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1.0 INTRODUCTION

This background document will be used as an information base for producing a strategic management plan for the Cape Scott Protected Areas which include Cape Scott Provincial Park (including the Nahwitti-Shushartie), and the Scott Islands Provincial Park. The purpose of the background document is to provide an overview of the natural, human heritage and recreational values of the Cape Scott Protected Areas in the context of provincial goals for conservation and recreation. While not an exhaustive resource atlas, this report provides sufficient information for understanding the various issues that will need to be addressed in a strategic management planning process.

2.0 PARK LOCATION AND SETTING

2.1 Cape Scott Provincial Park

Cape Scott Provincial Park lies within the Nahwitti Lowland Ecosection on the northwest corner of Vancouver Island, and represents one of the western-most points of Canada (Figure 1). The park encompasses scenic and wild coast and uplands. Its remote location and rich physical and cultural resources make Cape Scott Provincial Park unique within the present provincial park system. The park provides a wilderness experience along a stretch of relatively accessible wild coast land and serves as an extensive, high-quality recreational area.

Cape Scott Provincial Park was established to preserve its wilderness quality and the essence of the area's cultural heritage. In 1973, an area of 15,070 hectares surrounding the cape was designated by the provincial government as a Class A Provincial Park. It was established to protect, exhibit and interpret an example of the natural features and processes of the Nahwitti Lowland Natural Region. The Nahwitti-Shushartie was identified during the Vancouver Island Land Use Planning and was added to Cape Scott Provincial Park in July 1995. This 6,779 hectare addition contributes to the unique scenic character of the original Cape Scott Provincial Park, and enhances the park's ability to provide a wilderness experience along a stretch of high-quality, wild, and relatively accessible coast-land. There is no marine component to this addition. In total, the park protects 22,220 ha, 1,7348 ha upland and 4,871 ha of foreshore.

Cape Scott Provincial Park consists of coast and upland areas (Figures 2 and 3). It has low relief, poor drainage, picturesque white sandy beaches, and rock headlands. The park encompasses an intriguing array of life zones including the stunted vegetation of the bog lands, abundant marine flora and fauna, and the extreme environment of the sand dunes. The Nahwitti-Shushartie extends the original north-eastern border of Cape Scott Provincial Park, running from Dakota Creek east along the north coast of Vancouver Island to Shushartie Bay, and extending inland along the Stranby and Shushartie river valleys.

The park is accessed from a gravel road off Highway 19 at Port Hardy. The gravel logging road leads westward from Port Hardy, passes through Holberg and terminates in a parking lot next to the park boundary. There is no automobile access within the park. Historic trails are the only means of traversing the upland area of the park. A boat launch near the parking lot makes it possible to enter San Josef Bay by small boat or canoe along the river.

The park can be accessed by water at Fisherman Bay, the Stranby River estuary in Shuttleworth Bight, or the Shushartie River estuary in Shushartie Bay. These last two access are at private land.

2.2 Scott Islands Provincial Park

Scott Islands Provincial Park is comprised of five islands and associated rocks lying from ten to 46 kilometres off the northwest tip of Vancouver Island (Figure 4). Their approximate latitude is 50° 50' north, and their longitude is 128° 40' west. The five islands are aligned in a northwesterly direction, and from east to west are: Cox; Lanz; Beresford; Sartine; and Triangle. Lanz and Cox are the largest, at 764 hectares and 978 hectares respectively, while Beresford is the smallest measuring 14.5 hectares. Lanz and Cox were identified for protection in the Vancouver Island Land Use Plan. These islands have been combined with three existing ecological reserves - Anne Vallée (Triangle Island), Beresford Island and Sartine Island - to form Scott Islands Provincial Park. In this process, an area of one kilometre around each of the islands, including the three ecological reserves, was designated as park. In total, the park covers aproximately 6,216 hectares. Of this, 2,339 ha is upland and 4,077 ha is foreshore.

The ecological reserves were estabished in 1971. In 1982, Triangle Island Ecological Reserve was renamed Anne Vallée Ecological Reserve as a tribute to Anne who died while studying puffins on the island.

These remote rocky islands protect colonies of breeding seabirds, including Cassin’s and rhinoceros auklets, tufted puffins, common murres, pelagic and Brant’s cormorants, and glaucous-winged gulls. The park also protects one of four Northern sea-lion breeding rookeries in British Columbia.

Access to Lanz and Cox islands is by boat or by aircraft. Access to the three ecological reserves is restricted to scientific research and monitoring and requires a permit.

Figure 1 Regional Context
Figure not available at this time

figure 2 Cape Scott park west
Figure not available at this time

figure 3 Cape Scott Park - East
Figure not available at this time

Figure 4: Scott Island park
Figure not available at this time

3.0 NATURAL VALUES

3.1 CAPE SCOTT PROVINCIAL PARK

3.1.1 Topography

For the most part, Cape Scott Provincial Park consists of low rolling terrain, lying under 300 metres (one thousand feet) in elevation. Exceptions to this are the four mountains in the park, the highest being Mount St. Patrick at 422 metres (1,383 feet). The entire area is dominated by an extensive bog ecosystem. As the land is poorly drained, leached soil conditions and dense scrubby vegetation prevail. Bogs abound, with one at the very top of Mount St. Patrick. Muddy conditions exists year-round and large wet areas can be found at the head of Sea Otter Cove, San Josef River estuary, Eric Lake, St. Mary Creek, Rasmus Creek and Upper Hansen Lagoon. The park falls within the Coastal Western Hemlock Biogeoclimatic Zone, which is the rainiest biogeoclimatic zone in British Columbia.

The northern coast of Cape Scott Provincial Park fronts onto Queen Charlotte Strait and Goletas Channel and extends for approximately 50 kilometres from Cape Scott east to Shushartie Bay. Extensive stretches of beach are found along the coastline. Five large bays feature white sandy and cobble beaches and include Experiment Bight, Nels Bight, Nissen Bight, Shuttleworth Bight, Shushartie Bay. They are interspersed with smaller bays, like Fisherman Bay, which have steeper gravel beaches. Large expanses of cobble beach can be found between the Nahwitti River and Shushartie Bay. These long stretches of cobble beach are interspersed with rocky headlands which are impassable at low tide. Approximately halfway along the northcoast is Cape Sutil, which is the most northern point of Vancouver Island.

Other features of the north coast component of Cape Scott includes a tombolo (which as a gravel and sand bar that connects a small island to the mainland), black gravel beach, blow holes, large black cliffs, and sea stacks.

The western coast of the park fronts onto the Pacific Ocean where it is vulnerable to the southwest storms, making it a more rugged and exposed shoreline. The three sandy beaches, Guise Bay, Hansen Bay and Lowrie Bay, are smaller than the northern beaches and are separated by long stretches of rocky coast. The more southerly beaches of Sea Otter Cove and San Josef Bay are larger and are protected slightly from the southwest storms by headlands. Along this coast, Hansen Lagoon, with its mouth at the head of Hansen Bay, stretches five kilometres inland and forms a large salt water marsh and tidal mud flats.

The lower portions of five main rivers are found within the park boundaries. These are the San Josef River, Fisherman River, Stranby River, Nahwitti River and the Shushartie River. Only a small part of the San Josef River is in the park. Fisherman River is the most completely represented in the park; it is fed by St. Mary's Creek and flows through an incised channel to its mouth near the head of Hansen Lagoon. The Stranby River is the

most intact of the parks' five river systems. Although the entire upper watershed of this river has been logged, the old growth timber in the lower beaches is still intact.

The Nahwitti River which lies just east of the Stranby is in poor condition due to both human-made and natural damage. Intensive logging in the early 1990s, slides and floods which have eliminated the lower river's holding pools, and altered its original course. The lower river now meanders over a broad flood plain. The lower river valley at the Shushartie River is still intact with significant stands of virgin timber.

