

# Quaternary Fault and Fold Database of the United States

As of January 12, 2017, the USGS maintains a limited number of metadata fields that characterize the Quaternary faults and folds of the United States. For the most up-to-date information, please refer to the [interactive fault map](#).

## unnamed fault west of Cave Valley (Class A) No. 1400

Last Review Date: 1998-06-29

*citation for this record:* Sawyer, T.L., compiler, 1998, Fault number 1400, unnamed fault west of Cave Valley, in Quaternary fault and fold database of the United States: U.S. Geological Survey website, <https://earthquakes.usgs.gov/hazards/qfaults>, accessed 12/14/2020 02:05 PM.

<b>Synopsis</b>	This group of three short normal faults has a range-front fault at east flank of the Egan Range and has two faults bounding margins of an intermontane valley within the southern Egan Range. Reconnaissance photogeologic mapping these faults is the source of data. Trench investigations and studies of scarp morphology have not been completed.
<b>Name comments</b>	Refers to three short faults mapped by Schell (1981 #2844) and Dohrenwend and others (1991 #287) on the west side of Cave Valley and at the based of the Egan Range.
<b>County(s) and State(s)</b>	LINCOLN COUNTY, NEVADA
<b>Physiographic province(s)</b>	BASIN AND RANGE

<b>Reliability of location</b>	<p>Good Compiled at 1:100,000 scale.</p> <p><i>Comments:</i> Location based on 1:250,000-scale maps of Schell (1981 #2844) and of Dohrenwend and others (1991 #287). Mapping by Schell (1981 #2843; 1981 #2844) based on photogeologic analysis of primarily 1:24,000-scale color aerial photography supplemented with 1:60,000-scale black-and-white aerial photography, transferred by inspection to 1:62,500-scale topographic maps and photographically reduced and directly transferred to 1:250,000-scale topographic maps supplemented by field verification. Mapping by Dohrenwend and others (1991 #287) based on photogeologic analysis of 1:58,000-nominal-scale color-infrared photography transferred directly to 1:100,000-scale topographic quadrangle maps enlarged to scale of the photographs.</p>
<b>Geologic setting</b>	This group of three short normal faults has a range-front fault at east flank of the Egan Range and has two faults bounding margins of an intermontane valley within the southern Egan Range.
<b>Length (km)</b>	13 km.
<b>Average strike</b>	N21°E
<b>Sense of movement</b>	<p>Normal</p> <p><i>Comments:</i> Not studied in detail; sense of movement inferred from topography.</p>
<b>Dip Direction</b>	E
<b>Paleoseismology studies</b>	
<b>Geomorphic expression</b>	The fault is marked by an abrupt well-defined fault scarps that juxtapose Quaternary alluvium against bedrock and by lineaments and scarps on Tertiary deposits (Schell, 1981 #2844; Dohrenwend and others, 1991 #287).
<b>Age of faulted surficial deposits</b>	Quaternary and Tertiary
<b>Historic</b>	

<b>earthquake</b>	
<b>Most recent prehistoric deformation</b>	undifferentiated Quaternary (<1.6 Ma)  <i>Comments:</i> Although timing of the most recent event is not well constrained, reconnaissance studies by Dohrenwend and others (1991 #287) and Schell (1981 #2844) suggest a Quaternary time based on photogeologic interpretation.
<b>Recurrence interval</b>	
<b>Slip-rate category</b>	Less than 0.2 mm/yr  <i>Comments:</i> A low slip rate is inferred from general knowledge of slip rates estimated for other faults in the region.
<b>Date and Compiler(s)</b>	1998 Thomas L. Sawyer, Piedmont Geosciences, Inc.
<b>References</b>	#287 Dohrenwend, J.C., Schell, B.A., and Moring, B.C., 1991, Reconnaissance photogeologic map of young faults in the Lund 1° by 2° quadrangle, Nevada and Utah: U.S. Geological Survey Miscellaneous Field Studies Map MF-2180, 1 sheet, scale 1:250,000.  #2843 Schell, B.A., 1981, Faults and lineaments in the MX Siting Region, Nevada and Utah, Volume I: Technical report to U.S. Department of [Defense] the Air Force, Norton Air Force Base, California, under Contract FO4704-80-C-0006, November 6, 1981, 77 p.  #2844 Schell, B.A., 1981, Faults and lineaments in the MX Siting Region, Nevada and Utah, Volume II: Technical report to U.S. Department of [Defense] the Air Force, Norton Air Force Base, California, under Contract FO4704-80-C-0006, November 6, 1981, 29 p., 11 pls., scale 1:250,000.

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