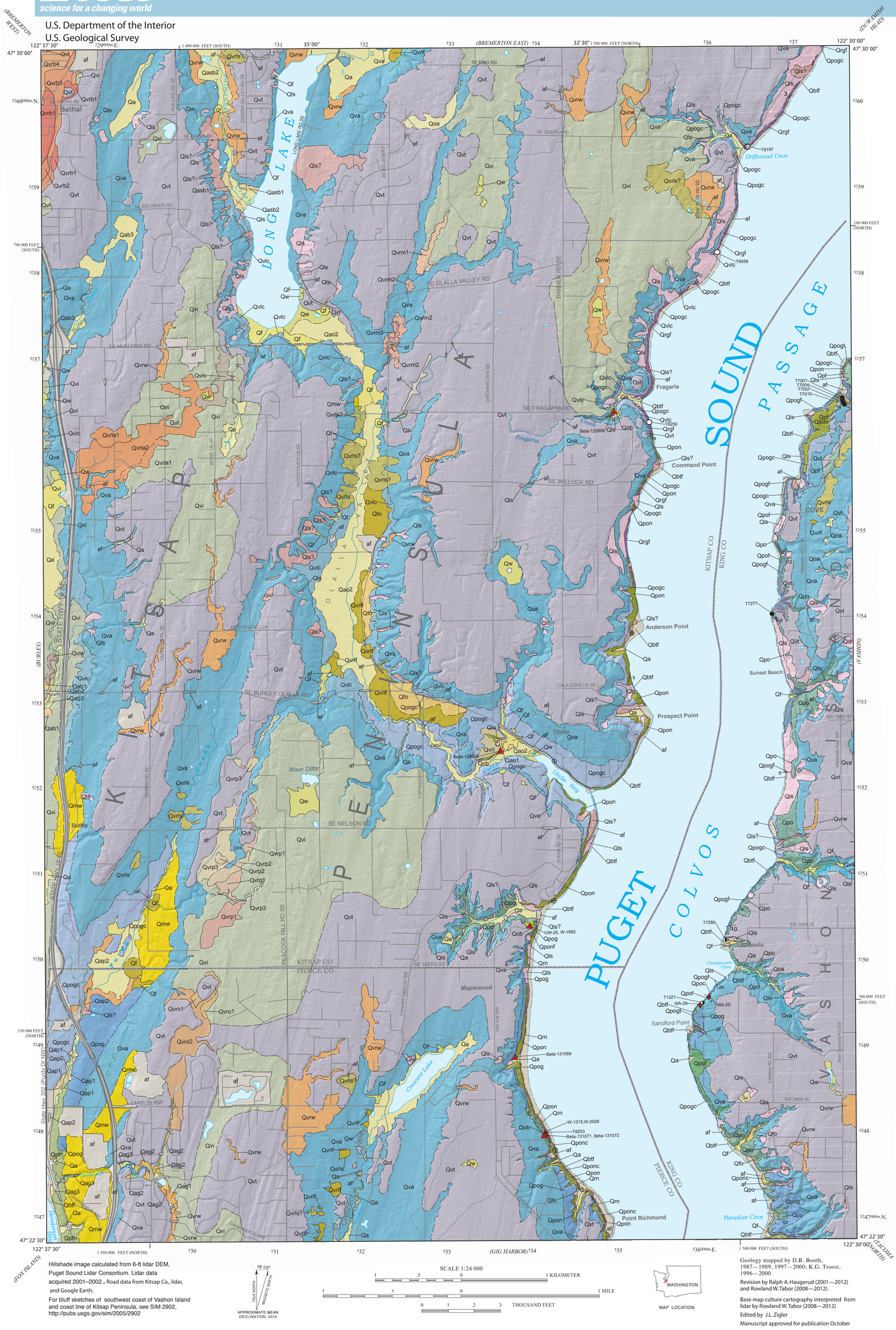
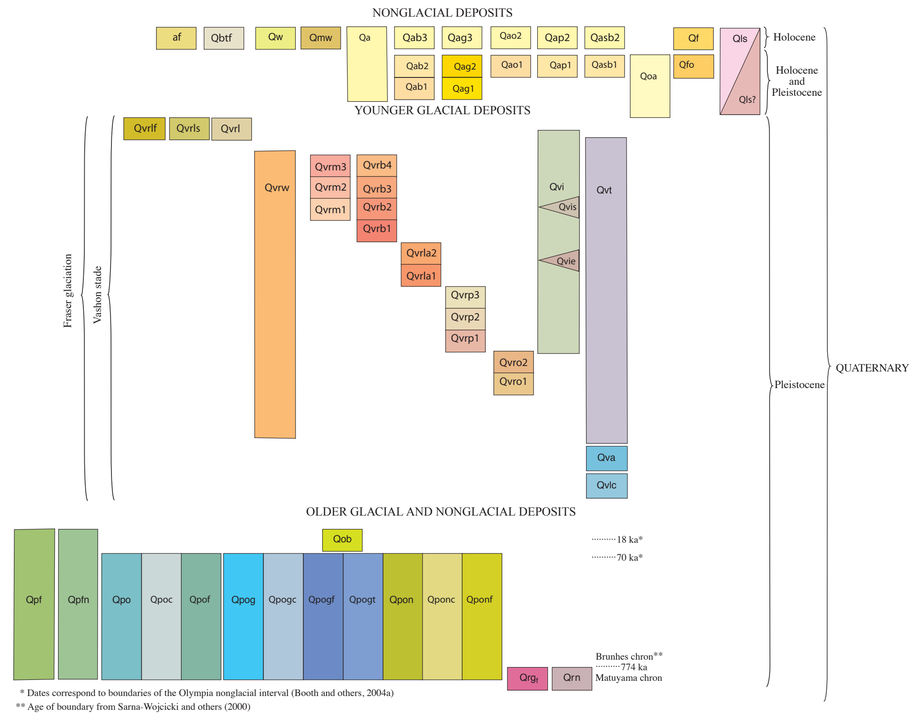
U.S. Department of the Interior
U.S. Geological Survey

