

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>.

unnamed faults near Schell Creek Range (Class A) No. 1412

Last Review Date: 1998-06-29

citation for this record: Sawyer, T.L., compiler, 1998, Fault number 1412, unnamed faults near Schell Creek Range, 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 02:05 PM.

Synopsis	This down-to-the-east normal fault bounds a short section of east front of the Schell Creek Range. Reconnaissance photogeologic mapping of these faults is the source of data. Trench investigations and studies of scarp morphology have not been completed.
Name comments	Refers to short fault mapped by Schell (1981 #2844) and subsequently by Dohrenwend and others (1991 #287). Fault bound Schell Creek Range from about 21 km west of Minerva to about 23 km northwest of Minerva.
County(s) and State(s)	WHITE PINE COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE

	1			
Reliability of	Good			
location				
	Comments: Location based on 1:250,000-scale maps of Schell (1981 #2844) and of Dohrenwend and others (1991 #287). Original mapping by Schell (1981 #2843; 1981 #2844) based on photogeologic analysis of primarily 1:24,000-scale color aerial photography supplemented with 1:60,000-scale black-and-white aerial photography, transferred by inspection to 1:62,500-scale topographic maps and photographically reduced and directly transferred to 1:250,000-scale topographic maps, and field verification. Mapping by Dohrenwend and others (1991 #287) based on photogeologic analysis of 1:58,000-nominal-scale color-infrared photography transferred directly to 1:100,000-scale topographic quadrangle maps enlarged to scale of the photographs.			
Geologic setting	This down-to-the-east normal fault bounds a short section of east front of the Schell Creek Range.			
Length (km)	3 km.			
Average strike	N19°W			
Sense of	Normal			
movement				
	Comments: Not studied in detail; sense of movement inferred from topography.			
Dip Direction	E			
Paleoseismology studies				
Geomorphic	The fault is marked by range-front fault juxtaposing Quaternary			
expression	alluvium against bedrock (Dohrenwend and others, 1991 #287).			
Age of faulted				
surficial	Quaternary and Tertiary			
deposits				
Historic				
earthquake				
_				
Most recent	undifferentiated Quaternary (<1.6 Ma)			
prehistoric				

deformation	Comments: Although timing of the most recent event is not well constrained, Dohrenwend and others (1991 #287) and Schell (1981 #2843; 1981 #2844) suggested a Quaternary time based on reconnaissance photogeologic studies.		
Recurrence interval			
Slip-rate category	Less than 0.2 mm/yr Comments: A low slip rate is inferred from general knowledge of slip rates estimated for other faults in the region.		
Date and Compiler(s)	1998 Thomas L. Sawyer, Piedmont Geosciences, Inc.		
References	#287 Dohrenwend, J.C., Schell, B.A., and Moring, B.C., 1991, Reconnaissance photogeologic map of young faults in the Lund 1° by 2° quadrangle, Nevada and Utah: U.S. Geological Survey Miscellaneous Field Studies Map MF-2180, 1 sheet, scale 1:250,000.		
	#2843 Schell, B.A., 1981, Faults and lineaments in the MX Sitting Region, Nevada and Utah, Volume I: Technical report to U.S. Department of [Defense] the Air Force, Norton Air Force Base, California, under Contract FO4704-80-C-0006, November 6, 1981, 77 p.		
	#2844 Schell, B.A., 1981, Faults and lineaments in the MX Siting Region, Nevada and Utah, Volume II: Technical report to U.S. Department of [Defense] the Air Force, Norton Air Force Base, California, under Contract FO4704-80-C-0006, November 6, 1981, 29 p., 11 pls., scale 1:250,000.		

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