

**ORIGINAL PURPOSE** To protect an unaltered west coast estuary

### OVERVIEW

<b>Date established:</b>	12 May 1988	<b>Location:</b>	West coast of Vancouver Island, 50 km S of Port McNeill
<b>ORC #:</b>	3119	<b>Latitude:</b>	50°09'N
<b>Map number:</b>	92 L/3	<b>Longitude:</b>	127°07'W
<b>Total Area:</b>	87 ha	<b>Elevation:</b>	-7-2 m
<b>Land:</b>	56 ha		
<b>Marine:</b>	31 ha		
<b>Access:</b>	Access by boat from Fair Harbour via Tahsish Inlet, or by aircraft.		
<b>Biogeoclimatic Zone:</b>	Coastal Western Hemlock (CWH)		
<b>Biogeoclimatic Variant:</b>	CWHvh1 Southern Very Wet Hypermaritime		
<b>Ecosection:</b>	Windward Island Mountains		
<b>Region:</b>	Vancouver Island		
<b>Management Area:</b>	Nootka		

### COMPOSITION

**Physical:** The estuary of the Tahsish River is formed primarily by two major channels enclosing an elongated flat island, which is cut into several segments by smaller flood channels. The substrate consists predominantly of sand and silt above mean tide level, and pebble, gravel and cobble where subjected to stronger flows and deeper water.

**Biological:** A small forest covers about one quarter of the reserve, including three treed communities, i.e. Sitka spruce-sword fern, Sitka spruce-herb/grass, and red alder-salmonberry and various transitions between these. Old flood channels in the treed area support slough sedge, water-parsley and Mexican hedgenettle. Scattered individuals of western redcedar, western hemlock, amabilis fir, bigleaf maple and Pacific crab apple are also found. Near high tide level, the following graminoid communities and tidal meadows occur (from higher to lower ground): Pacific reedgrass, tufted hairgrass and Lyngbye's sedge. Important associated species are (same sequence) seacoast angelica, meadow barley, northern riceroot, beach fescue, Baltic rush, seaside arrowgrass, Pacific silverweed and common scurvy grass. Below this last zone, surf grass and algal communities predominate, with rock weed (*Fucus*) and green algae (mainly *Enteromorpha*) most prominent.

Animal life in the estuary is very diverse and productivity is high. The network of channels with various depths, flow characteristics and substrates present, provides migrating, spawning and particularly rearing habitat for salmonid fish. Both the emergent and the water-covered parts of the estuary are extensively used during migration and in the winter by shorebirds, waders, dabbling and diving ducks, Canada geese and trumpeter swans. Bald eagles are present year-round and particularly common during salmon runs. Harbour seals haul out on

gravel bars at the front of the estuary and feed near its eastern boundary during high tides. Black bear use is high during the salmon spawning season. Mink, raccoon and river otters are also resident. Deer and particularly Roosevelt elk make use of the forested part and lush tidal meadows.

**Cultural:**

The reserve covers part of a First Nations trade route. The area is used for subsistence hunting, fishing, food gathering, botanical harvesting etc. Two archaeological sites, a seasonal village site (re: purpose statement) and fish weir posts, are present.

The ER is fully within the Ka:’yu:’k’t’h’/Chek’tles7et’h’ First Nations territory. There are First Nations’ culturally significant sites within this reserve. The reserve covers part of a First Nations trade route and is used for subsistence hunting, fishing, food gathering, botanical harvesting etc.

A portion of Tahsish-Kwois Park, immediately adjacent to the ER, are treaty selected lands under the Maa-nulth First Nations Treaty and are expected to become part of the Ka:’yu:’k’t’h’/Chek’tles7et’h’ First Nations lands as of April 1, 2011.

The ER is one of several protected areas covered by an active memorandum of understanding for collaborative management between BC Parks and the Ka:’yu:’k’t’h’/Chek’tles7et’h’ First Nations.

