

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 <u>interactive fault map</u>.

Ogden Valley northeastern margin fault (Class A) No. 2379

Last Review Date: 1999-10-01

Compiled in cooperation with the Utah Geological Survey

citation for this record: Black, B.D., and Hecker, S., compilers, 1999, Fault number 2379, Ogden Valley northeastern margin 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 02:58 PM.

Synopsis	Poorly understood Quaternary(?) fault along the northeastern margin of Ogden Valley.
Name comments	Fault ID: Refers to fault number 11-15 of Hecker (1993 #642).
County(s) and State(s)	WEBER COUNTY, UTAH
Physiographic province(s)	MIDDLE ROCKY MOUNTAINS

Reliability of location	Poor Compiled at 1:125,000 scale.	
location	Comments: Mapped or discussed by Sorenson and Crittenden (1979 #4510) and Sullivan and others (1988 #4508). Fault traces from mapping of Sullivan and others (1988 #4508).	
Geologic setting	Northwest-trending range-front normal fault along the eastern side of Ogden Valley. Ogden Valley is one of several "back valleys of the Wasatch," a line of discontinuous valleys in the Wasatch Hinterlands east of the Wasatch Range.	
Length (km)	13 km.	
Average strike	N40°W	
Sense of movement	Normal	
Dip Direction	SW	
Paleoseismology studies		
Geomorphic expression	Range-front normal fault. The morphology of the range front suggested an absence of late Quaternary faulting to Sullivan and others (1988 #4508). Sorenson and Crittenden (1979 #4510) mapped fault scarps on Holocene colluvium that Sullivan and others (1988 #4508) interpret as shallow landslide scarps.	
Age of faulted surficial deposits	Quaternary (?).	
Historic earthquake		
Most recent	undifferentiated Quaternary (<1.6 Ma)	
prehistoric deformation	Comments: Based on range-front morphology	
Recurrence interval		
Slip-rate category	Less than 0.2 mm/yr	
	Comments: The absence of late Quaternary faulting indicates a	

	low slip rate.
Date and Compiler(s)	1999 Bill D. Black, Utah Geological Survey Suzanne Hecker, U.S. Geological Survey
References	#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. #4510 Sorensen, M.L., and Crittenden, M.D., Jr., 1979, Geologic map of the Huntsville quadrangle, Weber and Cache Counties, Utah: U.S. Geological Survey Geologic quadrangle Map GQ-1503, scale 1:24,000.
	#4508 Sullivan, J.T., Nelson, A.R., LaForge, R.C., Wood, C.K., and Hansen, R.A., 1988, Central Utah regional seismotectonic study for USBR dams in the Wasatch Mountains: Bureau of Reclamation Seismotectonic Report 88-5, 269 p.

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