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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.

Southeast Coal Valley fault (Class A) No. 1131

Last Review Date: 1999-07-22

citation for this record: **Anderson, R.E., compiler, 1999, Fault number 1131, Southeast Coal Valley 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 02:17 PM.**

Synopsis	The southeast Coal Valley fault is a poorly understood structure with a little-known Quaternary history. It is marked by short (total <4 km), discontinuous, late Pleistocene, west-facing scarps that are apparently located at the faulted bedrock-alluvium contact between southeasternmost Coal Valley and the southwesternmost Seaman Range. No data are available on the morphology of the scarps, recurrence, or slip rate. On the basis of photogeologic reconnaissance, deposits or surfaces of late Pleistocene age are estimated to be displaced.
Name comments	Name applied by Schell (1981 #2844) to a short, Quaternary fault in the extreme southeast part of Coal Valley adjacent to a northerly trending ridge at the southwest extreme of the Seaman Range. **Fault ID:** Refers to fault #22 of Schell (1981 #2844).

County(s) and State(s)	LINCOLN COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:250,000 scale. *Comments:* Fault traces taken from Schell (1981 #2844) who compiled them at 1:250,000 from 1:25,000-scale aerial photos following field study.
Geologic setting	Short (<2 km), west-facing scarps apparently at the bedrock-alluvium contact in the southeast part of Coal Valley. According to Schell (1981 #2844, Table A2), these scarps may connect southward through a set of bedrock scarps in the North Pahranagat Range to Pleistocene scarps in Pahroc Valley. Because (1) Ekren and others (1977 #1036) do not show a through-going north-striking fault extending south across the North Pahranagat Range along the lineaments, and (2) neither Schell (1981 #2844) nor Ekren and others (1977 #1036) show Quaternary-Tertiary alluvium to be faulted directly south of the main range block, the southeast Coal Valley fault is not connected as suggested by Schell. Instead, the short (<2 km) scarp in north Pahranagat Valley is mapped as part of the Hiko fault zone [1130]. Restricted in this way, the southeast Coal Valley fault has a very short Quaternary trace (<4 km). The fault could be the south part of a much longer fault bounding the basin beneath Coal Valley on the east. If so, no record of Quaternary displacement is reported for most of the fault.
Length (km)	4 km.
Average strike	N7°E
Sense of movement	Normal
Dip Direction	W
Paleoseismology studies	
Geomorphic expression	No descriptions are reported. No fault is mapped at the bedrock-alluvium contact, by Ekren and others (1977 #1036).

Age of faulted surficial deposits	Schell (1981 #2844, Table A2) reports that intermediate-age alluvium with an estimated age range of 15-700 ka (mostly 15-200 ka) is cut by the fault and young alluvium with an age range of 0-15 ka is not (compiled at 1:1,000,000, 1996, #2846). In an unpublished 1:250,000-scale map of Quaternary faults in the Caliente 1? x 2? sheet, J.C. Dohrenwend estimates, on the basis of photogeologic study, deposits or surfaces of late Pleistocene (10-130 ka) are cut by the fault.
Historic earthquake	
Most recent prehistoric deformation	late Quaternary (<130 ka) *Comments:* Schell (1981 #2844, Table A2) estimates the probable age of last movement to be late Pleistocene, but no evidence is cited. On the basis of the late Pleistocene estimated age of deposits or surfaces cut by the fault by J.C. Dohrenwend (unpublished map) late Quaternary timing is chosen.
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr *Comments:* No 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	#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, *in* 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. #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. #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.