

The West Salt Creek Landslide in Mesa County, Colorado

[Jon White](#), a certified professional geologist with 32 years of experience, gave this [presentation](#) for the RMAG Luncheon Talk on October 12, 2106. Jon retired as a senior engineering geologist from the [Colorado Geological Survey](#) in February 2015.

“On May 25, 2014, a large rock avalanche (sturzstrom) occurred in rural Western Colorado, about 38 mi east of Grand Junction at an elevation of ~9,500 ft. The rock avalanche was initiated by a disturbed 2,900-ft wide and 900-ft deep block of Green River Formation that slipped along a preexisting landslide shear plane. As the rockmass (composed of shale, marlstone, and oil shale) rotated, the heaved and oversteepened front disaggregated and the pulverized rockmass “flowed” in discrete rock avalanche surges 2.8 mi down valley. The deposits ultimately covered nearly one square mile of the West Salt Creek valley. There was small, precursor landslide activity early that morning that blocked an irrigation ditch. Three local men investigating the blockage were killed by the main catastrophic failure at 5:45 PM MDT. The valley-constrained toe narrowly missed a producing oil and gas well pad.”

A free download of the report on the West Salt Creek Landslide is available from the Colorado Geological Survey’s [website](#)