

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](#).

Little Valley faults (Class A) No. 2439

Last Review Date: 1999-10-01

Compiled in cooperation with the Utah Geological Survey

citation for this record: Black, B.D., DuRoss, C.B., and Hecker, S., compilers, 1999, Fault number 2439, Little Valley faults, 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 02:57 PM.

Synopsis	Poorly understood zone of late Pleistocene faulting in Little Valley.
Name comments	Fault ID: Refers to fault number 8-20 of Hecker (1993 #642).
County(s) and State(s)	MILLARD COUNTY, UTAH JUAB COUNTY, UTAH
Physiographic province(s)	BASIN AND RANGE
Reliability of	Good

location	Compiled at 1:62,500 scale. <i>Comments:</i> Mapped or discussed by Bucknam and Anderson (1979 #517) and Oviatt (1992 #4544). Fault traces from 1:100,000-scale mapping of Oviatt (1992 #4544).
Geologic setting	Generally north-trending normal faults in Little Valley, north of Scipio Valley. The faults form a wide zone of faulting bounding the east and west sides of Little Valley. Unconsolidated deposits in the valley are mainly lake deposits and alluvium.
Length (km)	20 km.
Average strike	N10°E
Sense of movement	Normal
Dip Direction	E; W
Paleoseismology studies	
Geomorphic expression	Fault scarps in alluvium show displacements up to 8.2 m. Scarp morphology suggests an age similar to the Bonneville highstand, though Bucknam and Anderson (1979 #517) indicate the scarps are truncated by the shoreline and thus are older. These scarps may be similar in age to the pre-Holocene Scipio Valley [2440] scarps, which are south of the small bedrock hills at the north end of Scipio Valley.
Age of faulted surficial deposits	Late Pleistocene
Historic earthquake	
Most recent prehistoric deformation	latest Quaternary (<15 ka) <i>Comments:</i> The event forming the Little Valley fault scarps may be similar in age to the pre-Holocene event on the Scipio Valley [2440] faults to the south, but the scarps show no evidence of the younger (late Holocene) event evident on the latter faults.
Recurrence	

interval	
Slip-rate category	Less than 0.2 mm/yr
Date and Compiler(s)	1999 Bill D. Black, Utah Geological Survey Christopher B. DuRoss, Utah Geological Survey Suzanne Hecker, U.S. Geological Survey
References	#517 Bucknam, R.C., and Anderson, R.E., 1979, Map of fault scarps on unconsolidated sediments, Delta 1° x 2° quadrangle, Utah: U.S. Geological Survey Open-File Report 79-366, 21 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. #4544 Oviatt, C.G., 1992, Quaternary geology of the Scipio Valley area, Millard and Juab Counties, Utah: Utah Geological Survey Special Studies 79, 16 p., scale 1:100,000.

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