

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 Fairbanks Creek (Class A) No. 1524

Last Review Date: 1999-01-27

citation for this record: Adams, K., compiler, 1999, Fault number 1524, unnamed fault zone near Fairbanks Creek, 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 group of predominately northeast- to east-striking intra-plateau and piedmont faults is west of Chimney Reservoir and north of the Little Humboldt River in the vicinity of Fairbanks Creek. A north-striking fault bounds an east-facing escarpment on the west side of Chimney Reservoir and is included in this zone because of its proximity. The north-striking fault is expressed as an abrupt well-defined escarpment bounding east side of low unnamed hills. There is no consensus regarding the timing of faulting . Reconnaissance photogeologic mapping of the faults are the sources of data. Trench investigations and detailed studies of scarp morphology have not been completed.
Name comments	Refers to a group of faults mapped by Slemmons (1966, unpublished McDermit 1? X 2? sheet) and Dohrenwend and

	Moring (1991 #284) north of the Little Humboldt River, west of Chimney Reservoir, in the vicinity of Fairbanks Creek.
County(s) and State(s)	HUMBOLDT COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	<p>Good Compiled at 1:100,000 scale.</p> <p><i>Comments:</i> Fault locations are based on 1:250,000-scale map of Dohrenwend and Moring (1991 #284) and Slemmons (1966, unpublished McDermitt 1? X 2? sheet). The map of Dohrenwend and Moring (1991 #284) was produced by 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. Slemmons (1966, unpublished McDermitt 1? X 2? sheet) mapped from analysis of 1:60,000-scale AMS photography transferred to mylar overlaid onto a 1:250,000-scale topographic map using proportional dividers.</p>
Geologic setting	This group of predominately northeast- to east-west-striking intra-plateau and piedmont faults is west of Chimney Reservoir and north of the Little Humboldt River in the vicinity of Fairbanks Creek. A north-south striking fault bounds an east-facing escarpment on the west side of Chimney Reservoir and is included in this zone because of its proximity.
Length (km)	14 km.
Average strike	N51°E
Sense of movement	<p>Normal</p> <p><i>Comments:</i> (Slemmons, 1966, unpublished McDermitt 1? X 2? sheet; Dohrenwend and Moring, 1991 #284)</p>
Dip Direction	NW; S
Paleoseismology studies	
Geomorphic expression	Faults are expressed as north- or south-facing scarps on Tertiary bedrock (Willden, 1964 #3002) and Quaternary alluvium (Slemmons, 1966, unpublished McDermitt 1? X 2? sheet;

	Dohrenwend and Moring, 1991 #284). The north-striking fault is expressed as an abrupt well-defined escarpment bounding east side of low hills.
Age of faulted surficial deposits	Pleistocene, and possibly latest Pleistocene. Dohrenwend and Moring (1991 #284) mapped faults displacing deposits as young as early to middle Pleistocene alluvium. In contrast, Slemmons (1966, unpublished McDermitt 1° X 2° sheet) mapped latest Pleistocene faults that Dohrenwend and Moring (1991 #284) did not recognize.
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) <i>Comments:</i> The timing of most recent event is not well constrained, and the two reconnaissance photogeologic mapping studies that document the timing of faulting of these structures do not concur. Slemmons (1966, unpublished McDermitt 1° X 2° sheet) suggests that the two northern scarps are post-pluvial (< 13 ka). Dohrenwend and Moring (1991 #284) do not show either of these scarps on their map and they suggest that the nearby faults are early to middle Pleistocene in age. The assigned age is based on Dohrenwend and Moring (1991 #284) because it is the sole published source.
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr <i>Comments:</i> 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.
References	#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. #3002 Willden, R., 1964, Geology and mineral deposits of Humboldt County, Nevada: Nevada Bureau of Mines and

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