Estuaries, which are highly productive systems given the mix of fresh and saltwater, are found at the mouth of the San Josef, Stranby, Nahwitti and Shushartie rivers. The estuary in the Stranby may have been reduced in size by earlier farming activities. The Nahwitti estuary has been substantially changed through timber harvesting and booming; it is now a tidal flat with only one large deep holding pool that forms an outfall to the ocean.

Other minor fresh water systems found within the park include St. Mary's Creek, Rasmus Creek, Dakota Creek, Laura Creek, Skinner Creek, and Irony Creek.

3.1.2 Geology

Cape Scott Provincial Park, situated on the Nahwitti Lowland, is an emergent part of the northern coastal trough. The bedrock geology has been identified as a mixture of sedimentary and volcanic formations of the Tertiary time period belonging to the geologic sub-group Bonanza. The dissected erosional surface of these Tertiary formations slopes northward to reach sea level between Cape Scott and Cape Sutil along the northern coast. The area is considered to be geologically more part of the Queen Charlotte Islands than Vancouver Island. During the Pleistocene era, glacial ice moved south and southwest across the Queen Charlotte Strait scouring the Cape Scott area. Today, remnants of the glacial outwash form well-drained upland pockets amongst the predominantly boggy lowlands.

3.1.3 Climate

Exposed on both the north and west coasts to moisture-laden ocean winds, Cape Scott Provincial Park receives a considerable amount of precipitation. Yearly figures represent twice as much precipitation as falls in Campbell River (Appendix A). Frequent and sudden storms batter the cape's coastline, with gale force winds and violent surf. During the winter months, prevailing winds from the southeast can reach velocities of 100 kilometres per hour. In summer, the prevailing winds are from the northwest and south, reaching speeds of up to 64 kilometres per hour. These winds moderate the temperatures year round.

3.1.4 Vegetation

The park's vegetation represents the very wettest hypermaritime variant of Coastal Western Hemlock Biogeoclimatic Zone (CWHvh1) (Krajina, 1969) and characterized by stands of redcedar (Thuja plicata), western hemlock (Tsuga heterophylla) and Sitka spruce (Picea sitchensis). Within the park, the differences in topography, exposure and drainage affect the cover vegetation.

Along the coastal fringe, Sitka spruce is the dominant tree cover as it is the most tolerant of salt water spray and thrives in well-drained exposed soil. With the high winds and stormy conditions, the trees appear stunted, unable to grow to great heights. Here, ocean spray is the dominant factor influencing understory species. Along the north coast of the park, high winds, lack of shelter and wet soils have resulted in extensive blowdown in the area between Laura Creek and Christensen Point, and north of Shuttleworth Bight. However, some Sitka and hemlock have withstood the harsh conditions along the coast and are over 250 years of age, measuring between 36 to 37 metres in height. Coastal areas that contain these trees include: the stretch between Laura Creek and two kilometres east of Christensen Point; the east side of the Stranby River to Irony Creek; west of Cape Sutil; just west of the Nahwitti River, and just west of Shushartie Bay.

The Stranby valley bottom contains a significant stand of old growth spruce forest. Virtually no logging has taken place along the Stranby valley bottom and as a result, a narrow riparian spruce flood plain ecosystem is intact in the lower watershed. The Shushartie valley bottom has had minimal logging and also contains a substantial old growth spruce forest. In contrast, the Nahwitti valley bottom has been heavily logged and no longer contains first growth trees. Instead, it consists of dense second growth with red alder (Alnus rubra) dominating the riparian zone. East of Jepther Point the forest has been recently harvested.

Within the interior of Cape Scott Provincial Park, vegetation types are diverse. Lodgepole pine (Pinus contorta) is common especially in higher-elevation muskeg areas. Yellow-cedar (Chamaecyparis nootkatensis) has been noted in pockets between Cape Sutil and the Nahwitti River. Yellow-cedar is probably common in all the boggy areas of the park. Wild lily of the valley (Maianthemum dilatatum) and bedstraw (Galium sp.) are common understory plants in the forested areas.

Marshland areas can be found at the head of Hansen Lagoon, Sea Otter Cove and in the estuaries. Here, vegetation consists of stunted yellow and redcedar and lodgepole pine trees, while mosses, grasses, salal (Gaultheria shallon), salmonberry (Rubus spectabilis) and skunk cabbage (Lysichiton americanum) dominate the understory. Land that is not continuously water-saturated supports climax hemlock and redcedar forest with dense canopies and thick understory.

The extensive beach area supports many varieties of small herbs and grasses which yield to dense cover of shrubs, such as salmonberry and salal, near the forest edge. Sea Beach

Sandwort (Honkenya peploides), Hairy Rockcress (Arabis hirsuta), Coast Strawberry (Fragaria Chiloensis) and Indian Paintbrush (Castilleja miniata), Sea Plantain (Plantago maritima) and pea (Lathyrus japonicus, L. littoralis) are among the plants found inhabiting the sand above the high tide line. Gravel bars are dominated by Sea Milkwort (Glaux maritima) and cinquefoil (Potentilla pacifica).

The sand dunes of Guise Bay and Experiment Bight are a feature unique to Cape Scott. As a result of Danish pioneers to settle the land, they are home to many common garden weeds, hyacinth, snowdrops, daffodils, holly, ivy, laurel, rhododendrons, monkey puzzle trees, and cinquefoil. The native plants of arrow grass (Triglochin maritimum), and sedges (Carex lyngbyei) can also be found in the dunes.

Rocky headlands provide a home to some of the more hardy coastal plants such as Rusty Saxifrage (Saxifrage ferruginea) and the colourful Indian Paintbrush. Another salt water tolerant plant, Cinquefoil (Potentilla villosa), can be found clinging to the exposed rocks along with stunted Western Yew (Taxus brevifolia) and Saskatoon berry (Amelanchier alnifolia) (Cannings, 1975).

3.1.5 Marine and Aquatic Values

Cape Scott Provincial Park protects a wide variety of marine and aquatic values, from the rich intertidal life of the rock pools to the deep water habitat of grey whales to the inland rivers.

The rocks of the park's exposed shoreline are often encrusted with various lichens or blanketed by green or red algae (Enteromorpha intestinalis/Petrocelis). Periwinkles, limpets and barnacles are found in abundance on the rough rocky surfaces. The Tidepool Sculpin (Oligocottus maculosus), Hairy Hermit Crab (Pagurus hirsutiusculus), a variety of seastars and sea anemones are some common inhabitants of the rock pools. Farther out from shore and below low-tide, the Rock Scallop (Crassadoma gigantea) and Northern Abalone (Haliotis kamtschatkana) are found.

Interspersed between these rocky headlands, white sandy beaches support the Razor Clam (Siliqua patula), Purple Olive Snail (Olivella biplicata), and Jumping Sandhopper (Orchestoidea californiana).

Associated also with park's marine component are the tidal mud flats of Hansen Lagoon, Sea Otter Cove and the San Josef River Estuary. The mixing of fresh and salt water provides for numerous ecological niches. Geoducks (Panope generous) and variety of clams can be identified including the Sand Clam (Macoma secta), Mud Clam (Mya arenaria), Butter Clam (Saxidomus giganteus) and Littleneck Clam (Protothaca staminea). Crabs are also abundant in the tidal flat area with such species as Hairy Hermit Crab (Pagurus hirsutiuscalus), Helmet Crab (Telmessus chaeiragonis) and Dungeness Crab

(Cancer magister). Among the most abundant plant life is eelgrass (Zostera marina) which grows in large mats and harbours numerous small crustaceans.

The Stranby and Shushartie rivers are highly valued for fish and fish habitat. Coho salmon (Oncorhynchus kisutch), pink salmon (O. gorbuscha), and steelhead trout (O. mykiss) are found throughout the Stranby River. Chum salmon (O. keta) is found in the lower three kilometres. Sockeye (O. nerka), coho, pink, chum and steelhead use the Shushartie River. The Nahwitti River, although not as pristine as the Stranby and Shushartie rivers, also contains fish. Coho, chum, pink, and sockeye salmon, winter steelhead, cutthroat trout (O. clarki), and Dolly Varden trout (Salvelinus malma) use this river system. Aleutian Sculpin (Cottus aleuticus) and Prickly Sculpin (C. asper) have also been found in the Nahwitti. In 1989, a small variant of rainbow trout (O. mykis)was discovered in a blocked tributary of the Stranby River.

