

SHORELINE AREA (Reach Code): WHATCOM 2

REACH NUMBER: 13

Land Use	Current Land Use	Area is dominated by municipal buildings and commercial properties. Some park areas are located along the creek. The reach is located in the main downtown business area. (Ref# 8,37,71)
	Zoning	10.9 acres commercial, 7.5 acres public, 3.8 acres residential multi-family (Ref# 54,104)
Potential Species Present	Wildlife species	In 25% of the reach: presence of a variety of non-urban mammals, including habitat specific species; equal numbers of urban and non-urban birds, native amphibians, and garter snakes and lizard habitat. 75% of the reach has poor animal movement opportunities. (Ref# 61,69,70,105)
	Fish species	Bull trout, Chinook, Coho, Chum, Sea-run Cutthroat, Pink, Sockeye, Steelhead (Ref# 69,70,94,105)
	PHS species/habitats	25% 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	22.2 total acres with 20.6 acres of land and 1.6 acres of water (Ref# 13)
	Aquatic vegetation	No data
	Slope	Narrow incised channel, slope class 20-35% dominates approximately 30% of the reach, in the areas immediately adjacent to the creek. Areas of 0-5% slope are present in the remainder of the reach. (Ref# 21)
	Buildings	27 covering 3.06 acres total (Ref# 16)
	Culverts/stormwater utilities	Several culverts are located along this reach of stream. Approximately 16 storm discharge points, numerous sewer mains and storm drain lines are also present. (Ref# 39,40,41,42)
	Geology	Glaciomarine drift. Seismic Hazard Area (geologic units) and Landslide Hazard Area on 15-35% or greater slopes. (Ref# 21,103)
	Tributary creeks	None indicated (Ref# 8,57,59,71)
	Wetlands	(Ref# 11,52)
	Impervious surface	65% impervious, 27% semi-pervious, 8% pervious (Ref# 12)
	Invasive plant species	No data
	Roads/transportation	Four major arterials pass over the creek in this reach. Total of 0.5 miles or 1.9 acres of roads and 0.2 acres of alley. (Ref# 14,35,36,44,45,46)
	Soils	Hydric soils, very low filtration with high potential for runoff (Hydrologic soil Group D). (Ref# 51,63)
	Topography	32' to 83' range; 59' mean. (Ref# 47)
	FEMA	4.2 acres in 100 year floodplain, 2.7 acres in the floodway (Ref# 19)
	Terrestrial Vegetation	The majority of the reach has vegetated buffers of 25 feet or greater. Vegetation includes tree and shrub cover. The vegetation and buffer width decline at the upper most portion of the reach, where the channel becomes more confined and exposed – dominated by shrubs and herbaceous vegetation. 25% of the reach has an equal mix of native and naturalized non-native plants, low quality native plant community. Overstory is sparse in one-quarter of the reach and non-existent in the remainder. (Ref# 8,20,71)
	Riparian Function	DOE 303(d)
Channel confinement		Moderately confined (Ref# 22,23)

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	Channel gradient	<1% (Ref# 22,23)
	Channel migration zone	Very limited due to development. Stream flows through developed urban setting. (Ref# 22,23,94)
	Creosote structures	No data
	Fish passage blockages	None listed (Ref# 15,94)
	In-water structures	Three culverts or tunnels for 122 feet. One bridge (Dupont St). (Ref# 8,18,43,71)
	LWD presence	Incomplete data
	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)
Historic & Cultural	Historic aerials	No data
	Archeological sites	No data
	Historic sites	None indicated (Ref# 77)
	Parks & public access	No public park access. However, much of the property along the creek in this reach is publicly owned, both developed and undeveloped. Trails have been developed in the riparian zone in many areas through this reach. (Ref# 33,34,36,48,54)
Function Analysis	Reach Function	
	<ul style="list-style-type: none"> Hydrologic Shoreline Vegetation Habitat 	<p>Impaired. Hydrology is flashy.</p> <p>Impaired. Shoreline vegetation is limited.</p> <p>Impaired. Quality terrestrial and in-stream habitat is limited.</p>
	Limiting Factors	<ul style="list-style-type: none"> Water quality Hydrology Shoreline vegetation Impaired habitat, lack of in-stream structure, and in-stream flow
	Functions	
	<ul style="list-style-type: none"> Sustainable Not Sustainable 	<p>Habitat- fish migration corridors. Shoreline vegetation is sustainable with improvements and preservation of current native vegetation.</p> <p>Hydrology and terrestrial habitat.</p>
	Priority Actions	<ul style="list-style-type: none"> Water quality improvement Stormwater treatment and retention Addition of in-stream structures
Current Enhancement Projects	Ten restoration projects are underway to restore native shoreline vegetation and habitat along the creek. Projects cover approximately 90% of the creek in this reach.	
Preservation/Enhancement Opportunities	Enhancement of riparian vegetation; particularly planting of native trees to facilitate shading of the creek, and enhancement of the remaining 10% of the shoreline. (Ref# 8,20,24,49,50,61,69,70,71,89 for above)	