

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](#).

North Golden Gate fault (Class A) No. 1392

Last Review Date: 1998-06-29

citation for this record: Sawyer, T.L., compiler, 1998, Fault number 1392, North Golden Gate 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 02:14 PM.

Synopsis	This group of short discontinuous normal faults bounds east and west fronts of the northernmost Golden Gate Range, separating Garden Valley from White Range Valley. Reconnaissance photogeologic mapping of the faults is the source of data. Trench investigations and studies of scarp morphology have not been completed.
Name comments	The North Golden Gate fault and the East Garden Valley fault were mapped and named by Schell (1981 #2844). Dohrenwend and others (1991 #287) subsequently mapped these faults. These short faults bound both sides of the northernmost Golden Gate Range. The North Golden Gate name of Schell (1981 #2844) is more descriptive. Fault ID: Refers to faults 21 and 46 on Plate A6 of Schell (1981 #2844).

County(s) and State(s)	NYE COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	<p>Good Compiled at 1:100,000 scale.</p> <p><i>Comments:</i> 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.</p>
Geologic setting	This group of short discontinuous normal faults bounds east and west fronts of the northernmost Golden Gate Range, separating Garden Valley from White Range Valley.
Length (km)	15 km.
Average strike	N6°E
Sense of movement	<p>Normal</p> <p><i>Comments:</i> (Schell, 1981 #2844)</p>
Dip Direction	E; W
Paleoseismology studies	
Geomorphic expression	The fault is marked by fault scarps juxtaposing Quaternary alluvium against bedrock and by lineaments and scarps on Quaternary deposits and/or erosional surfaces (Schell, 1981 #2844; Dohrenwend and others, 1991 #287).
Age of faulted surface	Early to middle and (or) late Pleistocene on east fault trace near

Surficial deposits	Natural Arch (Dohrenwend and others, 1991 #287).
Historic earthquake	
Most recent prehistoric deformation	late Quaternary (<130 ka) <i>Comments:</i> Schell (1981 #2843; 1981 #2844) suggested a late Pleistocene time based on surface morphology, spatial distribution, and development of desert pavement, desert varnish, and soils of faulted deposits. Dohrenwend and others (1991 #287; 1996 #2846) suggested a Quaternary time based on reconnaissance photogeologic interpretation.
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr <i>Comments:</i> 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. #2846 Dohrenwend, J.C., Schell, B.A., Menges, C.M., Moring, B.C., and McKittrick, M.A., 1996, Reconnaissance photogeologic map of young (Quaternary and late Tertiary) faults in Nevada, <i>in</i> Singer, D.A., ed., Analysis of Nevada's metal-bearing mineral resources: Nevada Bureau of Mines and Geology Open-File Report 96-2, 1 pl., scale 1:1,000,000. #2843 Schell, B.A., 1981, Faults and lineaments in the MX Siting 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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