Jump to Navigation

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 south of Owyhee (Class A) No. 1549

Last Review Date: 1999-01-15

citation for this record: **Adams, K., and Sawyer, T.L., compilers, 1999, Fault number 1549, unnamed fault zone south of Owyhee, 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 02:36 PM.**

Synopsis	These short distributed intermontane faults in the northern Bull Run Mountains bound northwest front of Siciegottit peak, cross ridges east of Cavanaugh Spring and the canyon of the Owyhee River, and are scattered near range front west of Ungina Wongo peak. These northwest- through northeast-striking faults offset Quaternary colluvium and landslide deposits and juxtapose Quaternary colluvium against Tertiary and older rocks. Faults are expressed as minor topographic breaks, aligned drainages, saddles, and sidehill benches. Detailed geologic mapping of the region is the source of data.
Name comments	Refers to faults mapped by Coats (1971 #3017; 1987 #2861) in the northern Bull Run Mountains extending from southwest of Ungina Wongo peak to Prentice Hill. dePolo (1998 #2845)

	referred to some of these faults as part of the Eastern Duck Valley fault zone. Name is not retained herein because we show a distributed faulting of limited extent. **Fault ID:** Includes southern part of fault MD14 (Eastern Duck Valley fault zone) of dePolo (1998 #2845).
County(s) and State(s)	ELKO COUNTY, NEVADA
Physiographic province(s)	COLUMBIA PLATEAU
Reliability of location	Good Compiled at 1:100,000 scale. *Comments:* Fault locations primarily based on 1:24,000-scale geologic mapping of Coats (1987 #2861).
Geologic setting	These short distributed intermontane faults in the northern Bull Run Mountains bound northwest front of Siciegottit peak, cross ridges east of Cavanaugh Spring and the canyon of the Owyhee River, and are scattered near range front west of Ungina Wongo peak (Coats, 1971 #3017). Dohrenwend and Moring (1991 #284) do not show any of these faults.
Length (km)	14 km.
Average strike	N11°W
Sense of movement	Normal *Comments:* Not studied in detail; normal sense of movement from Coats (1971 #3017).
Dip Direction	NW; SW; W
Paleoseismology studies	
Geomorphic expression	Faults appear to be expressed as minor topographic breaks, aligned drainages, saddles, and sidehill benches.
Age of faulted surficial deposits	Quaternary; Tertiary. These faults offset Quaternary colluvium and landslide deposits and juxtapose Quaternary colluvium against Tertiary and older bedrock (Coats, 1971 #3017).

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 suggested based on detailed geologic mapping of Coats (1971 #3017). However, reconnaissance photogeologic mapping by Dohrenwend and Moring (1991 #284) do not show any of these faults.
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)	1999 Kenneth Adams, Piedmont Geosciences, Inc. Thomas L. Sawyer, Piedmont Geosciences, Inc.
References	#3017 Coats, R.R., 1971, Geologic map of the Owyhee quadrangle, Nevada-Idaho: U.S. Geological Survey Geophysical Investigations Map I-665, scale 1:68,000. #2861 Coats, R.R., 1987, Geology of Elko County, Nevada: Nevada Bureau of Mines and Geology Bulletin 101, 112 p., scale 1:250,000. #2845 dePolo, C.M., 1998, A reconnaissance technique for estimating the slip rate of normal-slip faults in the Great Basin, and application to faults in Nevada, U.S.A.: Reno, University of Nevada, unpublished Ph.D. dissertation, 199 p. #284 Dohrenwend, J.C., and Moring, B.C., 1991, Reconnaissance photogeologic map of young faults in the McDermitt 1° by 2° quadrangle, Nevada, Oregon, and Idaho: U.S. Geological Survey Miscellaneous Field Studies Map MF-2177, 1 sheet, scale 1:250,000.

Questions or comments?

Facebook Twitter Google Email
Hazards