AN INVENTORY OF INTERNATIONAL PARK POSSIBILITIES: POINT ROBERTS, BOUNDARY BAY, SAN JUAN & GULF ISLANDS ARCHIPELAGO

A JOINT REPORT PREPARED FOR THE INTERNATIONAL POINT ROBERTS BOARD

U.S. NATIONAL PARK SERVICE
PARKS CANADA

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AUGUST 1973

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INTRODUCTION

ORIGIN AND SCOPE OF STUDY

The International Point Roberts Board at its meeting with the International Joint Commission on April 11, 1972, suggested that the U. S. National Park Service and the Canadian National and Historic Parks Branch be asked to investigate the park potentials of Point Roberts.

The commission authorized the board to request the U. S. National Park Service and Canadian National and Historic Parks Branch to cooperate in making conceptual studies of international park possibilities in two orders of magnitude: one embracing the environs of Point Roberts; the other involving a larger region which was to include the island, marine, and littoral areas of the U. S. San Juan Islands, the Canadian Gulf Islands and the mainland coast from Vancouver, British Columbia, south to Everett, Washington. This study area was defined with primary reference to the requirements of the International Point Roberts Board; this definition does not imply that there are no other focal points of park interest elsewhere in the Puget Sound-Strait of Georgia region deserving separate study. The terms of reference for accomplishing the study were developed and agreed to by the U. S. National Park Service and Canadian National and Historic Parks Branch on December 12, 1972.

In line with the expressed intent of the Point Roberts Board, the United States National Park Service and the Canadian National and Historic Parks Branch have fulfilled a broad mandate. Accordingly, for the purpose of this report the terms "parks" and "potential parks" have been given a broad definition to refer to areas that now do or could in the future fulfill some important conservation or recreation function, including: wilderness areas; underwater areas with important scientific flora and fauna; wildlife conservation areas; public access areas for hiking, fishing and camping; boat docking and other recreation oriented uses.

The study was well under way by mid-January. Many federal, state and provincial, county and regional agencies provided the two

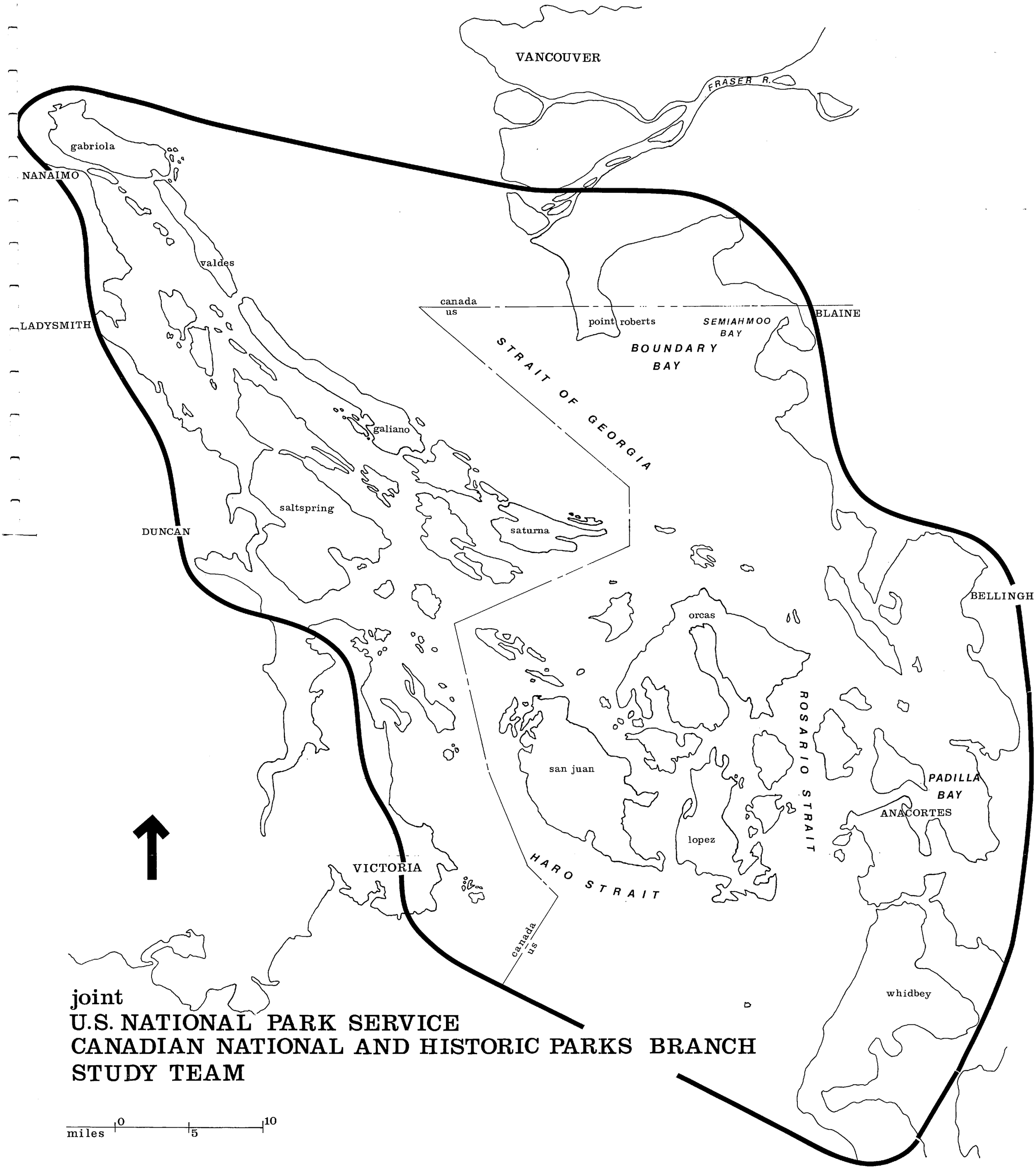
park services with a great deal of valuable resource information throughout the study. This study, conceptual in nature, is based upon onsite observation by study team members and highlights the known research data on some 70 resource areas which are identified in this report.