Scientific Investigations Map 3277
Pamphlet accompanies map



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LIST OF MAP UNITS

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- **af** — Artificial fill (Holocene)
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- **Qw** — Wetland deposits (Holocene)
- **Qmw** — Mass-wasting deposits (Holocene)
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- **Qab3** — Alluvium of Burley Creek, unit 3 (Holocene)
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Terraces along Salmonberry Creek

- **Qasb2** — Alluvium of Salmonberry Creek, unit 2 (Holocene)
- **Qasb1** — Alluvium of Salmonberry Creek, unit 1 (Holocene and Pleistocene)
- **Qf** — Fan deposits (Holocene)
- **Qoa** — Older alluvium (Holocene and Pleistocene)
- **Qfo** — Fan deposits, older (Holocene and Pleistocene)
- **Qls / Qls?** — Landslide deposits (Holocene and Pleistocene)

YOUNGER GLACIAL DEPOSITS

Deposits of the Vashon stade of the Fraser glaciation of Armstrong and others (1965) (Pleistocene)

- **Qvrlf** — Sublacustrine alluvial fans
- **Qvrls** — Sublacustrine landslides
- **Qvrl** — Sublacustrine deposits
- **Qvrw** — Recessional outwash deposits graded to Lake Russell

Outwash in the SE Mullenix Road area

- **Qvrm3** — Outwash of SE Mullenix Road, unit 3
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- **Qvrm1** — Outwash of SE Mullenix Road, unit 1

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- **Qvro2** — Outwash of 160th Steet, unit 2
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- **Qvi** — Ice-contact deposits
- **Qvis** — Subglacial outwash
- **Qvie** — Esker
- **Qvt** — Till
- **Qva** — Advance outwash deposits
- **Qvlc** — Lawton Clay

OLDER GLACIAL AND NONGLACIAL DEPOSITS

- **Qpf** — Sedimentary deposits of pre-Fraser glaciation age (Pleistocene)
- **Qpfn** — Nonglacial deposits
- **Qob** — Olympia beds of Minard and Booth (1988) (Pleistocene)
- **Qpo** — Deposits of pre-Olympia age (Pleistocene)
- **Qpoc** — Coarse-grained deposits
- **Qpof** — Fine-grained deposits
- **Qpog** — Glacial deposits
- **Qpogc** — Coarse-grained deposits
- **Qpogf** — Fine-grained deposits
- **Qpogt** — Till deposits
- **Qpon** — Nonglacial deposits
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Reversely magnetized deposits (Pleistocene)