Hansen Lagoon, Fisherman River and Eric Lake provided a suitable habitat for Cutthroat Trout. Steelhead trout and sockeye, pink, chum and coho salmon are thought to occur here. It is unknown whether the smaller creek systems in the Nahwitti-Shushartie support any fish species.

For many park visitors, the marine mammals represent the park's most spectacular wildlife resources. The sight of a pod of Killer Whales (Orcinus orcus) or Gray Whale (Eschrichtius robustus) grazing amongst the kelp beds is not uncommon. Sea lions and seals reside in the offshore waters and can often be seen lazing on the coastal rocks and islets. The occasional sightings of Harbour Porpoise (Phocoena phocoena) and Elephant Seal (Mirounga angustirostris) have also been noted by park visitors.

3.1.6 Terrestrial Wildlife

The inland forest area is know to support a variety of mammals. The Red Squirrel (Tamiasciurus hudsonicus)and White-footed Mouse (Peromyscus sp.) are the most common of these. Gray Wolf (Canis lupus), Cougar (Felis concolor), American Beaver (Castor canadensis), River Otter (Lontra canadensis), mink (Mustela sp.) and Raccoon (Procyon lotor) are residents of the park. Herds of Roosevelt Elk (Cervus elaphus roosevelti), which is a blue listed or vulnerable species, have been noted in the Nahwitti and Stranby drainages. Elk may occupy other drainage areas, but no observation data confirms their occupation.

During the 1970s, high populations of Mule Deer (Odocoileus hemionus) were recorded in the area. However, increased wolf populations during the late 1970s and the 1980s have reduced deer populations to a very low level. Information to date does not indicate that deer populations are recovering.

A significant population of Black Bear (Ursus americanus) inhabit the north coast and can frequently be seen foraging in the intertidal zone. Extensive bear trails are found along the

coast between Laura Creek and Christensen Point, as well as along the ridge that starts east of Cape Sutil.

Birdlife within the forest and forest clearings is diverse. The more common species include Rufous Hummingbird (Selasphorus rufus), Pileated Woodpecker (Dryocopus pileatus), Steller's Jay (Cyanocilta cristata) and Winter Wren (Troglodytes troglodytes). In the marshlands, the Short-eared Owl (Nyctea scandiaca) and American Kestrel (Falco sparverius) have been seen along with an occasional Snowy Owl (Nyctea scandiaca) and Northern Harrier (Circus cyaneus). Other feathered inhabitants range from Townsend's Warbler (Vermvora celata) to Pine Siskin (Carduelis pinus) (Cannings, 1975).

Aerial surveys taken during 1993 and 1994 show a considerable population of Bald Eagle (Haliaeetus leucocephalus) in the Nahwitti-Shushartie addition. A total of 25 occupied nests were located along the coast between Nissen Bight and Shushartie Bay.

The estuaries and tidal flat ecosystems in the western section of the park are prime feeding grounds for a variety of shore and migratory birds. Sandhill Cranes (Grus canadensis) and Common Snipe (Gallinago gallinago) are often found at the head of Hansen Lagoon. Spotted Sandpiper (Actitus macularia), Semipalmated Plover (Charadrius semipalmatus) and Killdeer (C. vociferus) are frequently seen feeding in flocks on the mud flats. Great Blue Herons (Ardea herodias), Canada Geese (Branta canadensis) and Trumpeter Swans (Cygnus buccinator) are among the migratory birds taking refuge in the sheltered lagoons and estuaries (Cannings, 1975).

3.2 SCOTT ISLANDS PROVINCIAL PARK

3.2.1 Topography

Cox Island is the easternmost and largest of the Scott Islands group. It is separated from Lanz Island by a channel that is about one kilometre wide. The island is roughly rectangular in shape and measures about 4 km long by 2.5 km wide. It has a rugged shoreline with many bays and high-tide beaches between and around numerous pinnacles, cliffs, gorges, and steep rocky ridges. As is the case with the other islands in the group, the land rises sharply from the tide-mark, except in a few places where shallow valleys run up from the shore. The island has a maximum elevation of 312 metres and has an upland area of 978 ha.

Lanz Island is only slightly smaller than Cox Island, measuring about four by two kilometres. It has a rugged rocky shoreline with many pinnacles, cliffs, crevices and precipitous slopes, and numerous small bays and high-tide cobblestone beaches. A larger bay with a sandy beach is located on the east side. Interior slopes rise to a maximum elevation of 212 metres. The island has a total upland area of 764 hectares, 692 of which are forested.

Beresford Island is actually a series of six small, rocky islets located 4 km southwest of Lanz Island. It has a total upland area of 14.5 ha, of which 5.6 ha is forested. The largest islet is dome-shaped with steep rocky sides, and is 98 metres high. Rocks and pinnacles are found at the north and southwest ends. The shore is rock, which emerges directly from deep water, making it possible to land only on a relatively calm day.

Sartine Island is a windswept treeless island with steep rocky slopes. Located about half-way between Lanz and Triangle islands, it is composed of a series of rounded, flat-topped knolls, rising to a maximum elevation of 113 metres, and joined by knife-edged saddles. Except for large boulders and a fringe of gravel at the base of some east slopes, there are no beaches or shelves. The main island is 28 ha in size, 16 ha of which are vegetated. Outer rocks are bare pinnacles, with a cumulative upland area of 5.2 ha.

Triangle Island (Anne Vallée Ecological Reserve), perched 46 km off the northwest tip of Vancouver Island, is the vanguard of the southern British Columbia coast. Perimeter slopes are steep with beaches or tidal rock shelves. The southwest peninsula ("Puffin Rock"), and the offshore rocks and pinnacles drop more abruptly into the sea. The island rises to a maximum elevation of 194 metres with an undulating central plateau and has a total upland area of 144 hectares, 106 of which are vegetated. Bare offshore pinnacles comprise an additional 5 ha. The soil is enriched by an abundance of bird droppings.

3.2.2 Climate

Meteorological data are available for Triangle Island from May 1910 to June 1921 through the Department of Naval Service and for Sartine Island from 1984 when an automatic station was installed. Generally speaking, the climate is mild and moist. Precipitation is moderate and fairly well spread out over the year, with a small proportion in the form of snow. Temperatures are characteristic of Pacific marine climates, with moderated seasonal variations and mean values approximately 4°C in January and 13°C in July. Throughout the year, fog and cloud predominate. Winds continually buffet the islands; hurricane force winds are frequent with speeds up to 193 km/hour.

3.2.3 Vegetation

On the seaward side of **Lanz Island**, Sitka Spruce is dominant, forming a bulwark against the storms that frequently lash the coast. Many trees are scarred or stunted, contorted or tilted by the wind, and the trunks are often disfigured as a result of injury or fungal infection. Dense understory stands of honeysuckle (Lonicera sp.), elderberry (Sambucus sp.), twinberry (Lonicera involucrata), alder (Alnus sp.), salal, and willow (Salix sp.) form an impenetrable barrier in many places. Bare litter areas with scattered Lady Fern (Athyrium filix-femina) are found under densely canopied spruce. Grass and forbs grow along much of the forest fringe. An extensive grassy area (Calamagrostis nutkaensis) occurs on the southwest tip.

Cox Island is floristically similar to Lanz Island. Salal and salmonberry dominate the understory of the spruce, hemlock and redcedar forest that covers 880 ha of the island. Grass and forbs fringe forest slopes, especially above steep rock faces, but there are no extensive grassy areas. Much of the forest appears diseased.

Beresford Island exhibits transitional features between large forested islands to the east, and treeless islands to the west. The only trees are Sitka Spruce, very old and much battered by the elements, growing on the rounded summit of the highest part of the island. Slopes are grassy with areas of dense shrubbery. Tufted Hairgrass (Deschampsia cespitosa) grows on the exposed rocky edges, while Elymus and Calamagrostis nutkaensis dominate most grassy slopes. Hairy goldfields (Lasthenia maritima), a rare blue listed species is foudn on this island. Salmonberry is the most abundant shrub, occurring under sparse stands of spruce and on slopes. The highest sections of attached rocks and pinnacles are grassy.