This report offers a relatively complete inventory of the large, essentially undisturbed natural tracts within the study area possessing major park characteristics as well as the marine areas possessing important scientific values. There are without doubt many smaller areas which could be identified as having unique characteristics but are beyond the scope of this investigation.

The study includes a map showing impending land uses for the entire study area, as accurately--as can now be assessed--indicating the uses to which the study area lands are proposed to be put. In large part, the land uses within the study area have been taken from the latest county and Regional District plans and have been cross-referenced as well by an inventory of the potential parks and installations of other agencies. It cannot be said for sure what the actual uses of land in the study area will be, but if present trends are indicative of the past, a major land-use conflict is developing between man's choosing to completely settle the study area or to preserve some of the last remaining scenic and scientific values of this area.

The San Juan-Gulf Islands archipelago, the Olympic Peninsula, the North Cascades, Mount Rainier, Seattle, Vancouver, Victoria, and southern Vancouver Island are the major attractions of an extensive vacation land situated in northern Washington and southern British Columbia. The study area covered by this report lies within this recreation complex. The report, therefore, is not confined to strictly local, state, or provincial interests, but, being part of the total recreational picture, is of international importance. It analyzes public uses of the study area--what parks and other recreation facilities now serve these people--and indicates what future demands might be.

THE STUDY AREA



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U.S. NATIONAL PARK SERVICE
CANADIAN NATIONAL AND HISTORIC PARKS BRANCH
STUDY TEAM

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An international problem is apparent, however, and the issue is the rapid loss of these natural island and marine resources. Without doubt, it is possible to preserve major marine and island parks for citizens of the United States and Canada to enjoy, while at the same time providing for human settlement as is needed. This report focuses on this national and international problem of the rapid loss through settlement of irreplaceable recreation and conservation resources that are being destroyed through lack of appropriate protection. With its essentially complete inventory of all major park possibilities extending from Whidbey Island to Gabriola Island, this report sets out to provide and investigate a number of alternatives for assisting in a solution to the specific issue of Point Roberts.

THE CONCEPT OF AN INTERNATIONAL PARK

The concept of international parks, while not new, has certainly proven to be a viable one. In its application, it has proven to be a flexible concept, capable of a variety of specific interpretations to meet specific situations. Its focus in all cases has, however, been international cooperation and coordination in planning and managing public reserves.

In North America, there are already a number of international parks which are typically contiguous public recreation or conservation reserves along international boundaries. These have been established by joint legislative action. On the Canada-U. S. border, a number of formulae have been employed. A special commission was jointly established to develop and operate Roosevelt-Campobello International Park (New Brunswick-Marine 1964). An exchange of letters forms the basis for establishing a joint advisory committee that informally coordinates actions in a provincial park and a U. S. forest reserve. Continued consultation provides the basis for coordinated planning and management of Waterton-Glacier and the soon-to-be-created Klondike Gold-Rush International Park. Although this list is incomplete, it demonstrates a history of cooperative activity.

