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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.

Spring Creek fault (Class A) No. 738

Last Review Date: 1994-06-03

citation for this record: **McCalpin, J.P., compiler, 1994, Fault number 738, Spring 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 02:01 PM.**

Synopsis	One of many short, west-dipping normal faults along west side of Bear River Divide that parallel east-directed thrust faults in Mesozoic sedimentary rocks in this part of the Overthrust Belt. This short normal fault displaces rock of the Tertiary Wasatch Formation and an overlying erosion surface.
Name comments	Unnamed in compilation of Gibbons and Dickey (1983). The informal name Spring Creek fault has been applied by J.P. McCalpin to this structure. Fault only extends about 2 km southwest from Spring Creek.
County(s) and State(s)	LINCOLN COUNTY, WYOMING
Physiographic province(s)	MIDDLE ROCKY MOUNTAINS
Reliability of	Good

location	Compiled at 1:250,000 scale. *Comments:* 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.
Geologic setting	One of many short, west-dipping normal faults along west side of Bear River Divide that parallel east-directed thrust faults in Mesozoic sedimentary rock in this part of the Laramide Overthrust Belt.
Length (km)	2 km.
Average strike	N25°E
Sense of movement	Normal *Comments:* Shown as normal by Gibbons and Dickey (1983 #821).
Dip Direction	NW
Paleoseismology studies	
Geomorphic expression	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.
Age of faulted surficial deposits	Tertiary Wasatch Formation and an overlying erosion surface of unknown age; deformation of Quaternary deposits not documented.
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* 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.
Recurrence interval	
Slip-rate	Less than 0.2 mm/yr

category	*Comments:* 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.