Sartine Island is treeless. Despite its steep rocky appearance, in places there is deep rich soil, favourable to plant growth. It is grassy, predominately Calamagrostis nutkaensis, with Elymus mollis on lower slopes and Deschamosua caespito on edges above rock faces. Conioseleum pacifcum and Montia sp. are common on grassy slopes. Dense salmonberry, one to two-metre high, covers the entire northern slope of the largest section of the island.

Triangle Island has no trees but has an unique distribution of coastal vegetation (Carl et al, 1951). The heavy growth of vegetation appears to be the result of the mild humid climate combined with a soil rich in minerals, and supplied with an abundance of nitrogen from seabirds that frequent the island. It is covered by a blanket of one to two metre-high salmonberry at its top. Stunted, wild crab-apple (Malus fusca) mixes with salmonberry in many areas making slopes impassable. On the highest part of the island, Saxifrage Ridge, salmonberry gives way to an expansive area of fragile, heavily burrowed soil covered with Saxifraga ferruginea and wood fern (Dryopteris assimilis). Extensive hummocks of licorice fern (Polypodium glycyrrhiza and ground-hugging salal also occur along Saxifrage Ridge. Calamagrostis nutkaensis is the dominant grass species on top of the island, covering substantial areas on the east side of Saxifrage Ridge and on the southeast ridge. Many perimeter slopes are grassy covered primarily by Tufted Hairgrass.

3.2.4 Marine and Aquatic Values

The rocky shores and islets of Triangle, Sartine and Beresford islands are used by Northern Sea Lions, or Stellar Sea Lions, (Eumetopias jubatus) as hauling out grounds, breeding grounds and rookeries. This species is considered rare both provincially and globally. This colony is the largest in British Columbia, surviving a federal policy of eradication from 1915 to1965 to protect the commercial fishery.

Other marine mammals that are found in the waters around the islands include Sea Otter (Enhydra lutis), Minke Whale (Balaenoptera acutorostrata), Humpback Whale (Megaptera novaeangliae), Sperm Whale (Physeter macrocephalus) and Killer Whale. Sea otters are on the provincial red list, that is they are endangered. The islands are also on the seasonal migratory corridor of the Gray Whale.

The Scott Islands is important breeding habitat for several species of seabirds including Pelagic Cormorant (Phalacrocorax pelagicus), Leach's Storm Petrel (Oceanodrama leucorhoa), Fork-tailed Storm Petrel (O. furcata), Black Oystercatcher (Haematopus bachmani), Glaucous-winged Gull (Larus glaucescens), Common Murre (Uria aalge), Thick-billed Murre (U. lumvia), Pigeon Guillemot (Cepphus columba), Cassin's Auklet (Ptychoraphus aleuticus), Rhinoceros Auklet (Cerorhinca monocerata), and Tufted Puffin (Fratercula cirrhata). Associated species include: Northern Fulmar (Fulmarus glacialis); Bald Eagle; Peregrine Falcon (Falco peregrinus); Marbled Murrelet (Brachyramphus marmoratus); Horned Puffin (Fraterаila corniculata); Northwestern Crow (Corvus caurinus); and Common Raven (C. corax). The pelagic cormorant, common murre, thick-billed murre, peregrine falcon, marbled murrelet, and tufted puffin are all on the provincial red list, or are endangered.

The Scott Islands are an important groundfish area, and squid spawning occurs along the shorelines. Geoduck and red sea urchin beds occur around Lanz and Cox islands.

3.2.5 Terrestrial Wildlife

The only endemic terrestrial mammal species on the islands are the White-footed Mouse and the Meadow Vole (Microtus pennesylvanicus). Despite the complete isolation of Triangle Island, in particular, both species are well-established, and morphological characteristics apparent in both populations on the island indicate that these mammals have diverged significantly from similar species inhabiting the nearest land-masses. Both species exhibit evidence of gigantism, which may be due to longer life, abundant food supply in summer, absence of predation and possible absence of parasitic or non-parasitic diseases. The Triangle Island Vole (Microtus townsendii cowani) is recognized as a provincial "red list" species.

A number of species have been introduced to the island and include rabbits (Triangle Island), mink (Lanz and Cox islands), and raccoon (Cox Island). Mink, in particular, had apparently eliminated pelagic bird nesting sites from Lanz and Cox islands (Carl et al, 1951). Surveys in the mid-1980s show small isolated colonies of pelagic cormorants and possibly pigeon guillemots.

4.0 CULTURAL VALUES

4.1 CAPE SCOTT PROVINCIAL PARK

4.1.1 First Nations History

The Cape Scott area was home to First Nations peoples of the Kwakiutl Nation. The Nahwitti lived to the north and the Quatsino further south.

The Nahwitti[1] territory stretched from Shushartie Bay to Cape Scott, and included the offshore islands, and consisted of three groups. As a result of decline in populations from war and disease and vulnerability to raids by northern peoples, by the 1870s, the Yutlinuk passed out of existence, and the Nakomgilisala and Tlatlasikwala became a 'single tribe' for external purposes such as in dealings with the Department of Indian Affairs (Galois, 1994:283).

In the early, Nakumgilisala village sites were at hanse Bay, Fisherman Bay, Hanna Point (now IR 2, Semach) and at the mouth of San Josef Creek. IR 3, Ouchton was an important village site.

During much of the 19th century, the main First Nations population was concentrated on the east side of Cape Sutil at the fortified village of Nahwitti (Mason, 1995). In 1879, a native reserve, the Nahwitti IR4, was confirmed at Cape Sutil. Today the reserve is uninhabited, but evidence of the village remain.

Other areas of First Nations habitation included Shuttleworth Bight and Shushartie Bay. Shuttleworth Bight was referred to as an old village site called "go'saa", and was used as a main fishing station. At the head of Shushartie Bay was another village site called Khatis. It was located at the head of Shushartie Bay, and was valued for its clam and crab beach.

To date, twelve archaeological sites have been identified. They include burial grounds, shell middens, remnants of a fish trap, pictographs, and remnants of a fortified village.

4.1.2 Post Contact History

In the late eighteenth century, English and Spanish explorers prescribed many of the present place names, such as Guise Bay, the Scott Island and San Josef Bay. Around 1800, Shushartie Bay became the primary trading centre on Vancouver Island based on the sea otter fur trade until the otters were virtually eliminated by 1830. Shushartie Bay lost its importance as a fur trading centre by 1836.

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[1] Originally, the name Nahwitti (newitty) was a native place name for Cape Sutil (formerly Cape Commerell) and the name of a Kwakiutl chief (Galois, 1994:277). However, by the mid 1800s, Nahwitti was used to describe the three tribes and their village.

Prior 1896, the only non-native people in the region were prospectors searching for gold in areas including the creeks and black sand beaches east from the cape to the Stranby River (Mason, 1995). Gold placer mining took place briefly at Dakota Creek and at Gold Beach, opposite Nahwitti Bar. Most prospectors left for the Klondike when gold was discovered there. The only non-native 'resident' was William McGary who lived in a house at Shushartie Bay, and traded with the natives and prospectors (Frey, 1975; Peterson, 1974).

In the latter part of the nineteenth century, the newly-formed government of British Columbia encouraged colorization by European settlers. In 1897, the Cape Scott area was settled by a group of hardy Danish pioneers attracted by the area's farming potential, particularly the flat fertile land at the head of Hansen Lagoon. They built a dyke across the lagoon and attempted to stabilize the sand dunes at Guise Bay. A store and post office were built at Fisherman Bay and in 1899, they hired a schoolteacher for their children's education. Their efforts, however, were not rewarded. Harsh weather conditions, the isolated location, and a changed government policy that would not grant the settlers title to their land or provide any services forced the majority of the original colonists to leave. By 1907, Cape Scott was deserted. The dedication and determination of the Danish to tame the land and eke out a living is still evident in the landscape today.

