ORIGINAL PURPOSE To protect an entire drainage basin with a wide elevation range

containing representative, undisturbed examples of three biogeoclimatic

zones in an area of wet interior climate

OVERVIEW

Date established: 23 Dec. 1974 3056 ORC#:

Map number:

82 M/16; 83 D/1

Location: W side of Kinbasket Lake (Mica Reservoir), 20 km E of

Mica Creek

790-3,020 m

52°00'N Latitude: 118°15'W Longitude:

2,699 ha **Total Area:**

Land: 2,691 ha 8 ha Lake:

Accessible only by boat. Access:

Biogeoclimatic Zones: Interior Cedar-Hemlock (ICH); Engelmann Spruce-Subalpine Fir

(ESSF); Interior Mountain-heather Alpine (IMA)

Elevation:

IMAun undifferentiated; ESSFvv Very Wet Very Cold; ESSFvvp **Biogeoclimatic Variants:**

> Very Wet Very Cold Parkland; ESSFwc2 Northern Monashee Wet Cold; ICHvk1 Mica Very Wet Cool; ICHwk1 Wells Gray

Wet Cool

Ecosections: Big Bend Trench; Northern Kootenay Mountains

Region: Kootenay

Columbia Revelstoke **Management Area:**

COMPOSITION

Physical:

The reserve is a steep, northerly exposed drainage basin on the west side of the Rocky Mountain Trench. It has been heavily glaciated and alpine glaciers still cover most land above the 2100 m level. Glacial evidence includes moraines, cirque basins with steep headwalls, and the U-shaped valley profile. Rock and talus surfaces dominate the higher elevations and steepest slopes. Forested lands have a thin mantle of coarse-textured soil that tends to be leached by heavy precipitation. Goosegrass Creek and its tributaries are turbulent mountain streams.

Biological:

Plant communities exhibit a transition from western redcedar-western hemlock forest at low elevation to Engelmann spruce-subalpine fir cover at higher levels and alpine tundra above tree line. The forests are in a climax state and wildfire influence has been negligible. Many plants here are indicators of high rainfall. Shrubs in the cedar-hemlock forest include devil's club, Douglas maple, Sitka mountain ash, and oval-leafed blueberry. Three kinds of ferns are common in that zone. In the spruce-fir zone, representative shrubs are black huckleberry, false azalea and white-flowered rhododendron; typical herbs include spiny wood fern and queen's cup. Several herbaceous or shrub communities of limited extent occur in forest openings, on avalanche paths and in riparian situations within the forest zones. Dominant plants in alpine habitats are pink and white mountainheather and alpine wintergreen.

The fauna has not been surveyed. Land capability for ungulates is low. The reserve provides good habitat for Grizzly and Black Bears, American Marten and a variety of small mammals and birds at home in old-growth forest.

MANAGEMENT CONCERNS			
SIGNIFICANT SPECIES	BC LIST STATUS	COSEWIC STATUS	CF PRIORITY
Grizzly Bear	Blue listed	Special Concern (2002)	2
Wolverine, ssp. luscus	Blue listed	Special Concern (2003)	2
Caribou (southern pop. 1)	Red listed	Threatened (2000)	2
THREATS			
Climate Change:	The physical and biological composition of this reserve may change should temperatures continue to warm and glaciers retreat. The accelerated rate of glacial melt may also impact the area's hydrology which, in turn, would impact the ecosystem's biotic components.		
	The encroachment of some forest systems on alpine areas has also been projected as a reaction to climate change. This could result in the loss of alpine habitat and a change in the composition and distribution of certain forest communities.		
Forestry:	Logging roads and cutblocks are very close to the reserve boundaries risking increased access to reserve.		
Recreation:	Adjacent heli-skiing disrupts endangered Caribou population.		
RESEARCH OPPORTUNITIES	This reserve is ideal for long-term monitoring of climax forest ecology and watershed hydrology.		

SCIENTIFIC NAMES FOR SPECIES MENTIONED IN THE GOOSEGRASS CREEK ER ACCOUNT

Both the flora and fauna are missing good surveys.

Flora

alpine-wintergreen (Gaultheria humifusa)
azalea, false (Menziesia ferruginea ssp. ferruginea)
blueberry, oval-leaved (Vaccinium ovalifolium)
devil's club (Oplopanax horridus)
fern, spiny wood (Dryopteris expansas)
fir, subalpine (Abies lasiocarpa var. lasiocarpa)
hemlock, western (Tsuga heterophylla)
huckleberry, black (Vaccinium membranaceum)
maple, Douglas (Acer glabrum var. glabrum)

mountain-ash, Sitka (Sorbus sitchensis)
mountain-heather, pink (Phyllodoce empetriformis)
mountain-heather, white (Cassiope mertensiana)
queen's cup (Clintonia uniflora)
redcedar, western (Thuja plicata)
rhododendron, white-flowered (Rhododendron albiflorum)
spruce, Engelmann (Picea engelmannii)

Fauna

Bear, Grizzly (*Ursus arctos*) Wolverine, luscus subspecies (*Gulo gulo luscus*) Caribou (*Rangifer tarandus*)