NECHAKO RIVER ER #72

ORIGINAL PURPOSE To protect the most vigorous known tamarack stands west of the Rocky Mountains for genetic stock

OVERVIEW

Date established:	4 Dec. 1975	**Location:**	30 km W of Prince George; 2.5 km SE of Isle Pierre
ORC #:	3072		
Map number:	93 G/14	**Latitude:**	53º55'N
		Longitude:	123º14'W
Total Area:	133 ha	**Elevation:**	670-715 m
Land:	133 ha		
Access:	Access via rough roads southwest of Buck Lake Park.		
Biogeoclimatic Zone:	Sub-Boreal Spruce (SBS)		
Biogeoclimatic Variant:	SBSdw3 Stuart Dry Warm		
Ecosection:	Nechako Lowland		
Region:	Omineca		
Management Area:	Upper Fraser		

COMPOSITION

Physical: The reserve lies on relatively flat benchlands above the Nechako River, in an area occupied by a glacial lake during melting of Pleistocene glaciers. Glacial-lake clays underlie much of this area. A shallow, boggy, flat-bottomed depression, apparently an old meltwater channel or former course of the Nechako River, crosses the reserve from northwest to southeast. Saturated organic soils occur in this depression; adjacent upland soils are believed to be Brunisols.

Biological: The flat depression across the middle of the reserve contains the vegetation types of major interest, including fairly open stands of tamarack trees of good size for this species. The stands of more or less pure tamarack are characterized by an understory of scrub birch, bluejoint grass, several species of sedges, and sphagnum moss. Black arboreal lichens are abundant on the tamarack trees. Mixed black spruce-tamarack boglands in which sphagnum moss dominates the ground cover are also present. Small standing water areas among the bog forest support a water sedge-buckbean association.

Upland forests on level ground are dominated by white and Engelmann spruce or their hybrids. Two spruce communities have been noted, one with an understory dominated by dwarf blueberry and lingonberry, and one characterized by black twinberry, common horsetail, and mosses. A low south-facing slope along the north edge of the central depression has mixed, scattered tree cover made up of spruces, lodgepole pine, trembling aspen, and the occasional Douglas-fir. Bunchberry, kinnikinnick, and mosses characterize the ground cover. Additional trees found in the reserve are subalpine fir and black cottonwood.

MANAGEMENT CONCERNS	
SIGNIFICANT SPECIES	None listed
THREATS	
Climate Change:	The Nechako River and other tributaries are heavily influenced by glacial melt and variable weather. Increased glacial melt and altered drainage patterns combined with increased variability in weather conditions may lead to alterations between heavy flooding and seasonal water shortage. The resultant erosion could degrade associated terrestrial habitats and increase sediment deposition and distribution. The tamarack stands may be subject to such hydrological extremes. Recent pine die off as the result of the mountain pine beetle has changed the hydrology of the area and may affect the tamarack stands. It has been projected that interior areas may be drier and warmer than current conditions, resulting in shifts in forest composition and distribution. Tamarack, a species adapted to poorly drained soils, may be displaced in this area by more drought tolerant species of trees.
Access:	Poaching occurs within the reserve due to ease of access.
Forestry:	Adjacent logging eliminates buffer zone around reserve.
RESEARCH OPPORTUNITIES	This site supports the best growth of tamarack in the Sub-Boreal Spruce Zone, and is important for the preservation of genetic stock for future establishment of this species in other locations. A partial plant list is available.

SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE NECHAKO RIVER ER ACCOUNT

Flora

aspen, trembling (*Populus tremuloides)*
birch, scrub (*Betula nana)*
blueberry, dwarf (*Vaccinium caespitosum)*
bluejoint, reedgrass (*Calamagrostis canadensis*)
buckbean (*Menyanthes trifoliata*)
bunchberry (*Cornus canadensis)*
cottonwood, black (*Populus trichocarpa* ssp. *trichocarpa)*
Douglas-fir (*Pseudotsuga menziesii)*
fir, subalpine (*Abies lasiocarpa* var. *lasiocarpa)*
horsetail, common (*Equisetum arvense)*
kinnikinnick (*Arctostaphylos uva-ursi)*
lingonberry (*Vaccinium vitis-idaea* ssp. *minus)*
moss, peat *(Sphagnum spp.)*
pine, lodgepole (*Pinus contorta* var. *latifolia)*
sedge, water (*Carex aquatilis)*
spruce, black (*Picea mariana)*

spruce, Engelmann (*Picea engelmannii)*
spruce, hybrid white (*Picea glauca* x *engelmannii)*
spruce, white (*Picea glauca)*
tamarack (*Latrix laricina*)
twinberry, black (*Lonicera involucrata)*