

# 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 western Long Valley (Class A) No. 1279

Last Review Date: 2000-11-30

*citation for this record:* Redsteer, M.H., compiler, 2000, Fault number 1279, unnamed faults in western Long Valley, 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 02:16 PM.

|                      |  |
|----------------------|--|
| <b>Synopsis</b>      | These unnamed faults consists of a discontinuous series of scarps and lineaments that extend along the eastern margin of the Tognini Mountains, with down-to-the-east displacement of bedrock against Quaternary sediment. Reconnaissance photogeologic mapping is the source of data. Trench investigations and detailed studies of scarp morphology have not been completed. |
| <b>Name comments</b> | Refers to faults along the western edge of Long Valley and the eastern margin of the Tognini Mountains (part of Maverick Springs Range) near Cabin Spring as mapped by Dohrenwend and others (1991 #2480).   |
| <b>County(s) and</b> | WHITE PINE COUNTY, NEVADA  |

|  |   |
|--|---|
| <b>State(s)</b>                          | WHITE PINE COUNTY, NEVADA   |
| <b>Physiographic province(s)</b>         | BASIN AND RANGE   |
| <b>Reliability of location</b>           | <p>Good<br/>Compiled at 1:100,000 scale.</p> <p><i>Comments:</i> Location based on 1:250,000-scale map of Dohrenwend and others (1992 #2480). Mapping based on photogeologic analysis of 1:24,000-scale color aerial photography supplemented with 1:60,000-scale black-and-white aerial photography, transferred to 1:62,500-scale topographic maps and photographically reduced and transferred to 1:250,000-scale topographic maps, with 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.</p> |
| <b>Geologic setting</b>                  | These unnamed faults are typical of Basin and Range extensional faults; located at the piedmont slope, they define the northeastern margin of the Long Valley. Bedrock exposed by faulting consists of folded and deformed Paleozoic bedrock capped by Tertiary volcanic and intrusive rocks (Hose and Blake, 1976 #4341).  |
| <b>Length (km)</b>                       | 12 km.  |
| <b>Average strike</b>                    | N6°E  |
| <b>Sense of movement</b>                 | Normal  |
| <b>Dip Direction</b>                     | E   |
| <b>Paleoseismology studies</b>           |   |
| <b>Geomorphic expression</b>             | The fault is marked by an abrupt change in relief that coincides with the eastern margin of the Tognini Mountains (part of Maverick Springs Range) along the western margin of Long Valley.   |
| <b>Age of faulted surficial deposits</b> | Quaternary, Paleozoic and Tertiary, (Hose and Blake, 1976 #4341).   |
| <b>Historic earthquake</b>               |   |

|  |   |
|--|---|
| <b>Most recent prehistoric deformation</b> | undifferentiated Quaternary (<1.6 Ma)<br><br><i>Comments:</i> Although timing of most recent prehistorical event is not well constrained, geomorphic criteria by Dohrenwend and others (1992 #2480) suggests possible Pleistocene age for most recent faulting.   |
| <b>Recurrence interval</b>                 |   |
| <b>Slip-rate category</b>                  | Less than 0.2 mm/yr<br><br><i>Comments:</i> 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.  |
| <b>Date and Compiler(s)</b>                | 2000<br>Margaret Hisa Redsteer, U.S. Geological Survey  |
| <b>References</b>                          | #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.<br><br>#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. |

[Questions or comments?](#)

[Facebook](#) [Twitter](#) [Google](#) [Email](#)

[Hazards](#)

[Design](#) [Ground Motions](#) [Seismic Hazard Maps & Site-Specific Data](#) [Faults](#) [Scenarios](#)

[Earthquakes](#) [Hazards](#) [Data](#) [Education](#) [Monitoring](#) [Research](#)

[Home](#) [About Us](#) [Contacts](#) [Legal](#)