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 <u>interactive fault map</u>.

unnamed fault east of Bristol Range (Class A) No. 1424

Last Review Date: 1998-06-28

citation for this record: Sawyer, T.L., compiler, 1998, Fault number 1424, unnamed fault east of Bristol 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 02:05 PM.

Synopsis	This down-to-the-east, arcuate normal fault bounds the east flank of the Bristol Range and has faults on piedmont slope near the Pioche Municipal Airport. 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 fault mapped by Schell (1981 #2844), and subsequently mapped with greater continuity by Dohrenwend and others (1991 #287). Fault extends from Bristol Pass, southward along east front of the Bristol Range, to east of the Pioche Municipal Airport, and includes several short faults on piedmont slope of Lake Valley near the airport.

County(c) and

State(s)	LINCOLN COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale.
	<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.
Geologic setting	This down-to-the-east, arcuate normal fault bounds the east flank of the Bristol Range and has faults on piedmont slope near the Pioche Municipal Airport.
Length (km)	17 km.
Average strike	N29°W
Sense of movement	Normal <i>Comments:</i> Not studied in detail; sense of movement inferred from topography.
Dip Direction	NE
Paleoseismology studies	
Geomorphic expression	The fault is marked by abrupt, well-defined fault scarps juxtaposing Quaternary alluvium against bedrock, and to a lesser extent by scarps and (or) lineaments on Quaternary and Tertiary deposits (Schell, 1981 #2844; Dohrenwend and others, 1991 #287).

Age of faulted surficial deposits	Quaternary and Tertiary deposits (Schell, 1981 #2844; Dohrenwend and others, 1991 #287).
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 #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
	Sitting 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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