

# 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](#).

## Olympia structure (Class B) No. 547

Last Review Date: 2017-08-18

*citation for this record:* , compiler, 2017, Fault number 547, Olympia structure, 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 03:05 PM.

<b>Synopsis</b>	
<b>Name comments</b>	
<b>County(s) and State(s)</b>	THURSTON COUNTY, WASHINGTON MASON COUNTY, WASHINGTON
<b>Physiographic province(s)</b>	PACIFIC BORDER
<b>Reliability of location</b>	Poor Compiled at 1: scale.  <i>Comments:</i> Location of fault from GER_Seismogenic_WGS84 ( <a href="http://www.dnr.wa.gov/publications/ger_portal_seismogenic_features.zip">http://www.dnr.wa.gov/publications/ger_portal_seismogenic_features.zip</a> , downloaded 05/23/2016) attributed to Brocher and others (2001 #4718), Blakely and others (2009 #7609), Clement and others (2010 #7612); scale of mapping was unspecified.

<b>Geologic setting</b>	
<b>Length (km)</b>	135 km.
<b>Average strike</b>	
<b>Sense of movement</b>	
<b>Dip Direction</b>	Unknown
<b>Paleoseismology studies</b>	
<b>Geomorphic expression</b>	
<b>Age of faulted surficial deposits</b>	
<b>Historic earthquake</b>	
<b>Most recent prehistoric deformation</b>	Unspecified <i>Comments:</i>
<b>Recurrence interval</b>	
<b>Slip-rate category</b>	Insufficient data
<b>Date and Compiler(s)</b>	2017
<b>References</b>	<p>#7609 Blakely, R.J., Sherrod, B.L., Hughes, J.F., Anderson, M.L., Wells, R.E., and Weaver, C.S., 2009, Saddle Mountain fault deformation zone, Olympic Peninsula, Washington—Western boundary of the Seattle uplift: <i>Geosphere</i>, v. 5, p. 105–125, doi:10.1130/GES00196.1.</p> <p>#4718 Brocher, T.M., Parsons, T., Blakely, R.J., Christensen, N.I., Fisher, M.A., Wells, R.E., and SHIPS Working Group, 2001, Upper crustal structure in Puget Lowland, Washington—Results from the 1998 seismic hazards investigation in Puget Sound: <i>Journal of Geophysical Research</i>, v. 106, p. 13,541–13,564.</p> <p>#7612 Clement, C.R., Pratt, T.L., Holmes, M.L., Sherrod, B.L., 2010,</p>

High-resolution seismic reflection imaging of growth folding and shallow faults beneath the southern Puget Lowland, Washington State: Bulletin of the Seismological Society of America, v. 100, p. 1710–1723, DOI: 10.1785/0120080306 .

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