

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>.

Buried Hills faults (Class A) No. 1055

Last Review Date: 1998-02-04

citation for this record: Anderson, R.E., compiler, 1998, Fault number 1055, Buried Hills 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	This group of northerly striking faults reflect diverse structural
_	settings in and adjacent to the Buried Hills. Less that 25 percent
	of the fault traces are in Quaternary deposits where they are
	weakly to moderately expressed as lineaments or scarps. The
	traces have been photogeologically compiled without field
	checking. An unpublished geologic map of the 1:100,000-scale
	Indian Springs quadrangle (P.L. Guth and J.C. Yount) does not
	show these faults. Their Quaternary history is neither well known
	nor well established.
Name	Name applied by Piety (1995 #915) to a group of at least five
comments	subparallel northerly striking discontinuous faults within and at
	the margins of the Buried Hills and extending south from
	Emigrant Valley through the Buried Hills into Frenchman Flat.
	Fault ID: Equivalent to BH 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.
Geologic setting	Comments: The traces are from a compilation by Reheis (1992 #1604) at 1:100,000-scale. They are derived from photogeologic interpretation of aerial photos at 1:60,000 and 1:80,000 scale. The traces are reliably located, but are in poor agreement with those mapped by Dohrenwend and others (1991 #288). One of the faults mapped by Reheis (1992 #1604) approximately matches a fault mapped by Tschanz and Pampeyan (1970 #1682), but none of the faults were shown by Ekren and others (1977 #1036). Also, an unpublished geologic map of the 1:100,000-scale Indian Springs quadrangle by P. Guth and J. Yount does not show these faults, raising doubt about their existence. Field confirmation is needed to document these faults. The small percentage of traces mapped as lineaments or scarps in Quaternary deposits by Reheis (1992 #1604) were used as a guide for the present compilation. The structures have diverse settings including a range-bounding fault along the western side of the southern Buried Hills, block-bounding faults within the Buried Hills, and intrabasin faults
	south-southeast of Papoose Lake in Emigrant Valley.
Length (km)	13 km.
Average strike	N2°W
Sense of movement	Normal Comments: Normal slip is inferred from mapping by Reheis (1992 #1604) and location in extensional setting of Basin and Range.
Dip Direction	W; E
Paleoseismology studies	
Geomorphic expression	Some traces are expressed as lineaments along range or block margins or as weakly to moderately expressed lineaments or scarps on surfaces of Quaternary or Tertiary deposits. Less than

	25 percent of the traces are developed on Quaternary deposits, giving doubt as to the recency of movement.
Age of faulted surficial deposits	Quaternary. Dohrenwend and others (1991 #288) show some of these faults as either juxtaposing Quaternary deposits against bedrock. Reheis (1992 #1604) didn't differentiate the age of surficial deposits that are faulted.
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) Comments: Dohrenwend and others (1991 #288) show some of these faults as either juxtaposing Quaternary deposits against bedrock. No studies have been conducted to refine the most recent movement on these faults.
Recurrence interval	
Slip-rate category	Comments: No data available on offset amounts or height or shape of scarps to guide slip-rate estimate. The late Quaternary characteristics of this fault (overall geomorphic expression, continuity of scarps, age of faulted deposits, etc.) support a low slip rate. Accordingly, the less than 0.2 mm/yr slip-rate category has been assigned to this fault.
Date and Compiler(s)	R. Ernest Anderson, U.S. Geological Survey, Emeritus
References	#288 Dohrenwend, J.C., Menges, C.M., Schell, B.A., and Moring, B.C., 1991, Reconnaissance photogeologic map of young faults in the Las Vegas 1° by 2° quadrangle, Nevada, California, and Arizona: U.S. Geological Survey Miscellaneous Field Studies Map MF-2182, 1 sheet, scale 1:250,000. #1036 Ekren, E.B., Orkild, P.P., Sargent, K.A., and Dixon, G.L., 1977, Geologic map of Tertiary rocks, Lincoln County, Nevada: U.S. Geological Survey Miscellaneous Investigations Map I-1041, 1 sheet, scale 1:250,000. #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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