



**Seattle Fault Zone**

The Seattle Fault Zone represents the area where several parallel strands of the Seattle fault have either broken the ground surface or caused deformation of geologic materials. On Mercer Island, evidence for the Seattle fault consists of offset strata and deformation such as sheared, liquefied and folded strata.

The Seattle fault is one of several active crustal faults in the Puget Lowland undergoing further research. The location of the Seattle fault zone was derived from this geologic mapping and from Blakely and others (2002), and Brocher and others (2004).

Blakely, R.J., Wells, R.E., Weaver, C.S., and Johnson, S.Y., 2002, Location, structure, and seismicity of the Seattle fault zone, Washington: Evidence from aeromagnetic anomalies, geologic mapping, and seismic-reflection data: Geological Society of America Bulletin, v. 114, p. 169-177.

Brocher, T.M., Blakely, R.J., and Wells, R.E., 2004, Interpretation of the Seattle uplift, Washington, as a passive-roof duplex, Bulletin of the Seismological Society of America, August 2004, vol. 94, no. 4, p. 1379-1401.

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| <p><b>Geologic Units</b></p> <p><b>Nonglacial Deposits (Holocene)</b></p> <ul style="list-style-type: none"> <li>Qp - Peat</li> <li>Ql - Lake deposits</li> <li>Qw - Fan deposits</li> <li>Qal - Alluvium</li> </ul> <p><b>Deposits of Fraser Glaciation (Pleistocene)</b></p> <ul style="list-style-type: none"> <li>Qvr - Vashon recessional outwash deposits</li> <li>Qvrl - Vashon recessional lacustrine deposits</li> <li>Qvrlc - Vashon recessional coarse-grained lacustrine deposits</li> <li>Qvt - Vashon ice-contact deposits</li> <li>Qvtl - Vashon subglacial till</li> <li>Qva - Vashon advance outwash</li> <li>Qvcl - Lawton Clay</li> </ul> <p><b>Older Glacial and Nonglacial Deposits (Pleistocene)</b></p> <ul style="list-style-type: none"> <li>Qpfn - Pre-Fraser nonglacial deposits</li> <li>Qob - Olympia beds</li> <li>Qpof - Pre-Olympia fine-grained deposits</li> <li>Qpoc - Pre-Olympia coarse-grained deposits</li> <li>Qpog - Pre-Olympia glacial deposits</li> <li>Qpogc - Pre-Olympia coarse-grained glacial deposits</li> <li>Qpogf - Pre-Olympia fine-grained glacial deposits</li> <li>Qpogt - Pre-Olympia glacial till</li> <li>Qpogd - Pre-Olympia glacial diamict</li> <li>Qpon - Pre-Olympia nonglacial deposits</li> <li>Qponc - Pre-Olympia coarse-grained nonglacial deposits</li> <li>Qponf - Pre-Olympia fine-grained nonglacial deposits</li> </ul> | <ul style="list-style-type: none"> <li>Scarpis</li> <li>Qm - Mass wastage deposits</li> <li>Qls - Landslide deposits</li> <li>m - Modified land</li> <li>af - Artificial fill</li> <li>gr - Graded Land</li> <li>Seattle Fault Zone</li> </ul> |
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## Geologic Map of Mercer Island, Washington

by Kathy G. Troost & Aaron P. Wisler  
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0 0.25 0.5 Miles  
0 0.5 1 Kilometers  
1:12,000