

Figure 3. A. Hillshaded digital-elevation model of lidar data near Allyn, Washington. B. Small-scale lidar image of cross-cutting scarps east of Case Inlet. C. Small-scale lidar image of scarp near Prickett Lake and Catfish Lake.

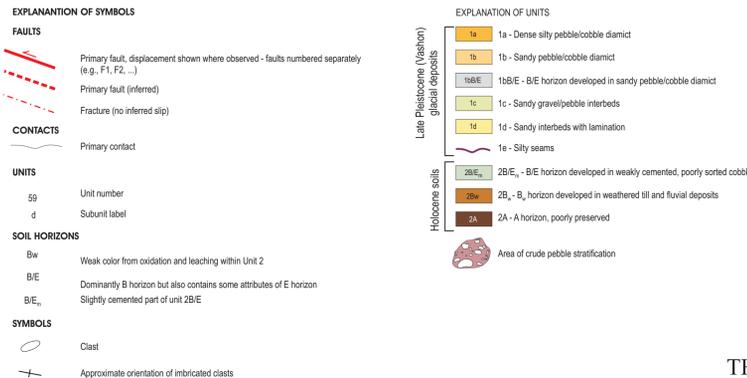
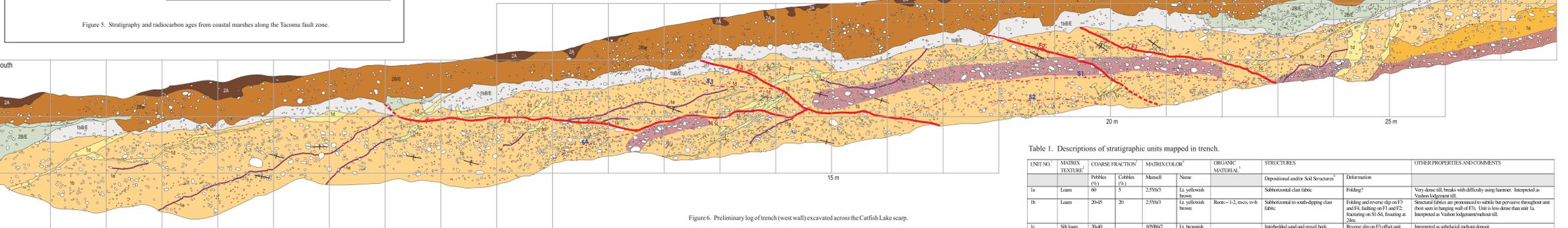
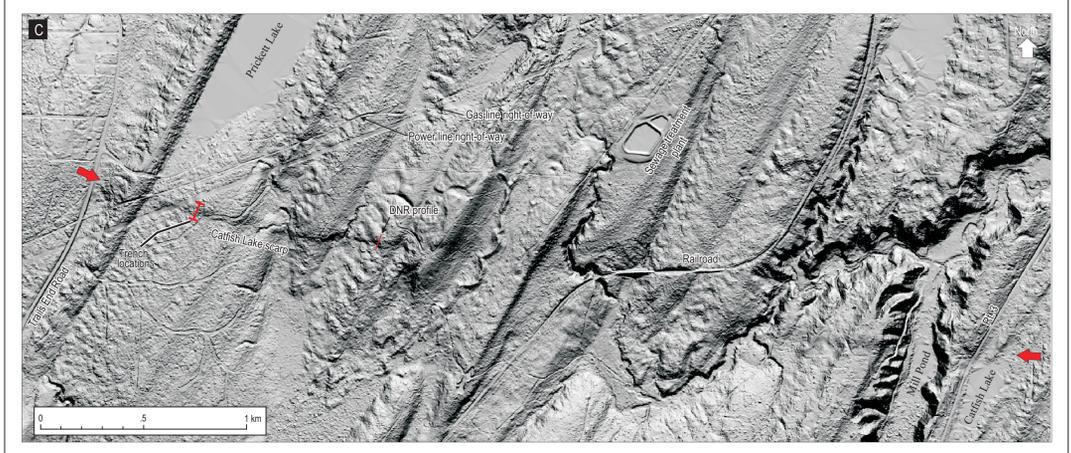


Table 1. Descriptions of stratigraphic units mapped in trench.

UNIT NO.	MATRIX TEXTURE (PE)	COARSE FRACTION (CB)	MATRIX COLOR	ORGANIC MATERIAL	STRUCTURES	OTHER PROPERTIES AND COMMENTS	
1a	Loam	40	25Y6/3	LI, yellowish brown	Subhorizontal clay fabric	Folding? Very dense till, breaks with difficulty using hammer. Interpreted as Vashon lodgment till.	
1b	Loam	20-45	25Y6/3	LI, yellowish brown	Subhorizontal to south-dipping clay fabric	Folding and reverse slip on F3 and F4, faulting on F1 and F2, fracturing on S3-S4, faulting at 2m. Interpreted as Vashon lodgment/till deposit.	
1c	Silt loam	20-40	10YR6/2	LI, brownish gray	Interbedded sand and gravel beds	Reverse slip on F3 offset unit above R10m, south-dipping orientation. Interpreted as subglacial melt-out deposit.	
1d	Silt loam	5	10YR6/2	LI, brownish gray	Poorly defined laminae (0.5 m thick average), internally deformed in places.	Interpreted as subglacial melt-out deposit.	
1e	Silt loam		25Y6/2	LI, brownish gray	Thin, anastomosing beds that appear as one layer, appear to fill cracks.	Truncated by F3 and F4. Interpreted as thin fracture filled with silty-sand material possibly worked into cracks from above.	
2B(E)	Loam	20-45	10YR5/6 with coating of 2.5Y2/2	LI, yellowish brown with coating of light gray	Roots - 1, 2, vL, vert, w	Interpreted as 10E horizon developed on the top of unit 1b and offset in post-glacial times on F3 and F4.	
2B(E)	Massive	25	2.5	10YR4/3	Roots - 2, vL, vert	Soil - weak color developed and fine silty material throughout is interpreted as the result of weak E horizon development. Possibly offset by F3 at ~1m.	
2B(E)	Unit is similar to unit 2B(E) except that it is cemented in places.					Interpreted as water-lain sand and greenish filling poorly preserved channels eroded into the top of unit 1b, with weakly developed BE horizon. Unit is very loose and lithologically distinct from units 1a and 1b. Interpreted as channel-fill material associated with 2B(E) but is slightly indurated possibly from post-depositional concentration during soil formation or by induration of flow till into channels during deposition. Unit is very loose (this designation based on color). Silt in unit possibly derived from other weathering of unit 1b or coarse deposition.	
2B(e)	Leamy sand in sandy loam	20	2.5	10YR6/3	Pink brown	Roots - 1, ov, h, 2, m, s-w, -h, 3, vL, w	Soil - soil is massive and has weak color developed from oxidation and leaching.
2A	A horizon material poorly preserved and consists of small pecks of organic material associated with areas of large modern trees. Lack of A horizon is likely anthropogenic.						

THE CATFISH LAKE SCARP, ALLYN, WASHINGTON: PRELIMINARY FIELD DATA AND IMPLICATIONS FOR EARTHQUAKE HAZARDS POSED BY THE TACOMA FAULT

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