In the late 1800s, Shushartie Bay was a landing point for settlers as it was one of the few safe harbours along the coast. By the 1900s, a wharf, post office, hotel store and salmon cannery were constructed. Apart from the wharf, no remnants of the settlement can be found.

Also in the late 1800s, the Dominion Government Telegraph was built and connected the settlements in that area. Parts of the line are still visible near the Stranby River and near an old homestead on a ridge top just west of Skinner Creek.

A wagon route to Cape Scott was proposed through the Nahwitti Shushartie to the Cape Scott settlement, but it was never completed. Instead, a small road, approximately four feet wide, was built along the telegraph route, and was used to transport goods and supplies between Shushartie Bay and Cape Scott. The road was built of corduroy over muskeg in many places, and originally only connected Shushartie Bay to the Stranby River. Eventually it was extended to Fisherman Bay. The poor transportation route greatly discouraged settlers from remaining in the area on a long-term basis.

In the early 1900s, five families settled near Cache Creek, now called the Stranby River. By 1915, a store, church, post office, and one-room school were located at the mouth of Cache Creek. The Shuttleworth family was one of the first settlers at the mouth of the Stranby River; Shuttleworth Bight was named after them. The harsh climate, poor transportation routes and limited natural resources resulted in most settlers abandoning the area by the 1920s, and leaving the land to be reclaimed by nature.

When the Cape Scott area was officially opened for preempting, another wave of settlers followed in the Danish footsteps. They too made heroic efforts to settle the land and by 1914 had built a church, post office and community hall/school near Hansen Lagoon. But, without proper transport facilities, either by land or water, the settlement was doomed. At the end of World War I, the area once again was abandoned by all but five families. The 1950s saw the last of the settlers give up efforts to farm the Hansen Lagoon meadow.

For over 25 years after this second desertion, Cape Scott was all but forgotten. It regained significance in 1942, when, in the midst of World War II, Canada was looking to bolster its coastal defenses. Due to its strategic position, a combined military/air force base and radar station was constructed. The station's life was short, as it was demolished after the war.

Today the only inhabitants of the Cape Scott region are a few residents of the San Josef Valley and the crew at the Cape Scott lighthouse.

4.1.3 Historical Artifacts

Although there is an interesting story to tell of the history of the cape, few visible signs of the settlement still remain. The many buildings have disintegrated over time and are barely discernible. Rusting farm tools litter the Hansen Lagoon meadows and a decrepit steam boiler from the Danish sawmill lies on the east side of the lagoon.

One of the most impressive historical features is the dyke at the end of Hansen Lagoon which dates back to the original Danish settlement. The remnants of other efforts to tame the land can be detected in the sand neck where posts of a fence made from driftwood still stand, as an attempt to reclaim the sands as pasture land. In the boggy areas, ditches that were dug by the Danes to drain the water-saturated upland are still evident.

Today's hiking trails follow the same path as the old wagon routes of the past. The original corduroy track and ditching by the settlers can be seen in places, particularly around San Josef Bay.

Gravesites, including two cemeteries, are an intriguing reminder of the early settlers. The most unusual of these is a six foot tall pink granite monument that marks the grave of William Christiansen, age 12. The adopted son of the local school teacher, died in 1906 of blood poisoning after stepping on a rusty nail. A second gravestone, that of N. P. Jensen, can be found at the sand neck amid a disappearing hay pasture, part of his lasting efforts to check the shifting sands.

4.2 SCOTT ISLANDS PROVINCIAL PARK

4.2.1 First Nations History

Historically, the Scott Islands are recognized as being the territory of the Yutlinuk (Yut'linuxw), or Yulenox (Boas, 1934). Documentary evidence points to the continued use of their traditional Yutlinuk territory off Cape Scott, particularly for the procurement of seabird eggs (Galois, 1994). Since the Cape Scott region was the shared ancestral home to the Quatsino, Koskimo, and Nakomgilisala, there is some possibility that the Quatsino also used Triangle Island (Yasui et al, 1995). Archeological information is limited for the majority of the Scott Islands, with the exception of Triangle Island.

Triangle Island lies within the traditional Kwakwaka'wakw territory. Little information is known about the people who once occupied the island. Archeological evidence suggests extensive Kwakwaka'wakw occupation and use of the island and surrounding waters. The island has four sites, three of which are shell midden sites, and the fourth being a village site (Yasui et al, 1995). The size and complexity at the middens suggest extensive occupation and use of the island and surrounding waters.

4.2.2 Post Contact History

A lighthouse was constructed on Triangle Island in 1909 and 1910. Built during a period of undeterred optimism in the technological mastery of steam and iron over nature, the Triangle Lighthouse sent a million candlepower light some fifty miles out to sea from its perch on top of the island. After nine years of operation, with despairing light-keepers tormented by wind, rain and fog, it was dismantled. The installation proved to be just too exposed to the elements, and too high to be effectively seen in low clouds.

4.2.3 Historical Artifacts

The gigantic lantern from the light station at Triangle Island is housed in the Canadian Coast Guard base in Victoria. The base of the lighthouse and at least two other structural foundations remain visible on the peak of the island. In a large bay on the island's northeast side are the remnants of a tramway built to hoist supplies up the steep cliff face from the beach to the lighthouse.

5.0 SPECIAL FEATURES

5.1 CAPE SCOTT PROVINCIAL PARK

The special features of Cape Scott Provincial Park include botanical, geological, archaeological and historic features/processes (Figure 5). Mount St. Patrick is one such special area. As the highest point in the park (422 metres), it exhibits an unusual vegetative phenomenon. Unlike any other point in the park, the summit of Mount St. Patrick is a **blanket bog**. The vegetation here is extremely stunted, consisting of lodgepole pine, Douglas fir, mountain hemlock and dwarf juniper. Where there are not open pools of water, the ground cover is a thick layer of sphagnum moss.

The "**sand neck**", or "blow out" that separates the cape from the rest of the park is another significant site both the ecological diversity and in the archaeological and historical aspects of Cape Scott Provincial Park. Here, the shifting sand dunes present a habitat in which few plants can survive. Amongst the plants that do naturally exist are a variety of plant species introduced by the Danish settlers in an attempt to stabilize the dunes. Dandelion (Taraxacum sp.) and common chickweed (Stellaria media) are two examples. The sand neck also holds historical significance. The remnants of old fences made of driftwood are still visible and N. P. Jensen's grave site, outlined by a small picket fence, is nestled by the forest edge. Archaeologically, the sand neck is believed to be the site of a major Indian battle in the past and is an identified Indian burial site.

Hansen Lagoon presents another area of special natural and cultural significance within the park. The mixture of fresh and salt water provides diverse habitats for water-based plants and animals. The resulting abundance of food and the sheltered nature of the lagoon make it one of the richer resting areas for migrating waterfowl on the northwest coast of Vancouver Island. Historically, the meadows of Hansen Lagoon, the most fertile land in the area, served as the hub of the initial Danish settlement. Here, the sites of both the first and second dyke built by the Danes to improved their agricultural land are still evident. Also significant is the site of Alfred Spencer's homestead to the east of the lagoon. The homestead was occupied until 1956 but has since deteriorated. It is located next to the site of the old school house and community hall. Of additional note within the park is the site of the Christiansen grave located near the turn-off to Hansen Lagoon from the main trail.

San Josef Bay exhibits sites of both historical and natural significance. The bay area served as a second focus to the early pioneer settlement. Along the shore, the sites of Henry Ohlsen's store, the Anglican Church and old homesteads can be determined. Physically, the bay's wide expansive white sandy beach is a significant natural feature. In addition, cut into the headland separating the two beaches at San Josef Bay, are a set attractive marine erosional features known as sea stacks or pillars.

