

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](#).

unnamed faults north of Ellison siding (Class A) No. 1141

Last Review Date: 2000-07-06

citation for this record: Anderson, R.E., compiler, 2000, Fault number 1141, unnamed faults north of Ellison siding, 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 02:18 PM.

Synopsis	This group of unnamed faults appear to be mid-basin structures located in the piedmont between the Sheep Creek Range on the east and the southern part of the Osgood Mountains on the west. The most continuous fault in the group is down to the east; one short (< 4 km) fault is down to the west, and displacement directions on others are not defined. Most traces marked by fault-related lineaments, but some form scarps on Quaternary surficial deposits or erosion surfaces. The lineaments and scarps are formed on latest Quaternary deposits or surfaces. There are no detailed studies, and no recurrence times have been reported.
Name comments	Refers to a group of north-trending faults that extend from near the Ellison siding on the Southern Pacific/Union Pacific rail line (north of the Humboldt River) north to the northern boundary of

	the Winnemucca sheet (41?N). The faults may extend north into the McDermitt sheet, although they were not mapped as such.
County(s) and State(s)	HUMBOLDT COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale. <i>Comments:</i> Trace taken from Dohrenwend and Moring (1991 #282) who compiled it at scale 1:250,000 based on photogeologic study 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. Faults are not shown on a 1:125,000-scale map of young fault scarps by Wallace (1979 #203).
Geologic setting	This group of unnamed faults appear to be mid-basin structures located in the piedmont between the Sheep Creek Range on the east and the southern part of the Osgood Mountains on the west. The most continuous fault in the group is down to the east; one short (< 4 km) fault is down to the west, and displacement directions on others are not defined.
Length (km)	18 km.
Average strike	N16°E
Sense of movement	Normal <i>Comments:</i> No specific data available; sense inferred from location and orientation in extensional tectonic province.
Dip Direction	E; W
Paleoseismology studies	
Geomorphic expression	The main east-side-down fault cuts gently west-sloping topography and has disrupted small ephemeral streams that flow into three closed depressions that are localized along the fault. A slightly larger west-flowing ephemeral stream breaches a fourth depression. The Quaternary history of these faults is probably recorded in the sediment traps, but they have apparently not been

	studied. There are no reports on the the geomorphic expression of the scarps.
Age of faulted surficial deposits	Reconnaissance photogeologic mapping by Dohrenwend and Moring (1991 #282) identified some lineaments and scarps on latest Pleistocene (10-30 ka) and (or) Holocene (<10 ka) deposits or surfaces. Others features are formed on deposits or surfaces that may be of late Pleistocene (10-130 ka) age.
Historic earthquake	
Most recent prehistoric deformation	latest Quaternary (<15 ka) <i>Comments:</i> Based on the reconnaissance photogeologic mapping by Dohrenwend and Moring (1991 #282) and the presence of scarps on latest Pleistocene (10-30 ka) and (or) Holocene (<10 ka) deposits or surfaces. However, no detailed mapping or geologic/geomorphic studies have been conducted.
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr <i>Comments:</i> No data available to constrain slip rate estimate. Low slip-rate category chosen in accordance with other relatively inactive faults in the region (Wallace, 1978 #2648).
Date and Compiler(s)	2000 R. Ernest Anderson, U.S. Geological Survey, Emeritus
References	#282 Dohrenwend, J.C., and Moring, B.C., 1991, Reconnaissance photogeologic map of young faults in the Winnemucca 1° by 2° quadrangle, Nevada: U.S. Geological Survey Miscellaneous Field Studies Map MF-2175, 1 sheet, scale 1:250,000. #2648 Wallace, R.E., 1978, Geometry and rates of change of fault-generated range fronts, north-central Nevada: Journal of Research of the U.S. Geological Survey, v. 6, no. 5, p. 637-649. #203 Wallace, R.E., 1979, Map of young fault scarps related to earthquakes in north-central Nevada: U.S. Geological Survey Open-File Report 79-1554, 2 sheet, scale 1:125,000.

[Questions or comments?](#)

[Facebook](#) [Twitter](#) [Google](#) [Email](#)

[Hazards](#)

[Design Ground Motions](#)[Seismic Hazard Maps & Site-Specific Data](#)[Faults](#)[Scenarios](#)

[Earthquakes](#)[Hazards](#)[Data](#)[Education](#)[Monitoring](#)[Research](#)

[Home](#)[About Us](#)[Contacts](#)[Legal](#)