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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.

unnamed faults in southeastern Huntington Valley (Class A) No. 1438

Last Review Date: 2000-12-01

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Synopsis	These unnamed faults consist of north- and northeast-trending scarps with down-to-the-west displacement. These faults are located on the western margin of the Little Bald Mountain, and Big Bald Mountain, and in the eastern Huntington Valley and the northeasternmost part of Newark Valley. Additional scarps (and lineaments) occupy a 9 to 12 km wide are of the valley floor. Reconnaissance photogeologic mapping is the source of data. Trench investigations and detailed studies of scarp morphology have not been completed.
Name comments	These unnamed faults are mainly on the western margin of Little Bald Mountain, and Big Bald Mountain, in the southeastern Huntington Valley, but also includes mountain front scarps in the northeasternmost part of Newark Valley. These faults are

	discontinuous and described collectively herein.
County(s) and State(s)	WHITE PINE COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale. *Comments:* Location based on 1:250,000-scale map of Dohrenwend and others (1992 #2480). Mapping 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 subsequent mapping by 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.
Geologic setting	These unnamed faults are primarily on the eastern margin of Little Bald Mountain and Big Bald Mountain, in the eastern Huntington Valley, but also continue south into northeasternmost part of Newark Valley. The Huntington and Newark Valleys are in the central part of the Great Basin within the Basin and Range province. During the Paleozoic, the central part of the Great Basin was located on the eastern margin of the Cordilleran geosyncline (Kay, 1951 #4402). The majority of the area was overlain with Paleozoic sedimentary rocks that are more than 1.6 km thick, primarily of marine origin (Hose and Blake, 1976 #4341). The Paleozoic sequence is deformed by folding and thrust faulting, and unconformably capped by Tertiary volcanic and intrusive rocks from Eocene to Oligocene and perhaps Miocene age (Stewart, 1980 #3056). These rocks have been uplifted into Mountain Ranges with elevations of 3,000 m that alternate with 1,700 m high flat-floored valleys. Valley sediments are primarily comprised of Pleistocene lake deposits, and sand and gravel deposits of alluvial fans and terraces. Fault-bound north-south trending mountains separated by broad desert valleys are typical of Basin and Range topography. Lineaments in this fault zone have a northeast trend which is not considered typical of Basin and Range faults, but seems to be relatively common for young

	faults within the region of the Ely 1?x2? sheet.
Length (km)	24 km.
Average strike	N18°E
Sense of movement	Normal
Dip Direction	W
Paleoseismology studies	
Geomorphic expression	This fault zone is defined by a series of north- and northeast-trending lineaments and scarps on the eastern margin of Little Bald Mountain, and Big Bald Mountain, in the eastern Huntington Valley. Lineaments coincide with an abrupt change in relief and slope along the eastern side of Little Bald Mountain, and Big Bald Mountain.
Age of faulted surficial deposits	Quaternary and Tertiary (Hose and Blake, 1976 #4341). In general, these faults form bedrock escarpments, but Dohrenwend and others (1992 #2480) mapped scarps on Pleistocene deposits.
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* Dohrenwend and others (1992 #2480) considered the last fault movement to be of Quaternary age.
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr *Comments:* Low slip-rate category is assigned on the basis of poor geomorphic preservation, lack of mapped fault scarps, and relative inactivity of similar distributed faults in the Basin and Range province.
Date and Compiler(s)	2000 Margaret Hisa Redsteer, U.S. Geological Survey
References	#2480 Dohrenwend, J.C., Schell, B.A., and Moring, B.C., 1992, Reconnaissance photogeologic map of young faults in the Ely 1° by 2° quadrangle, Nevada and Utah: U.S. Geological Survey

	Miscellaneous Field Studies Map MF-2181, 1 sheet, scale 1:250,000. #4341 Hose, R.K., and Blake, M.C., Jr., 1976, Geology and mineral resources of White Pine County, Nevada: Nevada Bureau of Mines and Geology Bulletin 85, 105 p. #4402 Kay, M., 1951, North American geosynclines: Geological Society of America Memoir 48, 143 p. #3056 Stewart, J.H., 1980, Geology of Nevada—A discussion to accompany the geologic map of Nevada: Nevada Bureau of Mines and Geology Special Publication 4, 136 p.