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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 southeastern Jackson Mountains (Class A) No. 1499

Last Review Date: 1998-07-19

citation for this record: **Sawyer, T.L., compiler, 1998, Fault number 1499, unnamed fault zone southeastern Jackson Mountains, 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 discontinuous zone has a short range-front normal fault that bounds the southeastern front of the Jackson Mountains east-northeast of Navajo Peak, short faults that bound the east and west sides of low hills west and southwest of the Jungo Hills, piedmont faults west of Smokey Springs, and a group of piedmont faults between Shawnee Creek and Bull Creek. Reconnaissance photogeologic mapping of the faults are the sources of data. Timing of most recent event is not well constrained, but late Quaternary is indicated based on reconnaissance photogeologic mapping. Trench investigations and detailed studies of scarp morphology have not been conducted.
Name comments	Refers to faults mapped by Dohrenwend and Moring (1991 #281) and Dohrenwend and others (1991 #285) along and near the

	southeastern front of Jackson Mountains from Cedar Creek south to Smokey Spring.
County(s) and State(s)	HUMBOLDT COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale. *Comments:* Fault locations based on 1:250,000-scale maps of Dohrenwend and Moring (1991 #281) and Dohrenwend and others (1991 #285); mapping is from 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 distributed discontinuous zone has a short range-front normal fault that bounds the southeastern front of the Jackson Mountains east-northeast of Navajo Peak, short faults that bound the east and west sides of low hills west and southwest of the Jungo Hills, piedmont faults west of Smokey Springs, and a group of piedmont faults between Shawnee Creek and Bull Creek.
Length (km)	27 km.
Average strike	N11°E
Sense of movement	Normal *Comments:* The majority of these faults were shown as having normal movement by Dohrenwend and Moring (1991 #281).
Dip Direction	E
Paleoseismology studies	
Geomorphic expression	The fault zone is expressed as short range- and hill-bounding faults juxtaposing upper piedmont-slope deposits against bedrock and as a cluster of short dissected scarps on the eastern piedmont slope of the Jackson Mountains (Dohrenwend and Moring, 1991 #281).
Age of faulted	late Pleistocene and (or) Holocene; Quaternary. The piedmont

surficial deposits	faults offset late Pleistocene and (or) Holocene piedmont-slope deposits, and the range- and hill-bounding faults juxtapose upper piedmont-slope deposits against bedrock (Dohrenwend and Moring, 1991 #281).
Historic earthquake	
Most recent prehistoric deformation	late Quaternary (<130 ka) *Comments:* The timing of most recent event is not well constrained. Dohrenwend and Moring (1991 #281) indicate one scarp on late Quaternary deposits (0-30 ka) and another on late Pleistocene alluvium (10-130 ka) suggesting a late Quaternary time for faulting.
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	#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. #285 Dohrenwend, J.C., McKittrick, M.A., and Moring, B.C., 1991, Reconnaissance photogeologic map of young faults in the Lovelock 1° by 2° quadrangle, Nevada and California: U.S. Geological Survey Miscellaneous Field Studies Map MF-2178, 1 sheet, scale 1:250,000.