The Point Roberts/Boundary Bay/Semiahmoo Bay area has been considered

in the past as a potential international park area where coordinated planning and management would be of mutual interest to Canada and the United States. This study reexamines this possibility in the context of a broader study area that includes the San Juan-Gulf Islands archipelago.

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PARK RESOURCES OF THE REGION

OVERVIEW OF THE STUDY REGION

The region defined for this study--Point Roberts and its entire environs--is part of a marine-oriented area described as an "inland sea" because of the shelter afforded the Puget Sound/ Strait of Georgia area by the Olympic Peninsula and Vancouver Island.

This "inland sea" is considered one of the world's most beautiful, diverse, and ecologically rich regions. Its proximity to the larger population centers of the Pacific Northwest and southwestern British Columbia endow it with outstanding outdoor recreational potentials. It is worth noting that this rich island-type environment with its sheltered waters and equable climate has considerable tourist appeal and can be considered a unique continental resource area.

A dramatic mountain backdrop, a diverse range of bays, islands, passages, estuaries and tidelands, compose its beauty. This rich geographic pattern reflects a turbulent geological history, the rising and falling of the entire coastal area accompanied by marine erosion and major delta building. The Strait of Georgia might well have been a lake with its rugged shoreline cliffs. These cliffs are now a part of the many islands in the area. The island archipelagoes of the "inland sea" slows and constrains the tides so that the ocean waters are heavily mixed with fresh waters--largely from the mighty Fraser River. This condition is less true south of the Point Roberts/Active Pass link where the rush of ocean waters through the Strait of Juan de Fuca is strong.

These oceanographic forces in the study region create an underwater region where the bottom characteristics are distinctly different from areas created by other types of oceanographic forces. The tide-swept channels in the San Juan-Gulf Islands archipelago are characterized by rocky and gravelly ocean bottoms, excepting in sheltered bays where stream and ocean sediments are laid or where their drift creates spits and lagoons.

Northward in the central Strait of Georgia, the lack of strong tides results in major depositions of fine sands and sediments from the Fraser River, which annually deposits 10 million tons of alluvium into the Strait of Georgia.

This diversity of geographic and oceanographic conditions results in the "inland sea's" amazing biological richness. As a whole, the "inland sea" supports over 1,100 higher life-forms. Much of this is attributable to the fantastic productivity of the Fraser River plume--the zone where fresh and salt water mix. The periphery of this plume is abundantly supplied with silica, which fosters rich growth of marine plants and phytoplankton, the base of the food chain. The phytoplankton feed the grazing zooplankton which in turn attract and nourish small fin-fishes, and the organisms which perish in the brackish plume nourish scavengers and bacteria on the ocean floor. Perhaps the most valued and celebrated fish of these waters is the salmon, which depends on the brackish waters of the plume to cushion its transition from fresh to salt water on both its seaward and return migrations. Herring, a principal food for salmon, also thrive within and near the plume.

Herring, salmon, and steelhead are commercially valuable; salmon, steelhead and coastal cutthroat are highly valued as sport fish. There may be potential sport and commercial fishing interest in other species as yet untapped.

The nutrient-rich Fraser River Delta and the rich tidal foreshores from Boundary and Semiahmoo Bays to Padilla Bay support a diversity and abundance of marine birds. Some 110 bird species depend on the "inland sea's" resources - particularly those intertidal areas that provide feed and resting areas for migratory and wintering waterfowl as well as shorebirds.

The most diverse habitat of the "inland sea" in terms of species is found in the rocky-gravelly ocean bottom of the San Juan-Gulf Islands archipelago. Here are found anemones, tubeworms, sea urchins, sponges, corals, mussels, and--on the numerous reefs--many species of rockfish such as cod. The "inland sea" provides habitat for large octopi. This diversity explains the attractiveness of sites within the study region for

recreational scuba diving. On the exposed reefs with clean swift waters, species such as giant barnacles and kelp thrive.

Embayments in the islands and the mainland coastline often have warmer waters than the larger straits as well as being generally more rich in organic feed. Here Pacific oysters thrive, and on the sandier areas so do Atlantic oysters, clams, sand dollars, shrimps, flatfishes like sole, and crabs. These species are taken by both commercial and sport fishermen.

The general geology of the study area is intriguing. The submerged fossil beds of the islands were once above water. The exposed sandstone formations of the islands have been carved by the tides into exquisite shapes, caves, and ledges. Sandy beaches and spits have been assembled by the tides, and Boundary Bay is the product of the combined actions of deposition and ocean erosion. The Point Roberts highland, a gravelly bluff probably deposited by glaciers, was most likely an island when the Fraser River eons ago emptied into the present-day Boundary Bay.

