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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 of western Egan Range (Class A) No. 1274

Last Review Date: 2000-11-27

citation for this record: **Redsteer, M.H., compiler, 2000, Fault number 1274, unnamed fault of western Egan 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 02:16 PM.**

Synopsis	The unnamed fault zone is characterized by a linear series of down-to-the-west escarpments on bedrock. The faults are down-to-the-west and juxtapose Quaternary alluvium against bedrock. Reconnaissance photogeologic mapping is the source of data. Trench investigations and detailed studies of scarp morphology have not been completed.
Name comments	Refers to an unnamed fault mapped by Dohrenwend and others (1992 #2480). This fault extends along the western front of the Egan Range, from Ninemile Basin southward to Hercules Gap in the southern part of Smith Valley.
County(s) and State(s)	WHITE PINE COUNTY, NEVADA
Physiographic	

Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale. *Comments:* Location based on 1:250,000-scale map of Dohrenwend and others (1992 #2480). Mapping based on photogeologic analysis of 1:24,000-scale color aerial photography supplemented with 1:60,000-scale black-and-white aerial photography, transferred to 1:62,500-scale topographic maps and photographically reduced and transferred to 1:250,000-scale topographic maps, with subsequent mapping by 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 unnamed fault is typical of Basin and Range extensional faults in central Nevada. It is a major down-to-the-west range-front fault on the western margin of the Egan Range, and defines the eastern margin of the Butte Valley.
Length (km)	45 km.
Average strike	N2°W
Sense of movement	Normal
Dip Direction	W
Paleoseismology studies	
Geomorphic expression	The faults coincide with an abrupt change in elevation and juxtapose bedrock against Quaternary alluvium, forming a prominent range front.
Age of faulted surficial deposits	Quaternary and older. Most of the fault consists of prominent topographic escarpments that juxtapose bedrock against Quaternary alluvium.
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* Dohrenwend and others (1992 #2480) considered the

	last fault movement to be of Quaternary age.
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr *Comments:* Low slip-rate category is assigned on the basis of poor geomorphic preservation, lack of mapped fault scarps, and relative inactivity of similar distributed faults in the Basin and Range province.
Date and Compiler(s)	2000 Margaret Hisa Redsteer, U.S. Geological Survey
References	#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.