

**SHORELINE AREA (Reach Code): SQUALICUM 7**

**REACH NUMBER: 7**

Land Use	Current Land Use	Majority of the land is undeveloped. Portions of the northern half of the reach are publicly owned but are not public park property. (Ref# 8,37,71)
	Zoning	52.4 acres industrial, 9.5 acres residential multi-family, 8.3 acres public. (Ref# 54,104)
Potential Species Present	Wildlife species	In 96% of the reach: presence of an abundance of garter snakes and lizards with denning habitat; a variety of non-urban mammals, including habitat specific species; a variety of non-urban birds, including habitat specific species; and salamanders or newts and frogs. Large and medium animal movement easy in nearly all of the reach. (Ref# 61,69,70,105)
	Fish species	Chinook, Coho, Sea-run Cutthroat, Steelhead. Presumed for Bull trout and Chum. (Ref# 69,70,94,105)
	PHS species/habitat	Fish accessible wetlands in valley. Approximately 96% of the reach has habitat for breeding/rearing/wintering use by multiple PHS or SC. (Ref# 24,92,93,105)
	TSE species	Bull trout (FT), Chinook (FT & SC), Coho (FCo), and Cutthroat (FCo). (Ref# 92,93,105)
	Invasive wildlife/fish species	No data
Physical Environment	Acres of land in reach	70.2 acres total with 69.2 acres of land and 1.0 acres of water (Ref# 13)
	Aquatic vegetation	No data
	Slope	Generally flat, in outwash valley, slope class 2-5%. Steep ridge along southern boundary of valley and SMA, slope classes 20-35% and 35-50%. (Ref# 21)
	Buildings	2 covering 0.03 acres total (Ref# 16)
	Culverts/stormwater utilities	Two detention facilities (0.58 ac). Culvert or tunnel under Hannegan Road. Sewer mains located along northern portion of reach, stormwater drains in northern and southern portions of reach. No stormwater discharge points indicated, however based on existing drain lines, 5 discharges are possible. (Ref# 39,40,41,42)
	Geology	Southern portion of reach is glaciomarine drift, the lower valley is continental glacial outwash. Seismic Hazard Areas (geologic units) and Landslide Hazard Areas on 15-35% or greater slopes. (Ref# 21,103)
	Tributary creeks	None indicated (Ref# 8,57,59,71)
	Wetlands	(Ref# 11,52)
	Impervious surface	68% pervious, 29% semi-pervious, 3% impervious (Ref# 12)
	Invasive plant species	reed canary grass dominates the herbaceous pasture (Ref# 100)
	Roads/transportation	Hannegan Road is upper terminus of reach. No roads within reach. Old railroad grades are present. Total of 0.1 miles or 0.5 acres of road. (Ref# 14,35,36,44,45,46)
	Soils	The northern portion of the reach has hydric soils, very low filtration/higher runoff potential (Hydrologic soil Group D). The very southern portion of the reach has high filtration/low runoff soils (Group A). (Ref# 51,63)
	Topography	110' to 208' range; 123' mean. (Ref# 47)
	FEMA	52.0 acres in 100 year floodplain, 20.8 acres in the floodway (Ref# 19)
	Terrestrial Vegetation	Lower half of the reach is mixed deciduous/coniferous forest with shrub understory. Upper half of reach is dominated by pasture grasses, predominately reed canary grass. The southern creek buffer is dominated by shrubs and regenerating young trees. The flood plain at the upper end of the reach is dominated by wetland (majority is emergent). Nearly all of the reach is diverse multi-structured native habitat of high quality (particularly near the creek); forest with mature component and emerging young trees. (Ref# 8,20,71)

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<b>Riparian Function</b>	DOE 303(d)	None indicated (Ref# 83,89)
	Channel confinement	Unconfined (Ref# 22,23)
	Channel gradient	<1% (Ref# 22,23)
	Channel migration zone	Some migration is available since the creek is flowing through a flood plain that is undeveloped. Restraints include the railroad grades in the valley. (Ref# 22,23,94)
	Creosote structures	No data
	Fish passage blockages	None indicated (Ref# 15,94)
	In-water structures	None indicated (Ref# 8,18,43,71)
	LWD presence	None indicated
	Non-point source pollution	No data
	Point source pollution	No data
	Riffle/pool analysis	No data
	Aquatic substrate type	No data
	Toxic sites/land fills	None indicated (Ref# 80)
<b>Historic &amp; Cultural</b>	Historic aerials	No data
	Archeological sites	No data
	Historic sites	None indicated (Ref# 77)
	Parks & public access	No public access. However, city owns large parcel in upper portion of the reach – possible restoration area. (Ref# 33,34,36,48,54)
<b>Function Analysis</b>	<p><b>Reach Function</b></p> <ul style="list-style-type: none"> <li>Hydrologic</li> <li>Shoreline Vegetation</li> <li>Habitat</li> </ul> <p><b>Limiting Factors</b></p> <p><b>Functions</b></p> <ul style="list-style-type: none"> <li>Sustainable</li> <li>Not Sustainable</li> </ul> <p><b>Priority Actions</b></p> <p><b>Current Enhancement Projects</b></p> <p><b>Preservation/Enhancement Opportunities</b></p>	<p>Unimpaired.</p> <p>Unimpaired lower half of reach. Upper reach impaired by invasive species (reed canary grass)</p> <p>Slightly Impaired. Invasive species</p> <ul style="list-style-type: none"> <li>Zoning</li> <li>Railroad grade along northern boundary – restricts channel migration</li> <li>Water quality</li> <li>Invasive species</li> </ul> <p>All three functions are sustainable with improvements.</p> <p>None</p> <ul style="list-style-type: none"> <li>Canopy cover in upper reach</li> <li>In-stream structures</li> <li>Water quality improvement</li> </ul> <p>None are recorded for this reach</p> <p>Emergent wetland vegetation improvement (north half of reach) (Ref# 4,24,61,62,69,70,71,75,89 for above)</p>