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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.

Cricket Mountains (west side) fault (Class A) No. 2460

Last Review Date: 2004-07-01

Compiled in cooperation with the Utah Geological Survey

citation for this record: **Black, B.D., Hylland, M.D., and Hecker, S., compilers, 2004, Fault number 2460, Cricket Mountains (west side) fault, 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 02:56 PM.**

Synopsis	Poorly understood late Pleistocene to Holocene fault zone on the west side of the Cricket Mountains.
Name comments	**Fault ID:** Refers to fault number 9-28 of Hecker (1993 #642).
County(s) and State(s)	MILLARD COUNTY, UTAH
Physiographic province(s)	BASIN AND RANGE

Reliability of location	Good Compiled at 1:50,000 scale. *Comments:* Mapped or discussed by Anderson and Bucknam (1979 #518), Ertec Western, Inc. (Schell, 1981 #4598), Oviatt (1989 #381), Hintze and Davis (2002 #6755, 2002 #6740, 2003 #6741). Fault traces from mapping of Ertec Western, Inc. (Schell, 1981 #4598) and Oviatt (1989 #381).
Geologic setting	Northeast-trending normal fault zone along the western base of the Cricket Mountains, east of Sevier Lake. The Cricket Mountains are in the Confusion Basin of southwestern Utah, a Paleozoic center of deposition. Mountains in the basin are comprised almost exclusively of sedimentary rocks, valleys contain lake deposits and alluvium.
Length (km)	41 km.
Average strike	N17°E
Sense of movement	Normal
Dip Direction	W
Paleoseismology studies	
Geomorphic expression	Oviatt (1989 #381) mapped the north end of the fault as cutting alluvial-fan surfaces modified by wave erosion in Lake Bonneville, and Ertec Western, Inc. (Schnell, 1981 #2843) indicated that the fault displaces post-Bonneville alluvium. In contrast, Anderson and Bucknam (1979 #518) observed a fault scarp with a wave-etched bench, and also beach terraces having no apparent displacement across the fault. Thus, they interpreted a pre-Bonneville-highstand age for the fault scarps, despite a morphology that appears younger than adjacent wave-cut scarps and similar to the Drum Mountain fault scarps [2432]. The Cricket Mountains scarps have a maximum measured displacement of 1.3 m.
Age of faulted surficial deposits	Latest Pleistocene to Holocene alluvial-fan deposits and latest Pleistocene lacustrine beach terraces (shorelines) (Oviatt, 1989 #381; Schell, 1981 #2843; Anderson and Bucknam, 1979 #518).
Historic	

earthquake	
Most recent prehistoric deformation	latest Quaternary (<15 ka) *Comments:* Considered to be less than 15 ka on basis of fault scarp morphology that appears younger than adjacent wave-cut scarps and similar to the Drum Mountain fault scarps [2432] (Anderson and Bucknam, 1979 #518) and apparent deformation of latest Pleistocene to Holocene alluvial-fan deposits and latest Pleistocene lacustrine shorelines (Oviatt, 1989 #381; Schell, 1981 #2843).
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr
Date and Compiler(s)	2004 Bill D. Black, Utah Geological Survey Michael D. Hylland, Utah Geological Survey Suzanne Hecker, U.S. Geological Survey
References	#518 Anderson, R.E., and Bucknam, R.C., 1979, Map of fault scarps in unconsolidated sediments, Richfield 1° x 2° quadrangle, Utah: U.S. Geological Survey Open-File Report 79-1236, 15 p. pamphlet, 1 sheet, scale 1:250,000. #642 Hecker, S., 1993, Quaternary tectonics of Utah with emphasis on earthquake-hazard characterization: Utah Geological Survey Bulletin 127, 157 p., 6 pls., scale 1:500,000. #6740 Hintze, L.F., and Davis, F.D., 2002, Geologic map of the Wah Wah Mountains North 30' x 60' quadrangle and part of the Garrison 30' x 60' quadrangle, southwest Millard County and part of Beaver County, Utah: Utah Geological Survey Map 182, 1 sheet, scale 1:100,000. #6755 Hintze, L.F., and Davis, F.D., 2002, Geologic map of the Delta 30' x 60' quadrangle and parts of the Lynndyl 30' x 60' quadrangle, northeast Millard County and parts of Juab, Sanpete, and Sevier Counties, Utah: Utah Geological Survey Map 184, scale 1:100,000. #6741 Hintze, L.F., and Davis, F.D., 2003, Geology of Millard County, Utah: Utah Geological Survey Bulletin 133, 305 p.

	#381 Oviatt, C.G., 1989, Quaternary geology of part of the Sevier Desert, Millard County, Utah: Utah Geological and Mineral Survey Special Studies 70, 41 p., 1 pl., scale 1:100,000. #4598 Schell, B.A., 1981, MX siting investigation, faults and lineaments in the MX siting region, Nevada and Utah: Long Beach, California, report no. E-TR-54 for U.S. Air Force, volume I, 77p.; volume II, variously paginated, scale 1:250,000.