- **Qrgf** — Fine-grained glacial deposits
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EXPLANATION OF GEOLOGIC SYMBOLS

- **Contact**—Dashed where approximately located
- **Variable boundary between beaches and tidal flats with salt water**
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- **Strike and dip of beds** — Inclined (25) / Horizontal
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Paleomagnetic sample localities

- T7277 ● **Normal magnetization**
- T7280 ◑ **Transitional magnetization**
- T9058 ○ **Reversed magnetization**
- Beta-128806 ▲ **^{14}C age locality**—See table 1 in pamphlet for ages
- WA-26 ◆ **Infrared-stimulated luminescence (IRSL) age localities (locally smaller symbol for clarity)**—See table 2 in pamphlet for ages
- **Prominent nick suggesting Pleistocene lake shoreline**

Lidar-revised Geologic Map of the Olalla 7.5′ Quadrangle, King, Kitsap, and Pierce Counties, Washington

By

Rowland W. Tabor[1], Ralph A. Haugerud[1], Derek B. Booth[2], and Kathy Goetz Troost[2]

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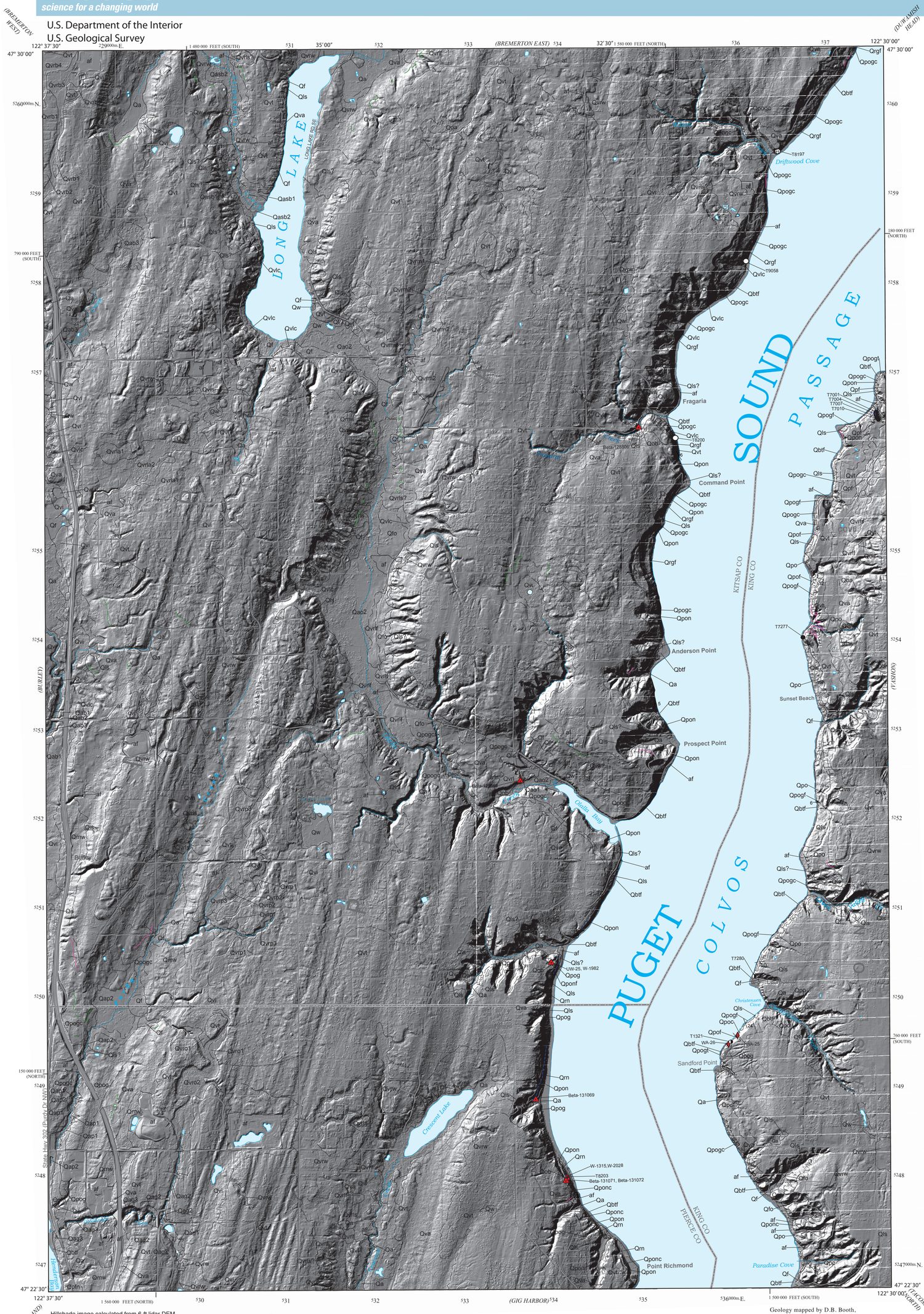
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[1]U.S. Geological Survey
[2]University of Washington

