

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](#).

North Bridger Creek fault (Class A) No. 737

Last Review Date: 1994-06-03

citation for this record: McCalpin, J.P., compiler, 1994, Fault number 737, North Bridger Creek 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 02:00 PM.

Synopsis	One of many short, west-dipping normal faults that parallel east-directed thrust faults in Mesozoic sedimentary rock in this part of the Overthrust Belt. Little is known about this short normal fault that displaces rock of the Tertiary Wasatch Formation and an overlying erosion surface of unknown age.
Name comments	Fault unnamed in compilation by Gibbons and Dickey (1983). The informal name North Bridger Creek has been informally applied to the fault by J.P. McCalpin. Fault only extends about 4 km north-northeast from North Bridger Creek and is located between Sillem Ridge and Elk Mountain.
County(s) and State(s)	LINCOLN COUNTY, WYOMING
Physiographic province(s)	MIDDLE ROCKY MOUNTAINS

Reliability of location	<p>Good Compiled at 1:250,000 scale.</p> <p><i>Comments:</i> Mapped in reconnaissance (1:100,000 scale) by Gibbons and Dickey (1983 #821). Fault traces recompiled at 1:250,000-scale on map with topographic base.</p>
Geologic setting	<p>One of many short, west-dipping normal faults that parallel east-directed thrust faults in Mesozoic sedimentary rock in this part of the Overthrust Belt. Fault is located between Sillem Ridge and Elk Mountain.</p>
Length (km)	4 km.
Average strike	N17°E
Sense of movement	<p>Normal</p> <p><i>Comments:</i> Shown as normal by Gibbons and Dickey (1983 #821).</p>
Dip Direction	W
Paleoseismology studies	
Geomorphic expression	<p>No fault scarps are known to exist, but the fault lies at the base of somewhat linear west-facing escarpment on rock of the Tertiary Wasatch Formation.</p>
Age of faulted surficial deposits	<p>Tertiary Wasatch Formation and an overlying erosion surface of unknown age; deformation of Quaternary deposits not documented.</p>
Historic earthquake	
Most recent prehistoric deformation	<p>undifferentiated Quaternary (<1.6 Ma)</p> <p><i>Comments:</i> Gibbons and Dickey (1983 #821) suggested Quaternary movement (probably on the basis of the faults proximity to the escarpment), but no specific justification was given.</p>
Recurrence interval	

Slip-rate category	Less than 0.2 mm/yr <i>Comments:</i> Low slip-rate category inferred based on absence of scarps and data to indicate otherwise.
Date and Compiler(s)	1994 James P. McCalpin, GEO-HAZ Consulting, Inc.
References	#821 Gibbons, A.B., and Dickey, D.D., 1983, Quaternary faults in Lincoln and Uinta Counties, Wyoming, and Rich County, Utah: U.S. Geological Survey Open-File Report 83-288, 1 sheet, scale 1:100,000.

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