Jump to Navigation

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 northwest of Condon (Class B) No. 814

Last Review Date: 2002-12-03

citation for this record: **Personius, S.F., compiler, 2002, Fault number 814, unnamed faults northwest of Condon, 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 03:17 PM.**

Synopsis	Faults northwest of Condon are predominantly northwest-trending, oblique strike faults. These faults offset volcanic rocks of the Miocene Columbia River Basalts Group, but no scarps in Quaternary deposits have been described along these faul Herein we classify these faults as Class B structures until further studies are cond
Name comments	These unnamed northwest-trending faults are mapped northwest of Condon in no central Oregon (Swanson and others, 1981 #3496; Bela, 1982 #3584; Tolan and Reidel, 1989 #3765; Pezzopane, 1993 #3544; Geomatrix Consultants Inc., 1995 #; Madin and Mabey, 1996 #3575; Weldon and others, 2002 #5648).
County(s) and State(s)	GILLIAM COUNTY, OREGON SHERMAN COUNTY, OREGON
Physiographic province(s)	COLUMBIA PLATEAU

Reliability of location	Good Compiled at 1:250,000 scale. *Comments:* Location of fault from ORActiveFaults (http://www.oregongeology.org/arcgis/rest/services/Public/ORActiveFaults/MapS downloaded 06/02/2016) attributed to 1:250,000-scale mapping of Swanson and ((1981 #3496.
Geologic setting	Faults northwest of Condon are predominantly northwest-trending, normal and/or strike-slip faults. These faults offset volcanic rocks of the Miocene Columbia Riv Basalts Group (Swanson and others, 1981 #3496; Bela, 1982 #3584; Walker and MacLeod, 1991 #3646).
Length (km)	22 km.
Average strike	N52°W
Sense of movement	Normal, Right lateral *Comments:* The two southernmost structures northwest of Condon are mapped as northwest-trending oblique faults with strike-slip displacement of unknown sense northernmost fault is mapped as two high-angle faults, a northern fault that trends north and is down-to-the-east, and a southern fault that trend northeast and is dow the-southwest (Swanson and others, 1981 #3496; Bela, 1982 #3584). Pezzopane (#3544) inferred that these other nearby faults with northwest strikes have right-la strike-slip displacements.
Dip Direction	NE; SW
Paleoseismology studies	
Geomorphic expression	No information on the geomorphic expression of these faults has been described.
Age of faulted surficial deposits	These faults offset volcanic rocks of the Miocene Columbia River Basalts Group (Swanson and others, 1981 #3496; Bela, 1982 #3584; Walker and MacLeod, 199 #3646); no evidence of faulted Quaternary deposits has been described.
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* Despite the lack of documented Quaternary displacement, the faults northwest of Condon have been mapped as probable Quaternary (<1.6–1.8 Ma) fa by Pezzopane (1993 #3544) and subsequent compilations (Geomatrix Consultant

	1995 #3593; Madin and Mabey, 1996 #3575; Weldon and others, 2002 #5648). W classify these faults as Class B structures until further studies are conducted.
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr *Comments:* No published slip rates are available for the faults northwest of Cond but the lack of documentation of scarps in Quaternary deposits suggests low rates Quaternary slip.
Date and Compiler(s)	2002 Stephen F. Personius, U.S. Geological Survey
References	#3584 Bela, J.L., 1982, Geologic and neotectonic evaluation of north-central Ore The Dallas 1 x 2 quadrangle: State of Oregon, Department of Geology and Miner Industries Geologic Map Series GMS-27, 2 sheets, scale 1:250,000. #3593 Geomatrix Consultants, Inc., 1995, Seismic design mapping, State of Oreg Technical report to Oregon Department of Transportation, Salem, Oregon, under Contract 11688, January 1995, unpaginated, 5 pls., scale 1:1,250,000. #3575 Madin, I.P., and Mabey, M.A., 1996, Earthquake hazard maps for Oregon: of Oregon, Department of Geology and Mineral Industries Geological Map Serie GMS-100, 1 sheet. #3544 Pezzopane, S.K., 1993, Active faults and earthquake ground motions in Or Eugene, Oregon, University of Oregon, unpublished Ph.D. dissertation, 208 p. #3496 Swanson, D.A., Anderson, J.L., Camp, V.E., Hooper, P.R., Taubeneck, W.I and Wright, T.L., 1981, Reconnaissance geologic map of the Columbia River Bas Group, northern Oregon and western Idaho: U.S. Geological Survey Open-File R 81-797, 35 p., 5 pls., scale 1:250,000. #3765 Tolan, T.L., and Reidel, S.P., 1989, Structure map of a portion of the Colu River flood-basalt Province, *in* Reidel, S.P., and Hooper, P.R., eds., Volcanism an tectonism in the Columbia River Flood-Basalt Province: Geological Society of America Special Paper 239, 1 sheet, scale 1:500,000. #3646 Walker, G.W., and MacLeod, N.S., 1991, Geologic map of Oregon: U.S. Geological Survey, Special Geologic Map, 2 sheets, scale 1:500,000. #5648 Weldon, R.J., Fletcher, D.K., Weldon, E.M., Scharer, K.M., and McCrory, 2002, An update of Quaternary faults of central and eastern Oregon: U.S. Geolog

	Survey Open-File Report 02-301 (CD-ROM), 26 sheets, scale 1:100,000.