

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 east of Sugar Loaf Peak (Class A) No. 1595

Last Review Date: 1998-10-01

citation for this record: Oswald, J.A., and Sawyer, T.L., compilers, 1998, Fault number 1595, unnamed fault east of Sugar Loaf Peak, 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	This single, isolated fault is spatially associated with a group of presumably older subparallel, echelon faults that cross a volcanic upland west of Trout Creek. The older faults mostly form scarps and (or) prominent topographic lineaments on Tertiary volcanic rocks. Evidence for young movement is the subparallel fault shown here that juxtaposes Quaternary alluvium against bedrock. Reconnaissance photogeologic mapping of fault related features is the source of data. Trench investigations and studies of scarp morphology have not been conducted along the fault.
Name comments	Refers to short fault mapped by Dohrenwend and others (1991 #290) located 8 km east of Sugar Loaf Peak.
County(s) and	ELKO COUNTY NEVADA

State(s)	ELKO COUNTY, NEVADA
Physiographic province(s)	COLUMBIA PLATEAU
Reliability of location	<p>Good Compiled at 1:100,000 scale.</p> <p><i>Comments:</i> Location based on 1:250,000-scale map of Dohrenwend and others (1991 #290); 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. The fault is not known to extend into Idaho.</p>
Geologic setting	One fault in a group of subparallel to left-stepping, en echelon faults that cross a volcanic upland west of Trout Creek (Coats, 1987 #2861; Dohrenwend and others, 1991 #290).
Length (km)	2 km.
Average strike	N37°W
Sense of movement	<p>Normal</p> <p><i>Comments:</i> Not studied in detail; sense of movement is inferred geologic setting.</p>
Dip Direction	SW
Paleoseismology studies	
Geomorphic expression	This single, isolated fault is spatially associated with a group of presumably older subparallel, echelon faults that cross a volcanic upland west of Trout Creek (Dohrenwend and others, 1991 #290).
Age of faulted surficial deposits	Quaternary; Tertiary. The fault shown here juxtaposes Quaternary alluvium against bedrock (Coats, 1987 #2861; Dohrenwend and others, 1991 #290).
Historic earthquake	
Most recent prehistoric deformation	<p>undifferentiated Quaternary (<1.6 Ma)</p> <p><i>Comments:</i> Although timing of the most recent event is not well</p>

	constrained, Dohrenwend and others (1991 #290; 1996 #2846) suggested a Quaternary time based on reconnaissance photogeologic studies.
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr <i>Comments: A low slip rate is inferred from general knowledge of slip rates estimated for other faults in the region.</i>
Date and Compiler(s)	1998 John A. Oswald, Piedmont Geosciences, Inc. Thomas L. Sawyer, Piedmont Geosciences, Inc.
References	#2861 Coats, R.R., 1987, Geology of Elko County, Nevada: Nevada Bureau of Mines and Geology Bulletin 101, 112 p., scale 1:250,000. #290 Dohrenwend, J.C., McKittrick, M.A., and Moring, B.C., 1991, Reconnaissance photogeologic map of young faults in the Wells 1° by 2° quadrangle, Nevada, Utah, and Idaho: U.S. Geological Survey Miscellaneous Field Studies Map MF-2184, 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, <i>in</i> 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.

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