

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 Sand Pass (Class A) No. 1603

Last Review Date: 1999-03-02

citation for this record: Adams, K., and Sawyer, T.L., compilers, 1999, Fault number 1603, unnamed fault zone near Sand Pass, 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 02:29 PM.

Synopsis	These short northeast-striking, apparently sinistral (left-lateral) intrabasin faults appear to form a small left step between the northern end of the Terraced Hills fault zone [1606] and the south end of the Bonham Ranch fault zone [1601]. Faults are apparently expressed as lineations on late Pleistocene lacustrine deposits. Regional geologic mapping is the main source of data. Trench investigations and detailed studies of scarp morphology have not been conducted.
Name comments	Refers to faults mapped by Bonham (1969 #2999) and Slemmons (1974, unpublished Lovelock 1? X 2? sheet) and referred to by Weick (1990 #3020) in the vicinity of Sand Pass, at the south end of the Smoke Creek Desert.
County(s) and	

County(s) and State(s)	WASHOE COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale. <i>Comments:</i> Fault locations primarily based on 1:250,000-scale bedrock mapping of Bonham (1969 #2999).
Geologic setting	These short northeast-striking, apparently sinistral intrabasin faults possibly form a small left step between the northern end of the Terraced Hills fault zone [1606] and the south end of the Bonham Ranch fault zone [1601] (Weick, 1990 #3020).
Length (km)	7 km.
Average strike	N47°E
Sense of movement	Left lateral <i>Comments:</i> Sinistral (left-lateral) sense of movement was inferred from motion on other northeast-striking faults in the region.
Dip	90° <i>Comments:</i> Vertical dip is based on inferred sinistral slip.
Paleoseismology studies	
Geomorphic expression	Faults are apparently expressed as lineations on late Pleistocene lacustrine deposits (Bonham, 1969 #2999).
Age of faulted surficial deposits	Bonham (1969 #2999) mapped the faults (lineations) in Quaternary lacustrine deposits. Based on their location within the area inundated by Lake Lahontan, the lacustrine deposits may be as young as latest Pleistocene (e.g., Adams, 1997 #3003).
Historic earthquake	
Most recent prehistoric deformation	latest Quaternary (<15 ka) <i>Comments:</i> Although timing of most recent event is not well

	constrained, a latest Quaternary time is suggested based on mapping of Bonham (1969 #2999) and stratigraphic information of Adams (1997 #3003).
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)	1999 Kenneth Adams, Piedmont Geosciences, Inc. Thomas L. Sawyer, Piedmont Geosciences, Inc.
References	#3003 Adams, K.D., 1997, Late Quaternary pluvial history, isostatic rebound, and active faulting in the Lake Lahontan basin, Nevada and California: Reno, University of Nevada, unpublished Ph.D. dissertation, 169 p. #2999 Bonham, H.F., 1969, Geology and mineral deposits of Washoe and Storey Counties, Nevada: Nevada Bureau of Mines and Geology Bulletin 70, 140 p., 1 pl., scale 1:250,000. #3020 Weick, R.J., 1990, Structural, tectonic and Quaternary study of the eastern Madeline Plains, California and southwestern Smoke Creek Desert, Nevada: Reno, University of Nevada, unpublished M.S. thesis, 160 p.

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