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>.

Central Pintwater Range faults (Class A) No. 1058

Last Review Date: 1998-02-10

citation for this record: Anderson, R.E., compiler, 1998, Fault number 1058, Central Pintwater Range 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 02:19 PM.

Synopsis	These north-northwest-striking faults form a graben in the central part of the northern Pintwater Range, which is an uplifted structural block. Late Pliocene(?) and Pleistocene(?) gravel deposited in the graben have sparse weakly to moderately developed lineaments or scarps suggesting Quaternary displacement on the graben faults. No detailed studies have been made nor can reliable estimates of recurrence and slip rate be made.
Name comments	Name applied by Piety (1995 #915) to north-northwest-striking faults that are extend about 15 km long in the central part of the northern Pintwater Range structural block. Fault ID: Equivalent to CPR fault of Piety (1995 #915)

County(s) and State(s)	LINCOLN COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale.
	<i>Comments:</i> Fault traces compiled by Reheis (1992 #1604) at 1:100,000-scale from aerial photos at scales of about 1:60,000 and 1:80,000. There are two main traces, a short (4.5 km long) western one and a long (16 m long) eastern one. The western fault is shown on the county map (1:250,000-scale, Tschanz and Pampeyan, 1970 #1682) as separating bedrock from Quaternary-Tertiary gravel, but the eastern one is only shown where it is in Paleozoic bedrock (Tschanz and Pampeyan, 1970 #1682).
Geologic setting	Mapping by Tschanz and Pampeyan (1970 #1682) and Reheis (1992 #1604) indicates that the central Pintwater Range faults form a central graben within the northern part of the Pintwater Range. Clastic sediment that accumulated in the graben is probably of late Pliocene and Pleistocene age (Tschanz and Pampeyan, 1970 #1682).
Length (km)	15 km.
Average strike	N11°W
Sense of movement	Normal <i>Comments:</i> Based on facing direction of scarps or downthrown side of fault inferred normal faults from aerial photos (Reheis, 1992 #1604)
Dip Direction	W; E
Paleoseismology studies	
Geomorphic expression	Most of the short western fault was characterized by Reheis (1992 #1604) as being in Quaternary deposits based on previous mapping, probably that of Tschanz and Pampeyan (1970 #1682). Most of the eastern fault is expressed as lineaments on bedrock, with less than 5 percent of the trace being characterized by short (< 0.5-km-long) weak to moderately well expressed scarps or lineaments on Quaternary deposits; these short traces are located

	basinward from the block-bounding eastern fault (Reheis, 1992 #1604).
Age of faulted surficial deposits	Pleistocene
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) <i>Comments:</i> Faulted Quaternary deposits have not been stratigraphically subdivided.
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr <i>Comments:</i> No data available on offset amounts or height or shape of scarps to guide slip-rate estimate. Lowest category chosen because the few short traces of the eastern fault that are developed on Quaternary deposits are characterized as weakly to moderately well expressed lineaments or scarps, suggesting low long-term slip rate.
Date and Compiler(s)	1998 R. Ernest Anderson, U.S. Geological Survey, Emeritus
References	 #915 Piety, L.A., 1995, Compilation of known and suspected Quaternary faults within 100 km of Yucca Mountain, Nevada and California: U.S. Geological Survey Open-File Report 94-112, 404 p., 2 pls., scale 1:250,000. #1604 Reheis, M.C., 1992, Aerial photographic interpretation of lineaments and faults in late Cenozoic deposits in the Cactus Flat and Pahute Mesa 1:100,000 quadrangles and the western parts of the Timpahute Range, Pahranagat Range, Indian Springs, and Las Vegas 1:100,000 quadrangles, Nevada: U.S. Geological Survey Open-File Report 92-193, 14 p., 3 pls., scale 1:100,000. #1682 Tschanz, C.M., and Pampeyan, E.H., 1970, Geology and mineral deposits of Lincoln County, Nevada: Nevada Bureau of Mines and Geology Bulletin 73, 188 p.

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