

SHORELINE AREA (Reach Code):Padden 1

REACH NUMBER: 21

Land Use	Current Land Use	Mixed land use dominated by residential and commercial uses, with some public access trails adjacent to the stream. No industrial uses currently located in this reach. (Ref# 8,37,71)
	Zoning	5.0 acres public; 3.5 acres residential; 3.5 acres commercial; 1.4 acres industrial (Ref# 54,104)
Potential Species Present	Wildlife species	Urban species typical of urban green spaces (Ref# 69,70,105)
	Fish species	Migration, rearing and spawning habitat documented for Chum and Fall Chinook salmon. Migration and rearing habitat for sea-run cutthroat, Coho and Winter Steelhead. Bull trout presence presumed, but not documented. (Ref# 61,69,70,94,105)
	PHS species/habitat	Riparian habitat and wetlands. No listed wildlife species.(Ref# 24,92,93,105)
	TSE species	Bull trout (presumed) (FT), Puget Sound Coho (FCo), Chinook (FT & SC), Sea-run Cutthroat (FCo). (Ref# 92,93,105)
	Invasive wildlife/fish species	Grey squirrels in riparian corridor.(Ref# 71)
Physical Environment	Acres of land in reach	13.4 acres total with 13.0 acres of land and 0.4 acres of water (Ref# 13)
	Aquatic vegetation	No data
	Slope	Slope class mostly at 0-5%, with ravine side slopes of 20 to 35%. (Ref# 21)
	Buildings	13 buildings covering 1.5 acres total land (Ref# 16)
	Culverts/stormwater utilities	Culvert under Harris and under Greenways Trail at end of McKenzie Street culvert is 72 feet long. Storm and sanitary sewer in reach.(Ref# 30,40,41,42)
	Geology	Continental sedimentary or rocks. Small Seismic Hazard Area (man made fill) in the lower portion of the reach. (Ref# 21,103)
	Tributary Creeks	None indicated (Ref# 8,57,59,71)
	Wetlands	(Ref# 11,52)
	Impervious surface	37% pervious, 36% semi-pervious, 27% impervious (Ref# 12)
	Invasive plant species	Ivy, Himalayan blackberry, traveler's joy and bittersweet nightshade present in high densities (Ref# 71)
	Roads/transportation	McKenzie Street, 8 th Street, and Donovan present in reach. Total of 0.2 miles of roads, mostly secondary feeders. (Ref# 14,35,36,44,45,46)
	Soils	Infiltration rates: 11.9 acres very slow with high runoff potential (Hydrologic soil Group D), 1.5 acres moderate and moderately well drained (Group B). Erosion potential: 11.1 slight and 2.3 acres severe. (Ref# 51,63)
	Topography	14' to 74' range; 31' mean. (Ref# 47)
	FEMA	4.7 acres in 100 year floodplain, 1.2 acres in floodway (Ref# 19)
	Terrestrial Vegetation	Deciduous forest canopy is well developed over creek in this reach. Forest riparian buffer averages 50' but is up to 200' in areas. Buffer smallest where it crosses Harris. (Ref# 8,20,71)
Riparian Function	DOE 303(d)	Category 2 listed for pH, temperature and dissolved oxygen. NSEA data shows occasional excursions beyond standards for these parameters. (Ref# 89)
	Channel confinement	Unconfined to moderately confined (Ref# 22,23)
	Channel gradient	1 to 4% (Ref# 22,23)
	Channel migration zone	None identified (Ref# 22,23,94)
	Creosote structures	No data (Ref# 8,71)
	Fish passage blockages	none identified (Ref# 15,94)
	In-water structures	One concrete fish ladder (Ref# 8,18,43,71)
	LWD presence	Majority of reach poor with small areas of marginal to good. (Ref# 10,71)

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	Non-point source pollution	No data
	Point source pollution	No data
	Riffle/pool analysis	No data
	Substrate type	No data for this reach
	Toxic sites/land fills	Tolly Craft Yachts Corp. is just outside this reach. Sediments (suspected) petroleum products, phenol, non-halogenated solvents, halogenated organics. Groundwater (confirmed) halogenated organics. (Ref# 80)
Historic & Cultural	Historic aerials	See waterfront futures website (Ref# 99)
	Archeological sites	No data
	Historic sites	None indicated (Ref# 77)
	Parks & public access	Public access via greenway trail that parallels the creek. (Ref# 33,34,36,48,54)
Function Analysis	<p>Reach Function</p> <ul style="list-style-type: none"> Hydrologic Shoreline Vegetation Habitat <p>Limiting Factors</p> <p>Functions</p> <ul style="list-style-type: none"> Sustainable Not Sustainable <p>Priority Actions</p> <p>Current Enhancement Projects</p> <p>Preservation/Enhancement Opportunities</p>	<p>Impaired, flashy hydrology.</p> <p>Slightly Impaired, invasive species present and riparian buffer width is reduced in the lower reach.</p> <p>Slightly Impaired, invasive species have decreased habitat structure.</p> <ul style="list-style-type: none"> Water quality is slightly impaired due to upstream water quality problems Habitat quality is limited by invasive plant cover and single age class Flashy hydrology <p>Shoreline vegetation and habitat is sustainable, but impaired.</p> <p>Hydrology, if upstream development increases.</p> <ul style="list-style-type: none"> Control of invasive, non-native species. Possible fish passage improvements including culvert replacement. <p>None indicated</p> <ul style="list-style-type: none"> Enhancement of riparian vegetation Restoration of in-stream habitat diversity Improved stormwater control and treatment in Watershed. Educational signs to protect riparian plantings. <p style="text-align: right;">(Ref# 24,61,69,70,71,89 for above)</p>