Jump to Navigation

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.

Scipio fault zone (Class A) No. 2441

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 2441, Scipio fault zone, 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 zone of late Quaternary faulting in west-central Scipio Valley.
Name comments	**Fault ID:** Refers to fault number 8-18 of Hecker (1993 #642).
County(s) and State(s)	MILLARD COUNTY, UTAH
Physiographic province(s)	BASIN AND RANGE
Reliability of	Good

location	Compiled at 1:100,000 scale. *Comments:* Mapped or discussed by Bucknam and Anderson (1979 #517), Oviatt (1992 #4544), and Hintze and Davis (2002 #6754, 2003 #6741). Fault traces from mapping of Oviatt (1992 #4544) and Hintze and Davis (2002 #6754).
Geologic setting	North-trending range-front normal faults west of Scipio in Scipio Valley. The fault zone is between the Scipio Valley [2440] and Pavant Range [2442] faults, which all dip eastward beneath the valley. Scipio Valley is an elongate north-south graben bounded on the east and west by high-angle normal faults. Unconsolidated deposits in the valley are mainly lake deposits and alluvium.
Length (km)	12 km.
Average strike	N3°E
Sense of movement	Normal
Dip Direction	E; W
Paleoseismology studies	
Geomorphic expression	Subdued scarps along the faults form a well-defined graben on trend with and immediately south of the Scipio Valley faults [2440]. Bucknam and Anderson (1979 #517) separate the Scipio fault zone from the Scipio Valley faults because the Scipio fault zone does not show evidence of the younger faulting present on the Scipio Valley faults to the north.
Age of faulted surficial deposits	Late Pleistocene to Holocene alluvial deposits.
Historic earthquake	
Most recent prehistoric deformation	latest Quaternary (<15 ka) *Comments:* Oviatt (1992 #4544) and Hintze and Davis (2002 #6754, 2003 #6741) map the faults as offsetting late Pleistocene to Holocene alluvial deposits.
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	#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. #6754 Hintze, L.F., and Davis, F.D., 2002, Geologic map of the Tule Valley 30' x 60' quadrangle and parts of the Ely, Fish Springs, and Kern Mountains 30' x 60' quadrangles, northwest Millard County, Utah: Utah Geological Survey Map 186, 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. #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.