

# 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](#).

## South Horse Prairie basin fault (Class A) No. 650

Last Review Date: 1993-03-31

Compiled in cooperation with the Idaho  
Geological Survey and the Montana Bureau of  
Mines and Geology

*citation for this record:* Haller, K.M., compiler, 1993, Fault number 650, South Horse Prairie basin 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 02:03 PM.

<b>Synopsis</b>	History of fault is poorly known, no detailed studies have been completed. Sole source of data is Ostenaa and Wood (1990 #318).
<b>Name comments</b>	Fault shown in Ostenaa and Wood (1990 #318). Fault extends from northern end of bedrock spur in Beaverhead Mountains, west of Horse Prairie Creek, to south of Cruikshank Creek.  <b>Fault ID:</b> Not shown in any previous compilation.

<b>County(s) and State(s)</b>	BEAVERHEAD COUNTY, MONTANA LEMHI COUNTY, IDAHO
<b>Physiographic province(s)</b>	NORTHERN ROCKY MOUNTAINS
<b>Reliability of location</b>	Poor Compiled at 1:250,000 scale.  <i>Comments:</i> Fault trace is from 1:700,000-scale map of Ostenaa and Wood (1990 #318).
<b>Geologic setting</b>	High-angle, down-to-west, normal fault along eastern side of Horse Prairie basin in the northern Beaverhead Mountains. No known estimates of total displacement exist.
<b>Length (km)</b>	25 km.
<b>Average strike</b>	N2°E
<b>Sense of movement</b>	Normal  <i>Comments:</i> (Ostenaa and Wood, 1990 #318)
<b>Dip Direction</b>	W
<b>Paleoseismology studies</b>	
<b>Geomorphic expression</b>	Ostenaa and Wood (1990 #318) report no evidence of late Quaternary movement but Quaternary deposits have limited aerial extent along the fault.
<b>Age of faulted surficial deposits</b>	
<b>Historic earthquake</b>	
<b>Most recent prehistoric deformation</b>	undifferentiated Quaternary (<1.6 Ma)  <i>Comments:</i> Fault has no characteristics of being active in the late Quaternary, but it cuts Miocene basin fill and is considered to be potential seismic source (Ostenaa and Wood, 1990 #318). They show fault as Cenozoic with possible or inferred Quaternary movement.

<b>Recurrence interval</b>	
<b>Slip-rate category</b>	Less than 0.2 mm/yr <i>Comments:</i> Inferred low slip rate based on absence of evidence for late Quaternary movement.
<b>Date and Compiler(s)</b>	1993 Kathleen M. Haller, U.S. Geological Survey
<b>References</b>	#318 Ostenaar, D., and Wood, C., 1990, Seismotectonic study for Clark Canyon Dam, Pick-Sloan Missouri Basin Program, Montana: U.S. Bureau of Reclamation Seismotectonic Report 90-4, 78 p., 1 pl.

[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](#)