

**SHORELINE AREA (Reach Code): WHATCOM 3**

**REACH NUMBER: 14**

Land Use	Current Land Use	Land use is dominated by commercial and light industrial uses. Some public property is located along the reach. (Ref# 8,37,71)
	Zoning	38.5 acres industrial, 11.4 acres commercial, 3.2 acres residential multi-family, 2.7 acres public (Ref# 53,104)
Potential Species Present	Wildlife species	In 20% of the reach: presence of a variety of non-urban mammals present, including habitat specific species; equal numbers of urban and non-urban birds, native amphibians, and garter snake and lizard habitat. Nearly the entire reach has poor animal movement opportunities – except for the upper most portion of the reach where some large and medium animal movement may be possible. (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/habitat	20% 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	55.8 acres total with 52.6 acres of land and 3.2 acres of water (Ref# 13)
	Aquatic vegetation	No data
	Slope	Narrow incised channel, slope class 20-35%. Channel opens a little toward the upper extent of the reach. The slope class becomes less severe, 2-5% and 5-10%. (Ref# 21)
	Buildings	75 covering 8.4 acres total (Ref# 16)
	Culverts/stormwater utilities	Several culverts empty into creek along this reach. Possible fish barrier culvert at upper extent of reach. Approximately 25 stormwater discharge points, numerous sewer mains and storm drain lines are present. (Ref# 30,40,41,42)
	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	74% impervious, 22% semi-pervious, 4% pervious (Ref# 12)
	Invasive plant species	Giant hogweed present behind Civic Center on both sides of creek (Ref# 100,71)
	Roads/transportation	Creek passes under three major arterials, including I-5, and two collectors. Total of 1.6 miles or 5.2 acres of road 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	45' to 74' range; 60' mean. (Ref# 47)
	FEMA	18.0 acres in 100 year floodplain, 7.5 acres in the floodway (Ref# 19)
	Terrestrial Vegetation	Buffer width decreases substantially through this reach. Vegetation becomes more herbaceous with shrubs. Buffer width increases east of I-5. The majority of the reach offers little to no habitat. There are areas within the reach that have native vegetation – ranging from predominately non-native with natives mixed in to predominately native vegetation. Lower end of reach has areas of native vegetation. (Ref# 8,20,71)
Riparian Function	DOE 303(d)	Category 5 Polluted Waters listed for dissolved oxygen, fecal coliform, and temperature. Category 4 Impaired Waters for Non-point pollution: in-stream flow and fish habitat insufficient for salmonid use. Category 2 Water of Concern for pH. Upper portion of reach (above Meador Ave) Category 2 Water of concern for pentachlorophenol. TMDL for fecal coliform. (Ref# 56,85,89)
	Channel confinement	Lower: moderately confined; Upper: confined (Ref# 22,23)
	Channel gradient	<1% (Ref# 22,23)

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	Channel migration zone	None. Creek is confined into a narrow channel. (Ref# 22,23,94)
	Creosote structures	No data
	Fish passage blockages	A blockage is located at the upper terminus of the reach – just east of I-5 (Ref# 15,94)
	In-water structures	One culvert or tunnel for 196 feet. Six bridges and one foot bridge. (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	0.1 acres of public open space. Many narrow parcels along this reach are publicly owned. (Ref# 33,34,36,48,54)
Function Analysis	<b>Reach Function</b>	
	<ul style="list-style-type: none"> <li>Hydrologic</li> <li>Shoreline Vegetation</li> <li>Habitat</li> </ul>	<p>Impaired. Hydrology is flashy.</p> <p>Impaired. Shoreline vegetation is limited.</p> <p>Impaired. Quality terrestrial and in-stream habitat is limited.</p>
	<b>Limiting Factors</b>	<ul style="list-style-type: none"> <li>Water quality</li> <li>Hydrology</li> <li>Shoreline vegetation</li> <li>Impaired habitat, lack of in-stream structure, and in-stream flow</li> </ul>
	<b>Functions</b>	
	<ul style="list-style-type: none"> <li>Sustainable</li> <li>Not Sustainable</li> </ul>	<p>Habitat- fish migration corridors. Shoreline vegetation is sustainable with improvements and preservation of current native vegetation</p> <p>Hydrology and terrestrial habitat.</p>
	<b>Priority Actions</b>	<ul style="list-style-type: none"> <li>Water quality improvement</li> <li>Stormwater treatment and retention</li> <li>Addition of in-stream structures</li> </ul>
<b>Current Enhancement Projects</b>	Two projects are currently underway to restore native shoreline vegetation and habitat along the creek in this reach.	
<b>Preservation/Enhancement Opportunities</b>	Preservation and enhancement of the existing shoreline and riparian vegetation along the creek. Increase the creek buffer up-stream of I-5.	
(Ref# 24,49,50,61,60,70,71,89 for above)		