The climate of the entire Pacific coast is dominated by the influence of prevailing winds from the sea and warming ocean currents. The weather of the Point Roberts/Island archipelago region is slightly cooler than a Mediterranean climate. The precipitation is less than 30 inches annually--substantially less than surrounding areas because this sub-area lies within a rain shadow created by the Olympic Mountains forcing moisture from ocean storms to fall largely on their westward side. The winter half-year is wet, but in summer--especially July and August when rain is less than one inch per month--the weather is magnificent for outdoor pursuits. The summer air is warm, averaging 64° in July and August, and moderate--rarely in excess of 86°--due to sea breezes. The study area has roughly 2,100 hours of sunshine annually, a true sunshine belt in an otherwise wetter and cloudier west-coast-marine environment.

POTENTIAL PARK RESOURCES: CANADA

Land and Sea

This marine-oriented region is replete with preservation potentials, reflecting the combined resources of the sea and the land in an area of ecological richness. There are many opportunities for preserving lands essential for conservation reserves and recreation. Acquisition of such lands is an urgent task because recreation and conservation demands are being parallelled by other demands competing for the land resources.

The sea is a focus for recreational activities as well as scientific and educational ones. The beaches and shorelines offer opportunities for swimming, scuba and skin diving, studying nature, and boat launching. The intertidal areas afford many opportunities for swimming, nature study, and conservation. The surface of the sea gives free and unfettered mobility, and the challenge and beauty of its changing moods is a tonic for the recreationist. Below the surface and its turbulence is the quiet and fascinating garden of the sea.

The land of the study area has its own qualities. The craggy low mountains and peninsulas have Arbutus and Garry oaks--trees that thrive by the sea--mixed with a range of plants from cedar trees to cactus. Wave-cut sandstones are geologic forms of particular interest. High bluffs above the ocean, such as Point Roberts on the mainland and island peaks, offer magnificent vistas of the island archipelago, the coastal lowlands, and the higher mountains.

The potentials of numerous sites throughout the study area are recorded in detail in the tables at the end of this section. This inventory of sites provides the basis for the identification and elaboration of conceptual park alternatives in the study area.

Point Roberts as the focus of the study was first considered. Lands adjacent to the point having park potential were then added to the inventory. The focus was broadened to include Boundary and Semiahmoo Bays and coastal tidelands. Potential sites in the San Juan-Gulf Islands archipelago were inventoried at the next level.

In identifying these individual sites, the expertise of many agencies and individuals was directly and indirectly drawn upon. The focus was to locate and describe places having particular scenic, recreational, scientific, or educational values warranting preservation--under a variety of administrative alternatives.

Additional criteria helped determine the selection of potential sites. Available public land was a major but not exclusive guide. Sites having visual prominence and scenic significance were included as were those having high recreational potential. Sites on sheltered waters and suitable for boat-based access were also included.

Boundary Bay

Boundary Bay, adjacent to the Point Roberts peninsula, is a particularly significant resource area. Including its Mud Bay section, it has 16 miles of shoreline with some 14,000 acres of intertidal foreshore, 2 to 3 miles in width.

Geologically, it is a vast floodplain and river delta area, built up by glacial deposits overlain with sand and silt. This deposition of materials is still going on, and the intertidal and subtidal banks are still being extended. Boundary Bay differs from the nearby foreshores, its waters being relatively silt free and high in salinity. The rich and diverse biological communities found in Boundary Bay may be there for either or both of these reasons.

Mud Bay, into which the Nicomekl and Serpentine Rivers empty, has a foreshore characterized by silty surface conditions, and quicksand areas where underground streams percolate to the surface. West of Mud Bay, however, some 12,400 acres of the bay's foreshore consists of firm clean sand. This sand, in depths of over 60 feet in some places and 20 feet in depth over most of the bay, provides much more stable foundation conditions than found in either the Sturgeon or Roberts Bank areas. Beyond the foreshore, the bay deepens very gradually, and on the Canadian side barely reaches a depth of

20 feet at low water. Behind the shoreline there is extensive agricultural use, a wireless station, a private light aircraft field, and the residential community of South Delta. Shoreline residential development is situated at Beach Grove and at Centennial Beach.

