

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 near northern Fortification Range (Class A) No. 1414

Last Review Date: 1998-06-29

citation for this record: Sawyer, T.L., compiler, 1998, Fault number 1414, unnamed fault near northern Fortification Range, 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 02:04 PM.

Synopsis	Reconnaissance photogeologic mapping of these faults is the source of data. Trench investigations and studies of scarp morphology have not been completed.
Name comments	Refers to two short faults mapped by Dohrenwend and others (1991 #287), the northern of these was also mapped by Schell (1981 #2844). The southern fault bound the northern Fortification Range and the northern fault crosses the piedmont slope south of Lake Valley Summit in northernmost Lake Valley.
County(s) and State(s)	LINCOLN COUNTY, NEVADA WHITE PINE COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE

Reliability of location	<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). Original 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 and 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>
Geologic setting	<p>One these two short, down-to-the-west normal faults bounds west front of the northern Fortification Range and the other is a piedmont fault in northernmost Lake Valley.</p>
Length (km)	<p>10 km.</p>
Average strike	<p>N6°W</p>
Sense of movement	<p>Normal</p> <p><i>Comments:</i> Sense of movement on northern fault from Schell (1981 #2844) and on southern fault was inferred based on topography.</p>
Dip Direction	<p>W</p>
Paleoseismology studies	
Geomorphic expression	<p>The northern fault is marked by scarps and lineaments on Quaternary deposits (Schell, 1981 #2844; Dohrenwend and others, 1991 #287). The southern fault is marked by an abrupt well-defined fault scarp juxtaposing Quaternary alluvium against bedrock (Dohrenwend and others, 1991 #287).</p>
Age of faulted surficial deposits	<p>Quaternary and Tertiary (Schell, 1981 #2844; Dohrenwend and others, 1991 #287)</p>

Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) <i>Comments:</i> Although timing of the most recent event is not well constrained, Dohrenwend and others (1991 #287) and Schell (1981 #2843; 1981 #2844) suggested a Quaternary time based on reconnaissance photogeologic studies.
Recurrence interval	
Slip-rate category	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.
Date and Compiler(s)	1998 Thomas L. Sawyer, Piedmont Geosciences, Inc.
References	#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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