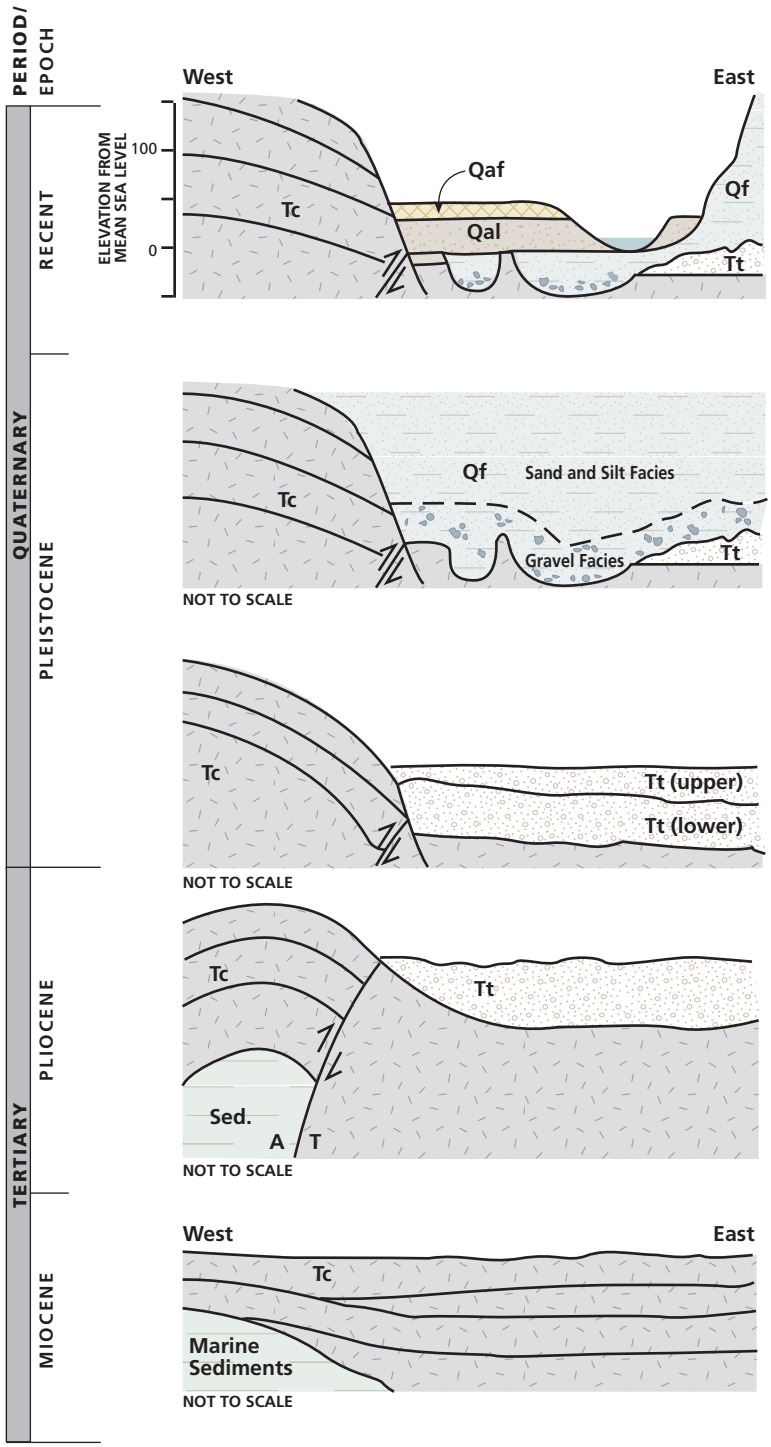
5/29/03 Fig3_2 GenGeoHistory



Qaf Fill

Qal Fluvial Deposits

Entrenchment of the present Willamette River down through fluviolacustrine deposits. River deposited sands and silts in the incised flood plain.

Qf Pleistocene Fluviolacustrine Deposits

Erosion of Troutdale Formation and Columbia River basalt from Lake Bonneville and Lake Missoula Floods (0.012-0.017 m.y. ago). Deposition of fluviolacustrine deposits with large stream erosional depositional features (scour channels, gravel bars, slack-water sand and silts).

Cascadia Uplift and crustal warping (~2 m.y. ago) resulting in the Tualatin Mountain Anticline formation. Upper member of the Troutdale deposited 2-5 m.y. ago.

Tt Troutdale Formation and Sandy River Mudstone

Lower member fluvial deposition of sand and gravel deposits (5-12 m.y. ago) from ancestral river systems. Sandy River Mudstone = overbank silts. Normal faulting with right-lateral strike-slip movement.

Tc Columbia River Basalt

Multiple volcanic fissure eruptions (12-16.5 m.y. ago) produced flows of the Columbia River Basalt Group.

DO NOT QUOTE OR CITE. This document is currently under review by the US EPA and its federal, state, and tribal partners, and is subject to change in whole or in part.

LWG
LOWER WILLAMETTE GROUP

A (away) = Strike-slip fault motion to the north
T (toward) = Strike-slip fault motion to the south

Reference: Modified from Geraghty & Miller, Inc. Figure 3-18, Feb. 1991 by Dr. Marvin Beeson (personal communication, 2003).

Figure 3-2
Portland Harbor RI/FS
Generalized Geologic History
Portland Harbor Area, Portland, Oregon
GROUNDWATER SOLUTIONS, INC.