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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.

Fallout Hills faults (Class A) No. 1133

Last Review Date: 1999-09-15

citation for this record: **Anderson, R.E., compiler, 1999, Fault number 1133, Fallout 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 02:18 PM.**

Synopsis	On the basis of photogeologic study, the Fallout Hills faults consist of a group of five short (<8 km) generally north-northwest-striking faults forming a zone as much as 5 km wide in the Fallout Hills. They appear to be block-bounding, as opposed to range-bounding, structures. Some form horst-and-graben features. Very little is known of the geomorphic expression, and on most faults a history of Quaternary faulting is either not documented or weakly indicated. No reliable estimates of either slip rate or recurrence can be made.
Name comments	Name applied by Piety (1995 #915) to a group of short (<8 km) generally north-northwest-striking faults forming a zone as much as 5 km wide in the Fallout Hills. **Fault ID:** Referred to as FH by Piety (1995 #915).
County(s) and	

County(s) and State(s)	LINCOLN COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale. *Comments:* Compiled from 1:100,000 map (Reheis, 1992 #1604) based on photogeologic study of aerial photos at scale of 1:60,000 and 1:80,000.
Geologic setting	None of the Fallout Hills faults are shown on the 1:250,000-scale geologic map of Lincoln County by Ekren and others (1977 #1036). On the basis of photogeologic study (Reheis, 1992 #1604), the Fallout Hills faults consist of five main north-northwest-striking faults that appear to be block-bounding, as opposed to range-bounding, structures. The three central faults are down to the west, and the eastern and western faults are down to the east, suggesting that the two eastern faults bound a horst block and the two western faults bound a graben block (Reheis, 1992 #1604). In the west, the fault group appears to merge with the Chert Ridge faults [1052]. The Indian Spring Valley fault [1054] extends south from the southwest part of the group. The structural relations between these faults are not known.
Length (km)	8 km.
Average strike	N9°E
Sense of movement	Normal *Comments:* Faults appear to bound tilt blocks or horst-and-graben structures as normal faults.
Dip Direction	W; E
Paleoseismology studies	
Geomorphic expression	Short (<1 km) parts of two of the faults are weakly to moderately expressed as scarps or lineaments on Quaternary deposits, longer (about 2 km) segments of another fault is in Quaternary deposits as identified from previous mapping, and all other traces are in bedrock (Reheis, 1992 #1604). Thus, the Quaternary expression of these faults is weak to absent.

Age of faulted surficial deposits	Quaternary
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* On most faults a history of Quaternary faulting is either not documented or weakly indicated.
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr *Comments:* No reliable estimate can be made, low value is inferred from knowledge of slip rates on other Pleistocene faults in the Basin and Range.
Date and Compiler(s)	1999 R. Ernest Anderson, U.S. Geological Survey, Emeritus
References	#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.

Questions or comments?

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