ORIGINAL PURPOSE To protect representative montane and subalpine forest and bog communities

Date established:	10 Aug. 1989	<b>Location:</b>	Tsitika drainage, south of Port	
ORC #: Map number:	3122 92 L/7		McNeill, on northeastern Vancouver Island	
wap number.	)	Latitude:	50°25'N	
		Longitude:	126°35'W	
Total Area:	554 ha	Elevation:	550-1,550 m	
Land:	539 ha			
Lake:	15 ha			
Access:	No road access			
Biogeoclimatic Zones:	Coastal Western Hemlock CWH); Mountain Hemlock (MH);			
	Coastal Mount	ain-heather Alp	oine (CMA)	
<b>Biogeoclimatic Variants:</b>	CWHvm2 Montane Very Wet Maritime; MHmm1 Windward			
	Moist Maritime; CMAunp Undifferentiated and Parkland			
<b>Ecosection:</b>	Northern Island Mountains			
Ecosection:	Vancouver Island			
Region:	vancouver isia			

## Physical:

The poorly drained, level area of a boggy lake is flanked by two slopes with a major east facing slope culminating in a high ridge of volcanic rocks, and a minor west facing slope rising to a lower forested ridge. Soils are Ferro-Humic Podzols and Gleysols.

#### **Biological:**

Lower elevations support extensive areas of subalpine fen and wet scrub forest around the lake and on gentler slopes. Subalpine forest is more prevalent on steeper slopes. Parallel strips of fen vegetation dominated by Sitka sedge, beaked sedge and cottongrass rise from the lake toward Tsitika Mountain. Numerous small ponds with yellow waterlilies and buckbean have formed in a terraced arrangement in the open areas due to high snowpack. Many alpine and subalpine species occur here at unusually low elevation. The intervening ridges of scrub forest, which alternate with the parallel fen strips, are dominated by mountain hemlock, yellow-cedar and oval-leaved blueberry combined with Indian hellebore, deer-cabbage and Sphagnum mosses. A variety of mountain hemlock-amabilis fir communities occupy better drained and higher slopes. Alpine vegetation is restricted due to rocky terrain at high elevation. Pink and white mountain heather and blue-leaved huckleberry prevail there and are also common around the open wet areas.

Mammals recorded from this area include black-tailed deer, cougar and wolf.

#### MANAGEMENT CONCERNS

SIGNIFICANT SPECIES	BC LIST STATUS	COSEWIC STATUS	CF PRIORITY
Common Goldeneye Mew Gull			3 6

#### **THREATS**

**Climate Change:** Bog communities have been assessed by researchers as some of

the most vulnerable ecosystems in BC. Wetland ecosystems are projected to dry up or alter due to raised temperatures and

changing hydrology.

Subalpine forests are projected to decline due to their adaptation

to cool moist environments. The displacement of these communities by dry forest and/or grassland ecosystems may

occur.

**Forestry:** Insufficient buffer zone increases windthrow risk within reserve.

Adjacent logging creates fringe effect and opens access to the reserve, increasing the introduction of non-native invasive species. Increased sedimentation in riparian habitats is also a

result.

**Harvest:** Harvesting adjacent to reserve boundaries increases risk of

unauthorized harvesting within the reserve.

**Program constraint:** Lack of funding for aerial inspections of park boundaries directly

abutting tenured crown land and private land.

RESEARCH OPPORTUNITIES The baseline information collected on plants in this ER are a good

starting point for studies on climate change. The initial reports are

available.

Ongoing studies in hydrology.

# SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE TSITIKA MOUNTAIN ER ACCOUNT

#### Flora

blueberry, oval-leaved (Vaccinium ovalifolium)

buckbean (Menyanthes trifoliata)

cotton-grass, narrow-leaved (Eriophorum angustifolium)

deer-cabbage (Fauria crista-galli)

fir, amabilis (Abies amabilis)

hellebore, Indian (Veratrum viride)

hemlock, mountain(*Tsuga mertensiana*)

huckleberry, blue-leaved (*Vaccinium deliciosum*)

moss, peat (Sphagnum spp.)

mountain-heather, pink (*Phyllodoce empetriformis*)

mountain-heather, white (*Cassiope mertensiana* var. *mertensiana*)

sedge, beaked (*Carex utriculata*) sedge, Sitka (*Carex sitchensis*) waterlily, yellow (*Nymphaea mexicana*) yellow-cedar (*Chamaecyparis nootkatensis*)

### Fauna

Cougar (Puma concolor)
Deer, Black-tailed (Odocoileus hemionus ssp. hemionus)
Goldeneye, Common (Bucephala clangula)
Gull, Mew (Larus canus)
Wolf, Grey (Canis lupus)