The natural features of the **Nahwitti-Shushartie** include old growth spruce forests along the Stranby and Shushartie river valleys and interesting geomorphological features (Figure

6). The large spruce trees that are thought to be over 250 years old are found in pockets along the coast and offer interesting contrast to the often stunted vegetation that has been subject to many years of harsh climatic conditions. The geomorphological special featues include tombolo, black gravel beach, blow holes, and sea stacks. The three archaeological sites offer a glimpse into the past. In particular, the petroglyph at Cape Sutil proves evidence of human existence from many years ago. More recent human encounters with the Nahwitti-Shushartie environment are also noticeable. Apple trees in the farm meadows, old homestead remains, telegraph wires and the old telegraph trail, with some of the corduroy trail still intact.

5.2 SCOTT ISLANDS PROVINCIAL PARK

The Scott Islands are the most important breeding grounds for seabirds in British Columbia. The outer three islands support over two million breeding birds, comprising over 38% of the breeding seabird population of British Columbia (Rodway et al, 1990). They are the most important colonies for Cassin's Auklets in the world, housing 58% of the estimated world population. Triangle Island supports the majority of Common Murre and Tufted Puffins breeding in British Columbia, and is the only breeding site for Thick-billed Murre in the province. Breeding populations may have been larger in the past prior to the introduction of mink and raccoon to Cox and Lanz islands in the 1930s.

Fossils occur on the sedimentary shelves on Cox Island.

Figure 5 Special Features- Cape Scott West
Figure not available at this time

Figure 6 Special Features- Cape Scott East
Figure not available at this time

6.0 VISUAL, RECREATION AND TOURISM VALUES

6.1 CAPE SCOTT PROVINCIAL PARK

6.1.1 Visual Values

The visual values of Cape Scott Provincial Park are associated primarily with its coastline. Although the upland vistas are limited due to the dense interior vegetation, a number of vantage points allow the visitor to appreciate park's visual values.

The summit of Mount St. Patrick offers the visitor a 360° view of the park's forested upland and scenic beach expanses. An excellent perspective is gained of San Josef Bay from the 422 metres in elevation. The beach in San Josef Bay has a view of a sheltered estuary and bay protected by the forested headlands further out to sea. The cape itself presents a view of an expanse of Pacific Ocean from a headland surrounded by frothing water and crashing waves. Other vantage points on Nels Bight, Experiment Bight and Nissen Bight present an open expanse of north coast beach characterized by unending rolling breakers.

The Nahwitti-Shushartie's wild, rugged character and rich supply of physical and cultural resources combine to offer some spectacular views and interesting features. With the proposed North Coast Trail corridor running almost entirely along the coast of the addition, there will be plenty of opportunities to view the stretches of sandy and cobble beaches, and the many steep headlands. Some of the high ridges offer clear views of the rugged shoreline. Other interesting visual features include the tombolo, Cape Sutil, Nahwitti Bar, and blowhole, Tatnall Reefs, and Shushartie Bay.

Visual values are also associated with the cultural landscape and artifacts. Farm machinery rusting in the meadows, rotting shakes and boards strewn amongst the underbrush, or grave sites hidden by a tangle of new growth are other visual experiences of Cape Scott Provincial Park.

6.1.2 Recreation Values

Cape Scott Provincial Park has numerous recreational values. It provides recreational opportunities for hiking, camping, nature study and appreciation, sight seeing, canoeing, kayaking and small pleasure craft use. Key recreational opportunities in the Nahwitti-Shushartie pertain to the coastal/beach setting, where there are opportunities for hiking, nature appreciation in the near-shore portions of the muskeg landscape, wildlife viewing, camping, cultural heritage appreciation, and fishing and boating along the river corridors and estuaries.

6.1.2.1 Existing Use

Cape Scott Provincial Park serves two functions in supplying recreation opportunities to the public. Although both are directly linked to the wilderness experience, one function is as a primarily day-use recreational opportunity, where use is concentrated at San Josef Bay. The other is as a relatively accessible wilderness hiking opportunity in the northern and eastern portions of the park.

Due to the heavy winter rains and frequent violent storms, Cape Scott Provincial Park experiences almost its entire visitor use during the less wet summer months between June and September with August being the peak month. Even within these months, use figures can fluctuate considerably depending on the weather conditions. Weekends are the most popular with use decreasing during the week. On most summer weekends, an average of 20 to 30 tenting parties are camped on Nels Bight. Use has peaked at 60 tents. During the August long weekend, the trail head parking lot is full with excess vehicles parking along the side of the road.

Visitor use of Cape Scott Provincial Park has been sparsely and inconsistently documented in the past. However, over 3,523 people visited Cape Scott Provincial Park in 1990. This increased dramatically by 1996 when there were 6,849 visitors, and in 1997, 6,333 visitors. A 1974 user survey showed that the majority of day users were of local origin, while the majority of overnight users are of Lower Island or Lower Mainland origin.

Visitor use of the area is increasing and is expected to continue. Such an increase will be tempered by distance from large population centers, access along logging roads and increasing ferry fares, but balanced by the improved Inland Island Highway. The type and origin of the visitor and the season of visitation are likely to remain the same.

There is evidence of rising use of the Goletas Channel by sea kayakers. However, the roughness of the water and the limited safe harboring points may restrict this recreational pursuit to the more experience kayakers.

6.1.2.2 Supply

Cape Scott Provincial Park fulfills an important role as a West Coast wilderness park. The experience in Cape Scott differs from that offered by parks on the east coast, such as Rathtrevor or Miracle Beach, which have relatively calm water, automobile access directly to the beach and extensive recreation development.

Together with Cape Scott, the other large parks such as Juan de Fuca Marine Trail, Brooks Peninsula and Pacific Rim National Park Reserve assist in providing a spectrum of West Coast experiences. Brooks Peninsula offers remote and rigorous wilderness opportunities. Pacific Rim National Park Reserve is a major destination area with a high level of use and, as a result, has lost much of its true wilderness character. Juan de Fuca provides a close-to-

urban day-use and extended hiking opportunities. Cape Scott's market niche is situated between the Brooks and Pacific Rim, in that it offers an accessible, yet less-developed, West Coast wilderness experience.

In the vicinity of Cape Scott Provincial Park, a number of small provincial parks and forest recreation sites offer mostly day-use opportunities such as picnic areas on the ocean or on a lake. In some cases, a few campsites are available. For the most part, Cape Scott Provincial Park is the only accessible protected scenic wilderness on the North Island.

6.1.2.3 Existing Facilities

To date, visitor facilities within Cape Scott Provincial Park, have been minimal, consisting of trails, primitive campsites with pit toilets and unmaintained cabins (see Figure 7). In the newly-added Nahwitti-Shushartie, visitor facilities are non-existent. With the exception of the overgrown old Cape Scott or telegraph trail.

Trails within Cape Scott Provincial Park provide relatively easy access into the park and follow the original wagon routes of the Danish pioneers. In some places, the Danish 'corduroy' trail construction and ditching methods can still be seen.

The trail leading from the parking lot to San Josef Bay, a section heavily used by day-users, is the best maintained portion of trail. It is wheelchair-accessible and a relatively easy short walk through an historically significant area of the park.

The main trail from the parking lot to Hansen Lagoon to Nels Bight runs through dense vegetation and boggy areas. At Hansen Lagoon, the vegetation opens up where bogs were drained and fields were cleared by the Danish settlers. The main trail has some of the longest stretches of mud in the park, particularly between Eric Lake and the Fisherman River. Trail conditions here are made worse by the large number of hikers using the trail and attempting to avoid the mud. Inevitably, as hikers walk around the mud, the extent of the mud spreads. Many of the mud holes now have boardwalks to minimize the environmental degradation along the trail. Near Hansen Lagoon, a secondary trail heads Nissen Bight.

From Nels Bight, a trail goes to Experiment Bight, Guise Bay and the cape. This trail is one of the drier ones, although thick undergrowth poses a problem near the shoreline. The Canadian Coastguard has constructed a series of steps, boardwalks and suspension bridges leading out to the fog alarm building past the lighthouse. This is proposed to be dismantled.

