Earth Fissure Map of the Dragoon Road Study Area: Cochise County, Arizona

December 2009
Arizona Geological Survey

Digital Map Series - Earth Fissure Map 16 (DM-EF-16)

NOTICE
THE STATE OF ARIZONA HAS MADE A REASONABLE EFFORT TO ENSURE THE ACCURACY OF THIS MAP WHEN IT WAS PRODUCED, BUT ERRORS MAY BE PRESENT AND THE STATE OF ARIZONA DOES NOT GUARANTEE ITS ACCURACY. THE MAP SUPPLEMENTS, AND IS NOT A SUBSTITUTE FOR, A PROFESSIONAL INSPECTION OF PROPERTY FOR DEFECTS AND CONDITIONS.

This is one of a series of earth fissure maps prepared by the Arizona Geological Survey ("AZGS") in accordance with Ariz. Rev. Stat. § 27-152.01(3). AZGS collected location information from previously conducted earth fissure studies, reviewed available remote-sensing aerial and satellite imagery, and conducted surface site investigations throughout the study area. A reasonable effort was made to identify all earth fissures in the study area. Nonetheless, some fissures may remain unmapped as a result of one or more of the following:
1) existing fissures may have been masked by construction or agricultural activities;
2) incipient fissures may lack clear surface expression;
3) the surface expression of fissures changes constantly as new earth fissures develop and old earth fissures fill in.
A blank area on the map does not guarantee earth fissures are not present. However, blank areas within the study area boundary have been investigated, and no surface evidence of fissures was found as of the date of map publication. Determining the presence or absence of a fissure at any specific site may require additional mapping and/or geotechnical analysis.

MAP EXPLANATION

Solid black lines represent the location of continuous earth fissures manifested as open cracks or gullies.

Solid red lines represent the location of discontinuous earth fissures manifested as elongated to circular depressions or as abbreviated or irregular linear depressions. These discontinuous surface features frequently represent an incipient surface expression of an earth fissure.

Dashed green lines represent the approximate locations of unconfirmed earth fissures, defined as fissures which could not be confirmed by surface investigations by AZGS geologists, but which have been previously reported by Professional Geologists in published documents or maps.

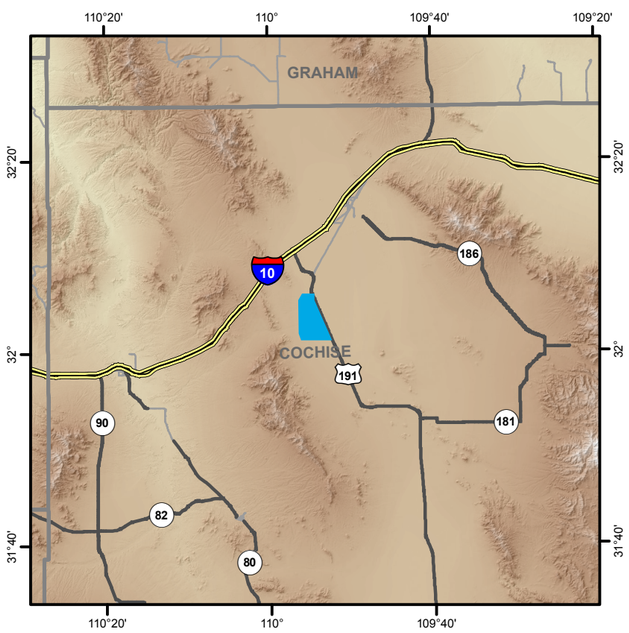
The outline of the Study Area is shown in blue.
Historical and modern aerial photos taken within this area were searched for anomalous lineaments. These lineaments were then investigated in the field to determine if there was any evidence of earth fissures.

References:

Keaton, J.R., Beckwith, G.H., Rucker, M.L., and Cheng, S.S., 1995, Analysis of Subsidence and Earth Fissures for Design of a proposed ash and sludge impoundment in southeastern Arizona, in A. Caleindo (ed), Proceedings of the 1995 Annual Symposium on Engineering Geology and Geotechnical Engineering, no. 31, Logan, Utah, Utah State University, p. 196-207.

Mike Rucker, 2009 personal Communication, [available for inspection at the Arizona Geological Survey, 416 W. Congress St., Suite #100, Tucson, Arizona]

LOCATION MAP
Study Area shown in Blue



Shaded relief basemap produced from 10m NED Digital Elevation Model

Transporation network dataset compiled by Arizona State Lands Dept. by combining the 2007 County Road Data of Maricopa, Pima, Pinal and Cochise Counties with the Census 2000 Tiger/Line Data of the remaining Counties.

Map projection and blue, 1000-meter grid ticks: Universal Transverse Mercator, zone 12. North American Datum of 1983 HARN

1:24,000 Scale

1 0.5 0 1 Miles

1 0.5 0 1 Kilometers

0 1000 2000 3000 4000 5000 Feet

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