

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 east of Roubideau Creek (Class B) No. 2272

Last Review Date: 1998-07-10

Compiled in cooperation with the Colorado Geological Survey

citation for this record: Widmann, B.L., compiler, 1998, Fault number 2272, unnamed faults east of Roubideau Creek, 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 03:02 PM.

Synopsis	This group of faults lies on the southern end of the Uncompangre
	Uplift. Although there was no reported evidence of Quaternary
	offset along these faults, they were mapped as Quaternary faults
	by Lettis and others (1996 #4453; plate 2). They attributed the
	fault activity to salt tectonism, and thus are considered to be Class
	B structures. The most recent movement on the faults herein
	considered to have occurred during the Quaternary based on the
	work of Lettis and others (1996).
Name	This group of unnamed faults includes five faults that generally

comments	trend northwest at the southeast end of the Uncompangre Uplift.
	Fault ID: Fault number Q22 of Widman and others (1998 #3441).
County(s) and State(s)	MONTROSE COUNTY, COLORADO
Physiographic province(s)	COLORADO PLATEAUS
Reliability of location	Good Compiled at 1:250,000 scale.
	Comments: The faults were mapped at a scale of 1:250,000 by Williams (1964 #2789) and Lettis and others (1996 #4453). The fault traces used herein are from Lettis and others (1996 #4453).
Geologic setting	This group of faults is on the southeast end of the Uncompander Uplift, which is a northwest-trending, east-tilted fault block. These faults are down to the northeast and southwest, and are considered to be salt-related rather than tectonic features (Lettis and others, 1996 #4453).
Length (km)	12 km.
Average strike	N50°W
Sense of movement	Normal
Dip Direction	SW; NE
Paleoseismology studies	
Geomorphic expression	No information is available about the Quaternary geomorphic expression of the fault.
Age of faulted surficial deposits	Faults in this group offset Jurassic to Cretaceous bedrock (Williams, 1964 #2789), but Quaternary deposits are not mapped along the faults. Although there is no evidence of faulted Quaternary deposits along these faults, Lettis and others (1996 #4453) concluded tahat they moved during the Quaternary, but are related to salt tectonism.
Historic earthquake	

	undifferentiated Quaternary (<1.6 Ma)
prehistoric deformation	Comments: Although there is no direct evidence for offset of Quaternary deposits along these faults, they were mapped as Quaternary faults related to salt tectonism by Lettis and others (1996 #4453; plate 2). Faults associated with the Uncompange Uplift are often considered to have experienced Quaternary movement. Based on the timing of abandonment of Unaweep Canyon from the Uncompanger plateau Cater (1966 #2671) indicated uplift began in the mid-Pliocene and continued into the Pleistocene resulting in as much as 640 m of differential uplift.
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr Comments: Widmann and others (1998 #3441) placed this structure within the <0.2 mm/yr slip-rate category.
Date and Compiler(s)	1998 Beth L. Widmann, Colorado Geological Survey
References	#2671 Cater, F.W., Jr., 1966, Age of the Uncompander Uplift and Unaweep Canyon, west-central Colorado: U.S. Geological Survey Professional Paper 550-C, 86-92 p.
	#4453 Lettis, W., Noller, J., Wong, I., Ake, J., Vetter, U., and LaForge, R., 1996, Draft report, Seismotectonic evaluation of Colorado River storage project-Crystal, Morrow Point, Blue Mesa dams, Smith Fork project-Crawford dam, west-central Colorado: Technical report to U.S. Bureau of Reclamation, Denver, Colorado, 177 p.
	#3441 Widmann, B.L., Kirkham, R.M., and Rogers, W.P., 1998, Preliminary Quaternary fault and fold map and database of Colorado: Colorado Geological Survey Open-File Report 98-8, 331 p., 1 pl., scale 1:500,000.
	#2789 Williams, P.L., 1964, Geology, structure, and uranium deposits of the Moab quadrangle, Colorado and Utah: U.S. Geological Survey Miscellaneous Geologic Investigations I-360.

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