Figure 3 Existing Facilities Cape Scott West
Figure not available at this time

Within the Nahwitti-Shushartie, trail access currently is limited. The trail system that was built in the 1800s is overgrown and difficult to travel. The North Coast Trail Action Committee has identified a preliminary trail corridor for the North Coast Trail that primarily extends along the coast run through some of the private land in-holdings and Indian reserves (Courville and Rusel, 1994).

Cape Scott Park also offers less-travelled routes. The Mount St. Patrick route, the only hiking opportunity that does not follow an original Danish wagon route, rises from San Josef Bay, crosses over the summit of the mountain and down to Sea Otter Cove, then terminates at Lowrie Bay. Conditions on this trail are wet and the route is fairly undefined, as much of the route passes through bog and is not maintained.

A route connects San Josef Bay to the south end of Eric Lake and intersects the main trail to the east of Eric Lake. It has not been maintained over the years. It is one of the original Danish wagon routes with the corduroy track and ditching still evident in many places.

The only developed **campsite** is Eric Lake, which has 13 raised tent pads and a food cache. Informal sites are at Guise Bay, Nissen Bight, Nels Bight, Donaldsen Farm, and two along the north shore of San Josef Bay. Camping within the park is not restricted to these sites. Thus hikers can enjoy unrestricted camping on the beaches, especially at San Josef Bay, Sea Otter Cover and Nels Bight. As yet, camping sites not have been established in the Nahwitti-Shushartie. Nine pit toilets are presently in place, three in San Josef Bay, two at Nels Bight, and one each at Nissen Bight, Donaldsen Farm, Eric Lake, and trailhead.

Five **cabins** exist in Cape Scott. Two of these, one at Fisherman River and the other at Donaldsen farm, are in poor repair. Another two, one at Hansen Lagoon and one at Lowrie Bay, are in good condition but are not maintained. The fifth cabin is the ranger cabin at Nels Bight, which is not available to the public.

6.1.3 Tourism Values

Cape Scott Provincial Park protect one of the last large areas of the island's west coast as an accessible wilderness park with excellent interpretive potential that all ages can appreciate. It fulfills an unique role in the provincial park system as a wilderness park with minimal development. Cape Scott, in fact, is one of the more accessible West Coast wilderness parks. With the new Inland Highway and growth of tourism in the future, this park could become increasingly important as a destination area.

With the addition of Nahwitti-Shushartie, the park has the potential to become one of the tourism anchors for northern Vancouver Island. The proposed North Coast Trail would offer travelers the chance to traverse the entire width of Vancouver Island. The experience could be similar to hiking the West Coast Trail in Pacific Rim National Park Reserve.

6.2 SCOTT ISLANDS PROVINCIAL PARK

6.2.1 Visual Values

The visual values of the islands are primarily associated with the rugged shorelines which rise abruptly from the sea, the prolific wildlife that inhabits the area, and the critically important colonies of breeding seabirds and Northern Sea Lions. However, these islands are frequently obscured by fog and inclement weather.

6.2.2 Recreation Values

Scott Islands Provincial Park's three outermost islands are ecological reserves and, as such, have restricted access. The intense concentration of breeding seabirds and sea-lions makes the colonies highly vulnerable to any form of human visitation. Nesting birds and sea-lion rookeries are easily disturbed by boats, planes or helicopters which approach too close. To walk anywhere on the main nesting slopes collapses burrows and destroys nesting habitat.

Visitation to Lanz and Cox islands is estimated at ten to thirty visitors and are primarily fishers and kayakers. No existing recreational facilities are available on any of the islands.

6.2.3 Tourism Values

Remoteness and difficult ocean conditions limit accessibility to the Scott Islands. Lanz and Cox Islands do have some limited tourism potential, given their size and proximity to Vancouver Island. Recreational boating, including kayaking for experienced adventurers, is possible. Occasional diving opportunities and whale watching may have potential in the area. Off site interpretation of the ecological reserves could be an added attraction for North Island visitors.

7.0 LAND TENURES, OCCUPANCY RIGHTS AND JURISDICTIONS

7.1 CAPE SCOTT PROVINCIAL PARK

7.1.1 Reserves, Permits and Tenures

Reserves

Transportation Canada holds a reserve over the cape for the purposes of maintaining a lighthouse station. The cape is a major destination for park visitors and use of these federally held lands is not discouraged by the Canadian Coast Guard.

Three Indian reserves which are under federal jurisdiction are excluded from the park. They include IR2 Semach, IR3 Ouchton, and IR4 Nahwitti (Figures 8 and 9, Tables 1 and 2). At present, the reserves are unoccupied.

Permits

The following hold permits for Cape Scott Provincial Park.

- BC Telephone Company - for use and maintenance of a telecommunication comshell for the purposes of providing marine radio coverage;
- Sea to Sky Trails - for provision of commercial guided backpacking trips.
- Good Earth Productions - for commercial film productions for "Great Canadian Parks" series;
- McCrory Wildlife Services - for scientific research on beetles; and
- Natural Resources Canada - for forest insect and disease surveys.

Tenures

There are mineral tenures in the lower Stranby River area, forest licenses in township 23, sections 7 and 9, and timber sales licenses in sections 19 and 30.

The three river systems do not contain any registered traplines, and the Stranby and Shushartie rivers do not have any angling guides registered. In the Nahwitti River there are four guides registered for a total of 132 angler days.

7.1.2 Inholdings

Within the park boundaries, a number of parcels are held by government agencies, companies and private individuals. In total, there are 22 parcels of private land totaling approximately 854 hectares.

Within the original park, a total of eight parcels totaling approximately 184 hectares exist (Figure 8 and Table 1). The largest inholding of 94.9 hectares, under the control of Transport Canada (Canadian Coast Guard) and includes the sand neck and Guise Bay. The

smaller properties are primarily undeveloped. Some owners have expressed interest in selling their properties to the Province or exchanging them for other comparable lands. In 1989, the Hunter property (26.31 ha) at Nels Bight was purchased, followed in 1990 with the Stevens' property (0.62 ha), and Kendall/Corwin property (31.77 ha) in 1991.

The Nahwitti-Shushartie addition contains 14 parcels of fee simple lands held by companies and private individuals, totaling approximately 670 hectares (Figure 9 and Table 2). They are mostly undeveloped. The largest one of 281.7 hectares near Shushartie Bay is owned by MacMillan Bloedel. Another major land holder is Shuttleworth Bight Holdings Company, Ltd. which owns 244.02 hectares along the west and east sides of Shuttleworth Bight.

7.1.3 Adjacent Land Use

Outside the park to the west, there has been extensive forestry development, and timber harvesting continues to be the primary activity. Along the Nahwitti-Shushartie, not much timber development has taken place as yet. As a result of the Vancouver Island Land Use Plan, Low Intensity Areas have been established on both the west and east sides of the park. In these areas, priority will be given to: maintenance of coastal visual and recreational opportunities; protection of cultural and heritage values; protection of sensitive coastal fish and wildlife habitats; and recognition of biodiversity connectivity.

In the marine and coastal areas, harvesting of finfish, crabs, urchins, and clams occur. These activities are managed by the federal Department of Fisheries and Oceans.

7.1.4 Other Agency Interests

The federal Department of Fisheries and Oceans manage the water column and the commercial fishery in the park and are responsible for the maintenance and enhancement of salmonid habitat. They are also the agency responsible for the Ocean Act, which will be addressing marine protected areas. Currently the Marine Protected Areas Strategy is being developed in conjunction withe other federal and provincial agencies and stakeholders. The Canadian Coast Guard continues to operate the light station at the cape and has jurisdiction over the sand neck.

Provincially,the Heritage Conservation Branch of the Ministry of Small Business, Tourism and Culture has an interest in seeing that the archaeological sites remain undisturbed. BC Environment is interested in wildlife populations and habitat, administration of angle guide permits, and biodiversity connectivity with the adjacent land base. BC Lands has the authority to issue licenses for foreshore use and the Ministry of Forests is interested in forest health issues and the eventual development of the North Coast Trail from Shushartie Bay to Port Hardy.

