Chehalis River

Flood Plain and Channel Patterns

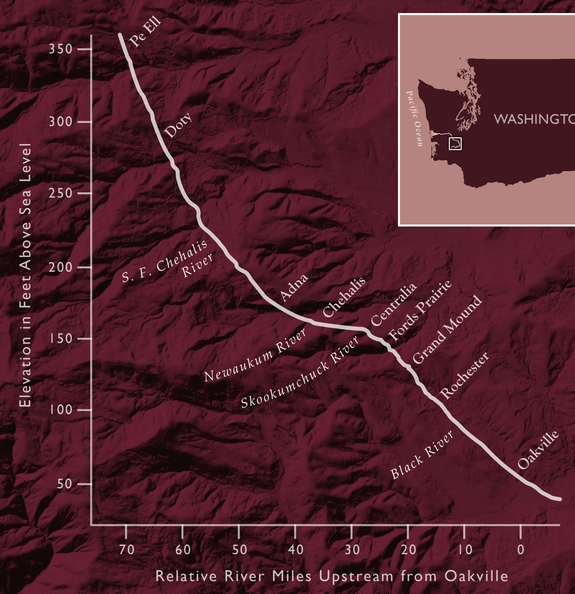
Chehalis Flood Plain Relative Elevation

Approximately 50 feet above Chehalis River surface elevation (and higher)

Chehalis River surface elevation (and lower)

The imagery below highlights the Chehalis River flood plain and its current and former channels. The extent of the map displays the river from Pe Ell, in the bottom left corner, downstream to Oakville, in the upper left corner. The flood plain is shown using a lidar-derived relative elevation model that displays the height above the adjacent Chehalis River using a white to dark red color ramp. The brightest white areas represent an elevation of 0 feet and are at or below river surface. As elevation increases in the flood plain, the white progressively changes from light red to dark red, with dark red representing an elevation approximately 50 feet above the river surface (see elevation bar at left). The red saturation is maintained outside of the flood plain to illustrate the surrounding topography.

For several river miles downstream of Pe Ell, the Chehalis River is confined to a narrow valley, with limited abandoned channels in the flood plain. Downstream of the confluence with the South Fork Chehalis River, landslides have pinned the Chehalis River to a single channel for over one mile. At the exit of the constriction just west of Adna, the river valley gradually widens and abandoned river channels become increasingly evident in the widening flood plain northward through Chehalis. At Centralia, the river flows through a brief constriction before the confluence with the Skookumchuck River, after which the river gradient steepens (see elevation profile at left) before passing Fords Prairie. The flood plain broadens and widens dramatically at Rochester at the confluence of the Black River, where abundant abandoned channels dominate the nearly three-mile-wide flood plain. The flood plain narrows again at Oakville and the Chehalis River continues flowing over 30 miles to Grays Harbor and the Pacific Ocean (see inset maps).



Elevation Profile of the Chehalis River from Pe Ell to Oakville

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http://file.dnr.wa.gov/publications/ger_presentations_coe_chehalis_river_floodplain.pdf