECOM (formerly URS) and River District staff briefed the River District Board of Directors on the condition and analysis of the dam at its January quarterly meeting in Glenwood Springs and are targeting the July 21-22, 2015, Board meeting for an overview of renovation options. AECOM engineers told the Board in January that the settlement is likely occurring because the rock-fill shell that surrounds the clay core on the upstream and downstream sides was inadequately compacted.

In such a dam, the clay core material is the impervious element in the dam. The rock fill shell supports the core. At Ritschard Dam, filters meant to collect seepage are in excellent shape and are doing their job. Normal seepage does not show any effects from the settlement.

Since the dam was constructed in 1995, it has settled near its center by about two feet, one foot more than anticipated. Along with this settlement, the crest of the dam has shifted downstream about nine inches.

Although the chief of dam safety for the state of Colorado has not placed an operational restriction on the dam, the River District will continue with the cautionary policy it began in 2014 of keeping the spring runoff fill level of the reservoir 10 feet below full. The lower water level has been shown by instrumentation to slow down settlement trends.

At that lower level, the Colorado River District can still meet all of its water delivery contracts, as well as water delivery obligations to recovery of endangered fish in the Colorado River.