**MANAGEMENT CONCERNS**

<b>SIGNIFICANT SPECIES</b>	<b>BC LIST STATUS</b>	<b>COSEWIC STATUS</b>	<b>CF PRIORITY</b>
Sea Otter	Blue listed	Special Concern (2007)	1
Cutthroat Trout, ssp. <i>clarkii</i>	Blue listed		2
Dolly Varden	Blue listed		2
Grey Whale	Blue listed	Special Concern (2004)	4
Olympia Oyster	Blue listed	Special Concern (2000)	4
Canada Goose, ssp. <i>occidentalis</i>	Red listed		2
Roosevelt Elk	Blue listed		2
Bald Eagle		Not At Risk (1984)	6
Black Bear		Not At Risk (1999)	6
Black Oystercatcher			5
Chinook Salmon		Threatened (2006)	2
Chum Salmon			6
Pink Salmon			6
Rainbow Trout			6
River Otter			4

**THREATS**

**Climate Change:**

Increased runoff, due to changes in hydrology, may reduce the salinity in estuarine areas, changing the community composition and species assemblages. The change in salination, acidity and temperature may foster algal blooms which may decrease vital sunlight exposure and negatively impact some marine vegetation

and associated fauna. Rising sea level is also projected to drown low-lying coastal plant communities and modify the shoreline habitat.

**Recreation:**

Wildlife in sensitive estuary areas is disrupted by small marine vessels (kayaks, small boats).

**Pollution**

Oil spills are an ever present risk in coastal areas.  
Plastic waste is an increasing concern in coastal areas.

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**RESEARCH  
OPPORTUNITIES**

The presence of a pristine, well developed estuary on Vancouver Island is in itself exceptional; most other major estuaries have been severely disturbed by human activities.

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**SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE TAHSISH RIVER ER  
ACCOUNT**

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**Flora**

alder, red (*Alnus rubra*)  
angelica, seacoast (*Angelica lucida*)  
arrow-grass, seaside (*Triglochin maritima*)  
barley, meadow (*Hordeum brachyantherum* ssp. *brachyantherum*)  
crab apple, Pacific (*Malus fusca*)  
fern, sword (*Polystichum munitum*)  
fir, amabilis (*Abies amabilis*)  
hairgrass, tufted (*Deschampsia cespitosa*)  
hedge-nettle, Mexican (*Stachys mexicana*)  
hemlock, western (*Tsuga heterophylla*)  
maple, bigleaf (*Acer macrophyllum*)  
redcedar, western (*Thuja plicata*)  
reedgrass, Pacific (*Calamagrostis nutkaensis*)  
rice-root, northern (*Fritillaria camschatcensis*)  
rush, Baltic (*Juncus balticus*)  
salmonberry (*Rubus spectabilis*)  
scurvy-grass, common (*Cochlearia groenlandica*)  
sedge, Lyngbye's (*Carex lyngbyei* ssp. *cryptocarpa*)  
sedge, slough (*Carex obnupta*)  
silverweed, coast (*Potentilla egedii*)  
spruce, Sitka (*Picea sitchensis*)  
surf-grass (*Phyllospadix* spp.)  
water-parsley, Pacific (*Oenanthe sarmentosa*)

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**Fauna**

Bear, American Black (*Ursus americanus*)  
Deer, Black-tailed (*Odocoileus hemionus* ssp. *hemionus*)  
Dolly Varden (*Salvelinus malma*)  
Eagle, Bald (*Haliaeetus leucocephalus*)  
Elk, Roosevelt (*Cervus canadensis roosevelti*)  
Goose, Canada, ssp. *occidentalis* (*Branta canadensis occidentalis*)  
Mink, American (*Neovison vison*)  
Otter, Northern River (*Lontra canadensis*)  
Otter, Sea (*Enhydra lutris*)

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Oyster, Olympia (*Ostrea conchaphila*)  
Oystercatcher, Black (*Haematopus bachmani*)  
Raccoon (*Procyon lotor*)  
Salmon, Chinook (*Oncorhynchus tshawytscha*)  
Salmon, Chum (*Oncorhynchus keta*)  
Salmon, Pink (*Oncorhynchus gorbuscha*)  
Seal, Harbour (*Phoca vitulina*)  
Swan, Trumpeter (*Cygnus buccinator*)  
Trout, Cutthroat, ssp. clarkii (*Oncorhynchus clarkii clarkii*)  
Trout, Rainbow (*Oncorhynchus mykiss*)  
Whale, Grey (*Eschrichtius robustus*)