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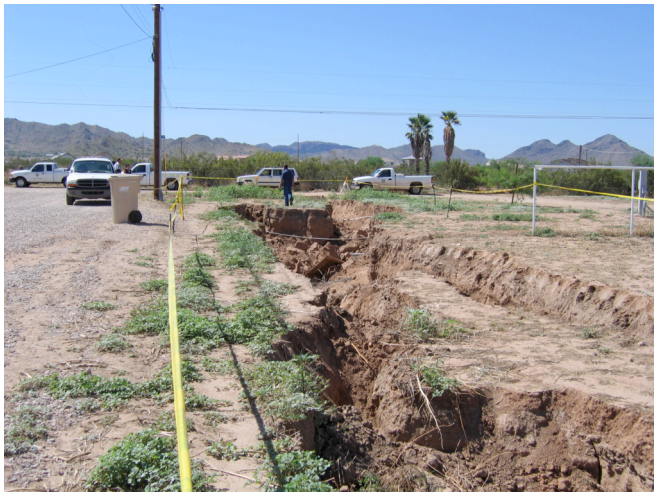
Earth Fissure Maps Released

On 4 June 2007, the Arizona Geological Survey (AZGS) will release individual, 1:250,000 scale, earth fissure planning maps of Cochise, Maricopa, Pima, and Pinal counties with accompanying Open-File Report 07-01. The maps show all currently known earth fissures. This is the first step in preparing highly detailed fissure maps to be completed area by area over the next few years.

Availability. Copies will be available at $4.00 per map at the AZGS Bookstore at 416 W. Congress, Suite 100, Tucson, and in Phoenix at the Dept of Mines and Mineral Resources at 1502 W. Washington. For free online pdf copies go to www.azgs.az.gov/earth fissure planning maps. The maps accompany a 25-page report, *Earth Fissure Mapping Program: 2006 Progress Report*; Open-file Report 07-01, by M. Lee Allison and Todd Shipman. The open-file report will be available online or at our Tucson Bookstore for $6.00, or for $20.00 with the four maps included.

Background. In response to the sudden reactivation in August 2005 of a 1.5 mile long fissure near Queen Creek, Arizona, the Arizona Legislature passed legislation to map earth fissures in Arizona. Effective 21 September 2006, House Bill 2639 charges the Arizona Geological Survey (AZGS) with 1) comprehensive mapping of earth fissures throughout Arizona, and 2) delivering detailed earth fissure map data to the State Land Department for public access online. A complementary bill, A.R.S. 33-422, requires disclosure of earth fissures in non-incorporated areas

Contact Dr. Michael Conway (Michael.conway@azgs.az.gov; 520.770.3500) to arrange interviews or field trips.



Reactivated earth fissure Queen Creek area, Maricopa County, following heavy rains. (25 August 2005 photo by Ray Harris).

Earth fissures are associated with basin subsidence that accompanies extensive ground water mining. In Arizona, fissures were first noted near Eloy in 1929. Their physical appearance varies greatly, but they may be more than a mile in length, up to 15 ft wide, and 100s of feet deep. During torrential rains they erode rapidly presenting a substantial hazard to people and infrastructure. Moreover, fissures provide a ready conduit to deliver runoff and contaminated waters to basin aquifers. Rapid population growth in southern Arizona is increasingly juxtaposing population centers and fissures.

AZGS: *To inform, advise, and educate the public about Arizona's geologic setting, and to encourage prudent development of Arizona's land, water, mineral, and energy resources.*