

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](#).

Polaris fault (Class A) No. 497

Last Review Date: 2017-07-01

citation for this record: Bryant, W.A., compiler, 2017, Fault number 497, Polaris 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 03:09 PM.

Synopsis	
Name comments	Fault ID: Refers to fault number 515 of Jennings (1994).
County(s) and State(s)	NEVADA COUNTY, CALIFORNIA SIERRA COUNTY, CALIFORNIA
Physiographic province(s)	CASCADE-SIERRA MOUNTAINS
Reliability of location	Good Compiled at 1:100,000 scale. <i>Comments:</i> Location of fault from Qt_ft_ver_3-0_Final_WGS84_polyline.shp (Bryant, W.A., written communication to K.Haller, August 15, 2017).
Geologic setting	

Length (km)	38 km.
Average strike	
Sense of movement	Right lateral, Normal
Dip	
Paleoseismology studies	
Geomorphic expression	
Age of faulted surficial deposits	
Historic earthquake	
Most recent prehistoric deformation	latest Quaternary (<15 ka) <i>Comments:</i>
Recurrence interval	
Slip-rate category	Between 0.2 and 1.0 mm/yr <i>Comments:</i> Hunter (2011) suggests lateral displacement rate of about 04. mm/yr.
Date and Compiler(s)	2017 William A. Bryant, California Geological Survey
References	#8150 Hunter, L.E. (compiler), 2009, Geotechnical and paleoseismic investigations of the Martis Creek Dam, Truckee, California: Association of Engineering Geologists, 2009 Annual Meeting Field Trip Guidebook, 18 p., 26 figures. #2878 Jennings, C.W., 1994, Fault activity map of California and adjacent areas, with locations of recent volcanic eruptions: California Division of Mines and Geology Geologic Data Map 6, 92 p., 2 pls., scale 1:750,000.

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