7.2 SCOTT ISLANDS PROVINCIAL PARK

7.2.1 Reserves, Permits and Tenures:

Reserves

Fish and Wildlife have a Land Act reserve over Lanz and Cox islands for scientific research. As these islands are now protected as park, this reserve can be released.

Permits

Two permits are held for all the Scott Island and they are:

- Natural Resources Canada - for forest insect and disease surveys; and
- McCory Wildlife Service - for scientific research on beetles.

On Triangle Island, Simon Fraser University has a permit for long-term demographic research on seabirds. A research station has been set up on the island by Simon Fraser University and the Canadian Wildlife Service to support this research. A weather station was established on Sartine Island in 1954.

Tenures

The only known tenure on Lanz and Cox islands is a trapline.

7.2.2 Adjacent Use

Fishing and commercial harvesting of sea life occur around the Scott Islands. The islands provide anchoring spots in poor weather. In addition, log booms are moved through the area.

7.2.3 Other Agency Interests

Department of Fisheries and Oceans control the water column and commercial harvest of marine resources. Canadian Wildlife Service and BC Environment are interested in the bird and sea lion populations.

Figure 5 Land In-holdings Cape Scott West
Figure not available at this time

Table 1: Inholdings and Reserves in Cape Scott Provincial Park - West

as of September 21, 1994

MAP REF.	LEGAL	SIZE (ha)	OWNER	CT	PID
1&2	DL 97, 1282 Rupert District	94.90	Transport Canada		
3	E1/2 of NE1/4 of NE1/4 os Sec 23, Tp. 43, Rupert District	1.93	Anglican Synod of BC	186501	006-598-641
4	Frac. S1/2 of S1/2 0f Sec 16, Tp. 43 Rupert District	60.05	Niho Land & Cattle Company Ltd.	EC135548	001-268-929
5	Frac. SE1/4 of SE1/4 of Sec 17, Tp. 43 Rupert District		Niho Land & Cattle Company Ltd.	EC135547	001-268-970
6	Lot 4, Plan 2503, Sec 21, Tp. 41, Rupert District	3.78	Zeilski, G	K49913	006-459-188
7	Lot 5, Plan 2503, Sec 21, Tp. 41, Rupert District	3.83	Godby & Nickon, Executors	2334931	002-041-782
8	NE 1/4 of NW 1/4, Sec. 13, Tp. 43, Rupert District	16.19	Niho Land & Cattle Company Ltd.	EC135546	001-268-775
9	Pcl.A(DD97997) of NW 1/4 Sec. 10, Tp. 43, Rupert District	0.92	Martin, Mary	R21270	003-657-906
10	Pcl.A(DD46505) of Sec's 20 & 21, Tp. 41, Rupert District	2.43	Anglican Synod of BC	465061	009-879-773
11	Indian Reserve # 2 - Semach				
12	Indian Reserve # 3 - Ouchton				

Figure 6 Land In-holdings Cape Scott east
Figure not available at this time

Table 2: Inholdings and Reserves in Cape Scott Provincial Park - East

MAP REF.	DESCRIPTION	SIZE (ha)	OWNER	CT
13	Parcel B of SW ¼ of Sec. 20, Tp. 23	0.79	Turner & Amos	EC12181
14	NW ¼ of Sec. 8, Tp. 35	64.75	Shuttleworth Bight Holdings	J28477
15	SW ¼ of NE ¼ of Sec. 16, Tp. 35	38.85	Shuttleworth Bight Holdings	CTM15069
16	S ½ of NW ¼ of Sec. 16, Tp. 35	38.85	Shuttleworth Bight Holdings	CTR23428
17	NW ¼ of SE ¼ of Sec. 16, Tp. 35	38.85	Shuttleworth Bight Holdings	CTR23431
18	SW ¼ of Sec. 17, Tp. 35 except the part lying east of Cache Creek	16.59	Shuttleworth Bight Holdings	CTEB11600
19	SE ¼ of Sec. 18, Tp. 35	46.13	Shuttleworth Bight Holdings	CTEB11601
20	NW ¼ of Sec. 2, Tp. 42A	64.35	Niho Land & Cattle	CTEC135545
21	N ½ of NE ¼ of Sec. 12, Tp. 42A	25.09	Angus	CTEC5418
22	SE ¼ of Sec. 13, Tp. 42A	22.66	Angus	CTEC5147
23	DL 19	262.44	MacMillan Bloedel	CTJ98559
24	DL 78	11.75	Chambers-Owander	CTEB84696
25	Blk A of Sec. 5, Plan 556 (11T5)	19.27	MacMillan Bloedel	CTJ69234
26	Blk C of Sec. 5, Plan 556	19.27	Higgins, E.M.	CT2324381
27	Indian Reserve # 4 - Nahwitti			

8.0 PLANNING ISSUES

Many issues need to be addressed in the management planning process. A number are highlighted below, but this listing is by no means exclusive.

8.1 Management of Park Access

The amount and type of access provided to a protected area will often determine the type of visitor use, number of visitors, seasonality of visitation, the degree of management required, and the ultimate "character" of the protected area. Currently the park is only accessed by vehicle via the San Josef mainline. Marine access is permitted at various locations and aircraft access is allowed through a permit system. Access to the three ecological reserves in Scott Islands Provincial Park is prohibited except by permit for scientific research and monitoring projects. Lanz and Cox, although have important and sensitive natural values, can be visited by boat. The management plan will address the issue of access with particular focus on the Nahwitti Shushartie.

8.2 Level of Development

Cape Scott Park is known for its accessible wilderness experience. However, increased numbers of visitors can detract from the wilderness attributes and results in both social and environmental impacts. For example, BC Parks has constructed boardwalk over some of the challenging muddy trails to minimize environmental impact. As more use occurs, so does the pressure to increase the level of development to improve the quality of the experience and protect the environment. Demands for ecotourism opportunities to diversify the local economy may also increase use and fuel the pressure for development. A balance must be reached between development and protection of park values, and the recreational experience offered by the park. The management planning process will review the current level of development and type of experience and give direction for future development, if any. Focus will be on the Nahwitti Shushartie which is currently undeveloped.

8.3 Management of Natural Values

Cape Scott Provincial Park protects a representative sample of the Nahwitti Lowlands Ecosection but some of the natural vegetation and ecosystems has been affected by forest development, clearing by settlers, and introduction of non-endemic species. Introduced animals and plants on the Scott Islands put at risk the breeding bird colonies and the rare and endangered species. The management plan needs to address the management of vegetation and wildlife habitat requirements of the parks' wildlife and recreation management.

8.4 Management of Cultural Values

Cape Scott Provincial Park and Scott Islands provincial parks protect glimpses from both First Nation and European history. In a previous master plan, BC Parks has adopted the theme of '*Wilderness reclaiming the works of man'*. The management will review this direction.

8.5 Inholdings

Cape Scott Provincial Park contains 24 parcels of land held by companies or private individuals. Development of these parcels cn have significant impacts on the natural and recreational values of the park. In addition, the inholdings in the Nahwitti Shushartie may influence location of the trail corridor and the level and extent of recreational activities and development within the park. The management plan will give direction on the management of these inholdings.

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APPENDIX A

Comparison of Monthly Climate Date
Cape Scott and Campbell River

Cape Scott

Monthly	Mean Daily Temp (° C)	Average Precipitation (mm)
January	4.1	307.6
February	5.3	252.7
March	5.4	234.5
April	7.2	187.5
May	9.4	135.3
June	11.5	103.2
July	13.2	83.1
August	13.9	106.4
September	12.7	191.5
October	10.2	351.5
November	6.9	331.3
December	5.1	344.0

Campbell River

Monthly	Mean Daily Temp (°C)	Average Precipitation (mm)
January	1.1	222.6
February	3.4	172.5
March	4.5	154.8
April	7.4	77.4
May	11.3	53.0
June	14.2	49.1
July	16.9	40.0
August	16.7	55.0
September	13.7	77.1
October	8.8	162.8
November	4.6	239.7
December	2.5	276.5