

Colorado Geological Survey and Colorado Earthquake Hazard Mitigation Council

The Colorado Earthquake Hazard Mitigation Council continues to hold bi-monthly meetings. One of the Council's 2007 projects was the development of a map and accompanying text called "Colorado Earthquake Hazards". This product is intended for use by the general public and should be available in early 2008 in both hard copy and on-line. The map depicts the locations of known and suspected Quaternary faults and historic earthquakes. In addition to information on Colorado's faults and earthquakes, the text lists sources for more detailed information and recommendations on what to do before, during, and after an earthquake, which are found on FEMA's website.

During 2007 the Council initiated efforts to formulate a policy recommendation to the Colorado Geological Survey on appropriate seismic design parameters for use by the Survey when reviewing major construction and renovation projects at public schools. Members of the Colorado Earthquake Hazard Mitigation Council serve on both regional and national committees of the Advanced National Seismic System.

Colorado Geological Survey (CGS) is conducting an investigation of a 95-mile long, 100-ft high escarpment near Anton, Colorado as part of a program to identify Quaternary faults in eastern Colorado. Two benched trenches were excavated in late 2007 using partial National Earthquake Hazard Reduction Program funding to look for evidence of faulting.

One 400-ft long trench was dug beneath a 15-ft deep, filled gully in the main escarpment face. The second, 600-ft long trench was dug beneath a modern playa and a 15-ft high escarpment at the playa margin. The trenches revealed unbroken Pleistocene to Pliocene strata and no evidence of fault rupture.

A total of four trenches have been dug at the Anton site since 2004, from the top to the base of the escarpment (~2,000 linear feet of 15-foot-deep, continuous trench). CGS is now assessing evidence that this feature formed during the past 20,000 years, a result of simultaneous wind erosion and adjacent loess deposition.

Submitted by Vince Matthews, Director and State Geologist, Colorado Geological Survey