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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.

Bull Creek fault (Class A) No. 1379

Last Review Date: 1998-07-11

citation for this record: **Sawyer, T.L., compiler, 1998, Fault number 1379, Bull Creek fault, 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 02:14 PM.**

Synopsis	Discontinuous zone of short, down-to-the-east normal faults along west side of Railroad Valley, east of the Duckwater Hills. Reconnaissance photogeologic mapping of the fault zone is the source of data. Trench investigations and studies of scarp morphology have not been completed.
Name comments	Refers to the Bull Creek fault of Schell (1981 #2844). Fault extends along flank of Duckwater Hills from State Highway 379 to north of Black Point. **Fault ID:** Refer to fault 104 on Plate A6 of Schell (1981 #2844).
County(s) and State(s)	WHITE PINE COUNTY, NEVADA NYE COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of	Good

location	Compiled at 1:100,000 scale. *Comments:* Location based on 1:250,000-scale maps of Schell (1981 #2844) and of Dohrenwend and others(1991 #287; 1992 #2480). 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; 1992 #2480) 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	Discontinuous zone of short, down-to-the-east normal faults along west side of Railroad Valley, east of the Duckwater Hills.
Length (km)	18 km.
Average strike	N3°E
Sense of movement	Normal *Comments:* (Schell, 1981 #2844)
Dip Direction	E
Paleoseismology studies	
Geomorphic expression	The fault is expressed by scarps juxtaposing Quaternary alluvium against bedrock and by lineaments and scarps on Quaternary deposits (Schell, 1981 #2844; Dohrenwend and others, 1991 #287; 1992 #2480).
Age of faulted surficial deposits	Quaternary (Schell, 1981 #2844; Dohrenwend and others, 1991 #287; 1992 #2480).
Historic earthquake	
Most recent prehistoric	undifferentiated Quaternary (<1.6 Ma)

deformation	*Comments:* The timing of most recent event is not well constrained, and the two sources do not concur. Schell (1981 #2844) suggested a late Pleistocene time based on a reconnaissance photogeologic study. Dohrenwend and others (1996 #2846) suggested a Quaternary time based on a reconnaissance photogeologic study. We assign herein the most conservative age as suggested by reconnaissance photogeologic mapping of Dohrenwend and others (1996 #2846).
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr *Comments:* 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. #2480 Dohrenwend, J.C., Schell, B.A., and Moring, B.C., 1992, Reconnaissance photogeologic map of young faults in the Ely 1° by 2° quadrangle, Nevada and Utah: U.S. Geological Survey Miscellaneous Field Studies Map MF-2181, 1 sheet, scale 1:250,000. #2846 Dohrenwend, J.C., Schell, B.A., Menges, C.M., Moring, B.C., and McKittrick, M.A., 1996, Reconnaissance photogeologic map of young (Quaternary and late Tertiary) faults in Nevada, *in* Singer, D.A., ed., Analysis of Nevada's metal-bearing mineral resources: Nevada Bureau of Mines and Geology Open-File Report 96-2, 1 pl., scale 1:1,000,000. #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.