

SHORELINE AREA (Reach Code): Marine 12 – Padden lagoon
REACH NUMBER: 38

Land Use	Current Land Use	Mixed industrial, rail and open space (Ref#8, 54, 71)
	Zoning	9.4 acres industrial, 3.6 acres water, 0.1 acres public, 0.1 acres commercial (Ref# 54)
Potential Species Present	Wildlife species	4.5 acres of mustelid habitat; purple martin nest boxes (Ref# 3, 70, 71, 105)
	Fish species	Chinook, chum, steelhead, and sea run cutthroat. Bull trout (presumed) (Ref# 3, 70, 71, 105)
	PHS species/habitat	Estuary and riparian habitat (Ref# 3, 70, 71, 105)
	TSE species	Sea run cutthroat (FCo). Bull trout (FT) and Coho (FCo) presumed. Chinook in bay (FT & SC) (Ref# 92, 93)
	Invasive wildlife/fish species	No data
Physical Environment	Acres of land in reach	13.1 acres total with 9.1 acres of land and 4.0 acres of water (Ref# 13)
	Aquatic vegetation	1.3 acres green algae, 0.5 acres marsh (Ref# 97, 98)
	Slope	0-5% slopes dominate (Ref# 47, 103)
	Buildings	6 buildings covering 1.23 total acres(Ref# 16)
	Culverts/stormwater utilities	38 feet culvert crossing under Harris. No storm water detention, sewer mains in reach (Harris?) (Ref# 40, 41, 42)
	Geology	Continental sedimentary deposits and alluvium. Seismic hazard area (man-made fill) is indicated around the lagoon. (Ref# 21, 51, 63)
	Tributary Creeks	None indicated (Ref# 8, 42, 71)
	Impervious surface	77% impervious, 23% semi-pervious, 0% pervious(Ref# 12)
	Invasive plant species	No data
	Roads/transportation	0.3 miles roads, 0.8 acres (Ref# 34, 44, 46)
	Soils	10.1 acres of soil with very slow infiltration rates and high runoff potential (Hydrologic soil Group D) and severe risk of erosion. (Ref#51, 63)
	Topography	0' to 20' range; 9' mean (Ref# 47)
	FEMA	5.5 acres in 100 year floodplain, 5.5 acres in floodway (Ref# 19)
Terrestrial Vegetation	Mixed shrub and herbaceous vegetation in Padden Lagoon restoration area and along north side of Harris Ave (this does not appear in pervious calcs). Plant communities are a mix of native and non-native species. The Padden Lagoon restoration site is an ongoing project attempting to reestablish native shoreline plant species and structure. (Ref# 8, 71)	
Marine Aquatic Function	Substrate type	3.7 acres mud, 0.1 acres mixed fines (Ref# 3, 99)
	Creosote structures	Creosote pilings at mouth of Padden (Ref# 71, 73, 74, 99)
	In-water structures	One dock on east side of lagoon. (Ref# 71, 73, 74, 99)
	Bulkheads	Rock bulkheads at rail crossing and west side of lagoon. Harris and port parking area present partial blockage, but beach area exists. (Ref# 71, 73, 74, 99)
	DOE 303(d)	Inner Bay, no data. Outer Bay – Category 5 for dissolved O2, Category 2 for pH, Category 1 for Fecal coliform, pH, and temperature. (Ref# 81)
	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# 79, 80)
	Bathymetry	No data (Ref# 25, 31)
	Wave energy	4.1 acres lagoon, 0.2 acres partially enclosed (Ref# 3, 99)
	Point source pollution	Dog feces (Ref# 71)
	Waterways/dredge beds	None identified (Ref# 3, 99)
	Drift cells	None identified (Ref# 3, 99)

SHORELINE AREA (Reach Code): Marine 12 – Padden lagoon

REACH NUMBER: 38

Marine Foreshore	Beach characterization	Muds and fines (Ref# 71)
	High-Low tide lines	0.1 acres beach, 3.8 acres special (Padden Lagoon).
	Erosion/accretion zones	None identified
Historic & Cultural	Historic aerials	No data
	Archeological sites	None identified (Ref# 77)
	Historic sites	None indicated
	Parks & public access	Padden lagoon restoration area in southwest corner of reach. (Ref# 33, 34, 36, 48)
Function Analysis	Reach Function	(Ref# for the following 1, 2, 5, 69, 70 71)
	<ul style="list-style-type: none"> Hydrologic Shoreline Vegetation Habitat 	<p>Impaired by railroad berm at mouth of lagoon and reduced outlet, flashy hydrology from Padden Creek.</p> <ul style="list-style-type: none"> Impaired on the east and north sides – vegetation absent Slightly impaired on south and west sides Terrestrial habitat – Impaired – lacks significant cover and limited connectivity Intertidal- Slightly impaired by reduced tidal flushing and possible water quality concerns from nearby toxic sites and from Padden Creek. Shallow and deep water habitats – Slightly impaired for shallow water and no deep water present.
	Limiting Factors	<ul style="list-style-type: none"> Railroad berm across mouth of estuary a primary limiting function Flashy hydrology and water quality issues from Padden Creek Existing land use and zoning
	Functions	<ul style="list-style-type: none"> Sustainable Not Sustainable
	Priority Actions	<p>All three with improvements.</p> <p>Shoreline vegetation and intertidal habitat may not be sustainable on the east side of lagoon if existing land use persists.</p> <ul style="list-style-type: none"> See preservation/ enhancement section. Actions # 25 and 36 were rated as high priority actions. (Ref# 73)
	Current Enhancement Projects	<p>Padden Lagoon Plantings on west side.</p>
	Preservation/Enhancement Opportunities	<ul style="list-style-type: none"> Remove fill, asphalt and rock to provide estuarine buffer, mudflat and marsh habitat on east side of lagoon (BBDP action # 36) (Ref# 73) Remove fill to create a tidally influence marsh on the south side of Harris and establish connection to Padden Creek (BBDP action # 25). (Ref# 73)