

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](#).

Sevier Valley fault (Class A) No. 2502

Last Review Date: 1999-10-01

Compiled in cooperation with the Utah Geological Survey

citation for this record: Black, B.D., and Hecker, S., compilers, 1999, Fault number 2502, Sevier 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 02:55 PM.

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| Synopsis | Poorly understood Quaternary fault near Marysvale in southern Sevier Valley. |
| Name comments | Fault ID: Refers to fault number 9-11 in Hecker (1993 #642). |
| County(s) and State(s) | PIUTE COUNTY, UTAH |
| Physiographic province(s) | COLORADO PLATEAUS |
| Reliability of | Poor |

| | |
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| location | Compiled at 1:24,000 scale. <i>Comments:</i> Mapped by Anderson and others (1978 #4548). Fault traces from 1:50,000-scale mapping of Cunningham and others (1983 #4495). |
| Geologic setting | North-south trending normal fault in the Sevier Valley floor. Surficial deposits in the valley mask a complex area of subsidence from faulting, folding, and subsidence due to removal of salt from buried Jurassic rocks. |
| Length (km) | 7 km. |
| Average strike | N9°W |
| Sense of movement | Normal |
| Dip Direction | W |
| Paleoseismology studies | |
| Geomorphic expression | The fault is defined by a line of low hills adjacent to Sevier River on the east side of the valley. In contrast, alluvial fans to the west descend from the base of the Tushar Range and have smooth, undisrupted profiles. |
| Age of faulted surficial deposits | Quaternary |
| Historic earthquake | |
| Most recent prehistoric deformation | undifferentiated Quaternary (<1.6 Ma) <i>Comments:</i> |
| Recurrence interval | |
| Slip-rate category | Less than 0.2 mm/yr |
| Date and Compiler(s) | 1999 Bill D. Black, Utah Geological Survey Suzanne Hecker, U.S. Geological Survey |

References

#4548 Anderson, R.E., Bucknam, R.C., and Hamblin, W.K., 1978, Road log to the Quaternary tectonics of the Intermountain seismic belt between Provo and Cedar City, Utah: Geological Society of America, Rocky Mountain Section Annual Meeting, Provo, Utah, Field Trip no. 8, 50 p.

#4495 Cunningham, C.G., Steven, T.A., Rowley, P.D., Glassgold, L.B., and Anderson, J.J., 1983, Geologic map of the Tushar Mountains and adjoining areas, Marysvale volcanic field, Utah: U.S. Geological Survey Miscellaneous Investigations Map I-1430, scale 1:50,000.

#642 Hecker, S., 1993, Quaternary tectonics of Utah with emphasis on earthquake-hazard characterization: Utah Geological Survey Bulletin 127, 157 p., 6 pls., scale 1:500,000.

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