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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.

West Specter Range fault (Class A) No. 1114

Last Review Date: 1999-03-22

citation for this record: **Anderson, R.E., compiler, 1999, Fault number 1114, West Specter Range 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 02:18 PM.**

Synopsis	The West Specter Range fault is a short (<10 km), north-striking, down-to-the-west fault that lies at the western base of a narrow band of bedrock exposures that extends south from the main Specter Range. The fault has normal displacement and appears to be a block-bounding rather than range-bounding fault. Along parts of the fault, scarps appear to record two Quaternary displacement events, the youngest of which may have occurred in the latest Pleistocene or Holocene.
Name comments	Name given by Anderson and others (1995 #897) to a short (<10 km) north-striking fault located at the western base of a south-trending arm of the Specter Range, north and south of U S Highway 95 about 19 km east of Nevada Highway 29.
County(s) and State(s)	NYE COUNTY, NEVADA
Physiographic	

Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale. *Comments:* Mapped at a scale of about 1:40,000 by Anderson and others (1995 #897) from study of aerial photos at scale of about 1:60,000 and supplemented by field studies. Trace recompiled herein at 1:100,000 scale for digitization. The fault was not shown on either the 1:250,000-scale regional compilation of Quaternary faults by Piety (1995 #915) or on the more detailed 1:100,000-scale compilation of Reheis and Noller (1991 #1195).
Geologic setting	The West Specter Range fault forms the west boundary of a narrow band of bedrock exposures that extends south from the main Specter Range. It has normal displacement and appears to be a block-bounding rather than range-bounding fault.
Length (km)	9 km.
Average strike	N2°W
Sense of movement	Normal
Dip Direction	W
Paleoseismology studies	
Geomorphic expression	The southern part of the fault strikes slightly east of north and is marked by prominent scarps as much as 1.4 m high on stable (old) fan surfaces along about 25 percent of its length. Some of these scarps have gentle, beveled crests and steep elements (8?-9?) in their mid slopes. The steep parts may reflect the youngest faulting event. The northern part of the fault strikes slightly west of north and is marked by smaller scarps and conspicuous lineations on younger alluvial deposits (Anderson and others, 1995 #897).
Age of faulted surficial deposits	The youngest faulted deposits along the northern traces have soils with a moderately well developed desert pavement of limestone clasts, a thick Av horizon, and a weakly developed argillic B horizon. In addition, these deposits still have some vestiges of original surface morphology. By comparison to the surface morphology and soils to other nearby areas, Anderson and others

	(1995 #897) estimated the surface developed on these deposits to be as young as 15 ka. Scarps along the southern section are formed on older alluvial fans estimated, on the basis of well-formed desert pavement of highly etched limestone clasts and well-developed thick soils, to be middle Pleistocene (130-750 ka) in age (Anderson and others, 1995 #897).
Historic earthquake	
Most recent prehistoric deformation	latest Quaternary (<15 ka) *Comments:* The latest faulting event appears to have occurred in the latest Pleistocene (10-30 ka) or Holocene (<10 ka) as evidenced by estimates of the age of the youngest surface on which scarps are formed along the northern part of the faults trace. Anderson and others (1995 #897) estimated the surface developed on these deposits to be as young as 15 ka, which would imply an event that is <15 ka (Anderson and others, 1995 #897).
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr *Comments:* A slip rate of 0.004 mm/yr was calculated from age estimates of faulted surfaces (Anderson and others, 1995 #897). Accordingly, the less than 0.2 mm/yr slip-rate category has been assigned to this fault.
Date and Compiler(s)	1999 R. Ernest Anderson, U.S. Geological Survey, Emeritus
References	#897 Anderson, R.E., Bucknam, R.C., Crone, A.J., Haller, K.M., Machette, M.N., Personius, S.F., Barnhard, T.P., Cecil, M.J., and Dart, R.L., 1995, Characterization of Quaternary and suspected Quaternary faults, regional studies, Nevada and California: U.S. Geological Survey Open-File Report 95-599, 70 p., 2 sheets. #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. #1195 Reheis, M.C., and Noller, J.S., 1991, Aerial photographic interpretation of lineaments and faults in late Cenozoic deposits in the eastern part of the Benton Range 1:100,000 quadrangle and

	the Goldfield, Last Chance Range, Beatty, and Death Valley Junction 1:100,000 quadrangles, Nevada and California: U.S. Geological Survey Open-File Report 90-41, 9 p., 4 sheets, scale 1:100,000.

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