U.S. Department of the Interior
U.S. Geological Survey

Scientific Investigations Map 3277
Pamphlet accompanies map



Hillshade image calculated from 6-ft lidar DEM, Puget Sound Lidar Consortium. Lidar data acquired 2001–2002. Road data from Kitsap Co., lidar, and Google Earth.

For bluff sketches of southwest coast of Vashon Island and coast line of Kitsap Peninsula, see SIM 2902, http://pubs.usgs.gov/sim/2005/2902

SCALE 1:24 000

1 KILOMETER
1 MILE
THOUSAND FEET

APPROXIMATE MEAN DECLINATION, 2013

MAP LOCATION

Geology mapped by D.B. Booth, 1987—1989, 1997—2000; K.G. Troost, 1996—2000

Revision by Ralph A. Haugerud (2001—2012) and Rowland W. Tabor (2008—2012).

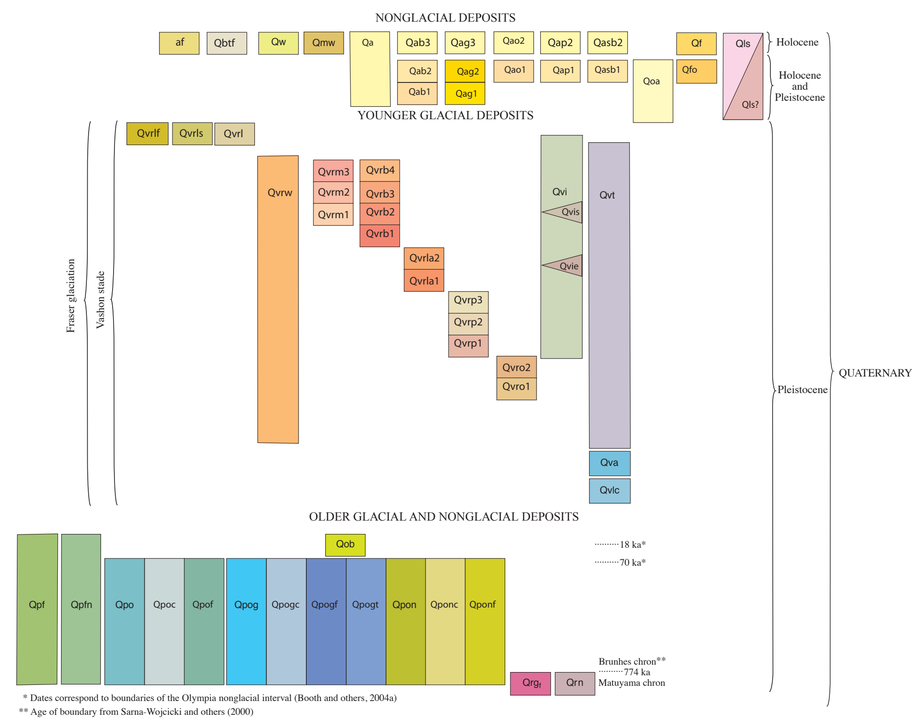
Base map culture cartography interpreted from lidar by Rowland W. Tabor (2008—2012)

Edited by J.L. Zigler

Manuscript approved for publication October 24, 2013

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