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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.

unnamed fault zone near Badger Mountain (Class A) No. 1480

Last Review Date: 1998-07-19

citation for this record: **Sawyer, T.L., compiler, 1998, Fault number 1480, unnamed fault zone near Badger Mountain, 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 02:50 PM.**

Synopsis	This distributed group of right-stepping generally northwest-striking mainly Class C faults includes range-bounding and intermontane faults at Badger Mountain and on the southwest flank of Mahogany Mountain, and inter-plateau faults on the north and west flanks of Badger Mountain and extending southward parallel to Wall Canyon Creek and along the east margin of Shoestring Valley, to north of Black Buttes. The fault zone parallels fault zone 1479, which lies to the east. Most of these faults displace only Tertiary volcanic and sedimentary rocks and are not shown on the map. Quaternary movement is suspected on the faults show here based on their expression as prominent topographic escarpments, aligned ridge-crest saddles and, locally, linear reaches of drainage channels. Reconnaissance photogeologic of the fault zone and detailed geologic mapping are the sources of data. Trench investigations and detailed studies of

	scarp morphology have not been conducted.
Name comments	Refers to faults mapped by Slemmons (1966, unpublished Vya 1? X 2? sheet), Bonham (1969 #2999), and Dohrenwend and Moring (1991 #281) from Badger Creek northeast of Fatty Martin Lake southward across Badger Mountain and southwest flank of Mahogany Mountain, along the east margin of Shoestring Valley to north of Black Buttes.
County(s) and State(s)	HUMBOLDT COUNTY, NEVADA WASHOE COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale. *Comments:* Fault locations are based on 1:250,000-scale map of Dohrenwend and Moring (1991 #281), which is from 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 and then reduced and transferred to 1:250,000-scale topographic maps. A few fault locations at Badger Mountain and to the north-northwest are based on 1:250,000-scale geologic map of Bonham (1969 #2999).
Geologic setting	This group of right-stepping generally north-northwest-striking faults includes range-bounding and intermontane faults at Badger Mountain and on the southwest flank of Mahogany Mountain, and inter-plateau faults on the north and west flanks of Badger Mountain and extending southward parallel to Wall Canyon Creek and along the east margin of Shoestring Valley, to north of Black Buttes. The fault zone is west of and parallels fault zone 1479.
Length (km)	25 km.
Average strike	N24°W
Sense of movement	Normal *Comments:* Not studied in detail; sense of movement is inferred from topography.

Dip Direction	SW; NE
Paleoseismology studies	
Geomorphic expression	Although these faults displace only Tertiary volcanic and sedimentary rocks, Quaternary movement is suspected based on three of them based on their expression as prominent topographic escarpments, aligned ridge-crest saddles and, locally, linear reaches of drainage channels (Dohrenwend and Moring, 1991 #281).
Age of faulted surficial deposits	Tertiary. Based on regional scale mapping these faults displace only Tertiary volcanic and sedimentary rocks (Bonham, 1969 #2999; Dohrenwend and Moring, 1991 #281).
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* Although timing of most recent event is not well constrained, a Quaternary time is suspected (Dohrenwend and Moring , 1991 #281).
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 and height of topographic escarpments on resistant Tertiary volcanic rocks.
Date and Compiler(s)	1998 Thomas L. Sawyer, Piedmont Geosciences, Inc.
References	#2999 Bonham, H.F., 1969, Geology and mineral deposits of Washoe and Storey Counties, Nevada: Nevada Bureau of Mines and Geology Bulletin 70, 140 p., 1 pl., scale 1:250,000. #281 Dohrenwend, J.C., and Moring, B.C., 1991, Reconnaissance photogeologic map of young faults in the Vya 1° by 2° quadrangle, Nevada, Oregon, and California: U.S. Geological Survey Miscellaneous Field Studies Map MF-2174, 1 sheet, scale 1:250,000.