

ORIGINAL PURPOSE To set aside unlogged floodplain islands for research on succession in black cottonwood communities

OVERVIEW

Date established:	12 June 1975	Location:	50 km W of Terrace
ORC #:	3063	Latitude:	54°19'N
Map number:	103 I/6	Longitude:	129°18'W

Total Area:	341 ha	Elevation:	15 m
Land:	163 ha		
Foreshore:	178 ha		

Access: Access by boat from Exchamsiks River Park.

Biogeoclimatic Zone: Coastal Western Hemlock (CWH)
Biogeoclimatic Variant: CWHvm Very Wet Maritime; CWHvm1 Submontane Very Wet Maritime
Ecosection: Kitimat Ranges
Region: Skeena
Management Area: Skeena Mass

COMPOSITION

Physical: The reserve comprises three large and four small islands in a low-gradient reach of the Skeena River where reduced river velocities allow sediments from upstream to settle out, forming many bars and islands. The river is slightly sinuous here, with a width of 0.7 to 1.7 km. Peak flow in the sediment-laden Skeena results from snowmelt, occurs between May 19 and June 29, and may reach 9000 m³/s. The low flow in March may be 50 to 100 times less than peak flow. These flow variations result in considerable channel shifting, and both erosion and accretion of islands. The islands are low and flat, have a high water table and may occasionally be flooded. A variety of sand and gravel bars is present, including point bars, channel side bars and mid channel bars.

Biological: Alluvial processes result in a series of vegetation bands around the island perimeters. The outermost band, subject to considerable flooding and scouring, is dominated by horsetails (northern scouring-rush and common horsetail) in association with willows (Sitka and Pacific willows). Between this zone and the more extensive black cottonwood forest is a narrow band of red alder having an understory dominated by red-osier dogwood and horsetails. Most of the island surfaces support stands of black cottonwood in which red elderberry, salmonberry and horsetails are abundant.

Birds such Townsend's and Orange-crowned Warblers, thrushes, Steller's Jays and Ruffed Grouse occur in the cottonwood forest; Killdeers and Spotted Sandpipers around the shorelines. Bald Eagles are common in the

area. The islands have moderately good Moose habitat and are believed to be important calving sites for Moose. Beaver also occur. Side-channels and backchannels within the ER provide important spawning and rearing habitat for salmonids, including all 5 species of Pacific Salmon, Steelhead, and including blue-listed species such as Bull Trout and Dolly Varden. Potential for Wolverine and Trumpeter Swan to occur within the ER boundaries.

MANAGEMENT CONCERNS

SIGNIFICANT SPECIES/COMMUNITIES	BC LIST STATUS	COSEWIC STATUS	CF PRIORITY
Sitka spruce – salmonberry association	Red listed		2
Grizzly Bear	Blue listed	Special Concern (2002)	2
white adder’s-mouth orchid	Blue listed		3
Bull Trout	Blue listed		2
Dolly Varden	Blue listed		2

THREATS

Climate Change:	The changed hydrology that has been projected to result from increased winter-spring precipitation and a reduction in snow pack may affect the erosion and accretion of the floodplain islands. Extreme flooding during half the year followed by extremely dry conditions may reduce the productivity of the islands as well.
Forestry:	Forestry development plans for adjacent Skeena River Islands may affect wildlife that use those areas as well as the reserve.
Forestry:	Development may impact the run-off and hydrology within the reserve.
Utilities and Utility Corridors:	Habitat loss due to construction of gas pipeline crossing through adjacent islands.
Recreation:	Potential for wildlife displacement and habitat degradation from recreational public. ER is located in an area that is heavily used by sports fishermen in the summer and fall. Many camps during salmon season in the nearby area, noise from jet-boats, shoreline erosion.

RESEARCH OPPORTUNITIES

The reserve is an ideal site to study natural regeneration of black cottonwood, natural succession on unlogged floodplain islands and relationships between alluvial processes and floodplain vegetation along a large, unregulated river. The affects of climate change on these processes would also lend itself to research.

SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE SKEENA RIVER ER ACCOUNT

Flora

alder, red (*Alnus rubra*)
cottonwood, black (*Populus trichocarpa* ssp. *trichocarpa*)
dogwood, red-osier (*Cornus stolonifera*)
elderberry, red (*Sambucus racemosa*)
horsetail, common (*Equisetum arvense*)
orchid, white adder's-mouth (*Malaxis brachypoda*)
salmonberry (*Rubus spectabilis*)
scouring-rush, northern (*Equisetum variegatum* ssp. *alaskanum*)
willow, Pacific (*Salix lucida* ssp. *lasiandra*) Pacific willows
willow, Sitka (*Salix sitchensis*)

Fauna

Bear, Grizzly (*Ursus arctos*)
Beaver, American (*Castor canadensis*)
Dolly Varden (*Salvelinus malma*)
Eagle, Bald (*Haliaeetus leucocephalus*)
Grouse, Ruffed (*Bonasa umbellus*)
Jay, Steller's (*Cyanocitta stelleri*)
Killdeer (*Charadrius vociferous*)
Moose (*Alces americanus*)
Salmon, Chinook (*Oncorhynchus tshawytscha*)
Salmon, Chum (*Oncorhynchus keta*)
Salmon, Coho (*Oncorhynchus kisutch*)
Salmon, Pink (*Oncorhynchus gorbuscha*)
Salmon, Sockeye (*Oncorhynchus nerka*)
Sandpiper, Spotted (*Actitis macularius*)
Trout, Bull (*Salvelinus confluentus*)
Trout, Rainbow (aka Steelhead*) (*Oncorhynchus mykiss*)
Warbler, Orange-crowned (*Vermivora celata*)
Warbler, Townsend's (*Dendroica townsendi*)