Boundary Bay as a whole is a major marine life and waterfowl area currently held as a provincial reserve. It is an important link in the food chains and breeding areas of the entire Strait of Georgia system and the Pacific waterfowl flyway. The bay is also well known for its clams and crabs. Several other species of detritus and filter feeders, such as oysters, barnacles, and sea anemones are known to occur here. Ground fish, sea snails, and other edible sea creatures also exist in a significant quantity. Boundary Bay is a major herring spawning area. Reclamation or additional pollution of the bay would most likely harm the local herring fishery, among other marine values, and could reduce or disperse the commercial and sports salmon fishing. Watershed protection in the Serpentine and Nicomekl River valleys as it relates to Boundary Bay is highly important.

Up to 100,000 waterfowl winter in the bay each year, and over a million birds use the area annually during migration, including most of the population of black brant geese. Marsh areas along the shore provide for protection and some nesting for birds; the marine vegetation at the foreshore edge provides an important feeding area; and numerous shore birds feed on the tidal flats. Mud Bay is particularly significant for its sheltered location and as a feeding area.

Generally by being at the top of the food chain, the waterfowl act as grazers and predators within the foreshore community. Consequently, any external influences that affect the producers within the food chain, such as eel grass and algae, have a direct influence on this internationally significant wildfowl resource.

Other marine organisms that may be dependent to an extent on the food chain relationships in Boundary Bay are marine mammals, including an estimated population of 275 harbor seals. Various

species of whales have also been observed in the area.

Biologically, three basic ecological communities can be identified in Boundary Bay. Moving from shallow to shallower water, these include:

Eel Grass Community: This important producing unit occupies the lower tidal flats and acts as a detritus trap. It is found in association with the green algae Ulva. This particular community appears to be one of the most important for various higher life forms. It also harbors what is probably the most complex biotic community in the bay. Large numbers of detritus and filter feeders are a part of this community.

Red, Green, and Blue-Green Algae: These primary producer colonies, found on the intertidal flats, are dominated by the red alga Iania and are often free floating. They act as detritus and sand traps, slowly building up and adding to a more shallow area known as the salt marsh. It is within this community that several forms of dabbling ducks feed.

The Salt Marsh: The salt marsh represents the upper stage of the natural succession of plant life occurring in Boundary Bay. It consists of various terrestrial halophytic--salt loving--plants growing on the substratum built up by past colonies of algae and trapped sand and silt. It is the chief feeding area for many waterfowl species, particularly ducks and black brant.

POTENTIAL PARK RESOURCES: UNITED STATES

San Juan Island

Situated within the "inland sea", the San Juan Islands are a profusion of individual islands, widely varying in character. The nucleus of the San Juan archipelago is formed by Orcas, San Juan, and Lopez Islands. Orcas Island, 57 square miles in size, is the largest of the group; however, of the 473 islands awash at low tide, the vast majority have an area of less than one-quarter of an acre.

To the south and west, the San Juans are bounded by the open waters of the Strait of Juan de Fuca. The San Juan islands are separated from mainland Washington by Rosario Strait. To the north of the islands is the Strait of Georgia.

For the most part, the individual islands are rugged and mountainous. Many island peaks exceed 1,000 feet, and typically rise precipitously from the water's edge. Where sufficient soil permits, the islands are heavily wooded,

especially the northern shores. Landforms vary from smooth glaciated plains to irregular rocky mountain peaks.

The islands generally possess irregular shorelines, deeply indented by narrow fjord-like harbors. Separating the islands from each other and from the mainland is a complex series of submarine troughs. These channels, commonly narrow and U-shaped due to glacial erosion, often attain depths of over 600 feet, and occasionally exceed 1,000 feet in depth.

Topography - Geology

The San Juan Islands represent the visible evidence of a partial submergence of a mountain range that connects the United States mainland and Vancouver Island. The higher points of this submerged range constitute the islands and reefs, while the former valleys and ravines are its channels and harbors.

The landscape is characterized by abrupt changes in elevation. The highest point within the islands is Mount Constitution at 2,409 feet above sea level; the deepest point sounded near the islandsis in Haro Strait, 2,356 feet below sea level.

The islands geology is composed mainly of Paleozoic and Mesozoic sedimentary rocks, the former having been intruded and changed by a series of igneous dykes and sills of Mesozoic age. The structure and form of these sedimentary rocks have been greatly complicated by later folding and faulting.

What are now the San Juan Islands were at one time overridden by glaciers, significantly smoothing the character of the land. Even the summit area of Mount Constitution is deeply striated and polished by glacial action. Evidences of glacial drift are widespread, and excellent examples of recessional moraines occur in the study area. The shorelines of the islands are mostly rocky with some bays, estuaries, and headlands; there are few beaches. The inland waters, while relatively calm between the islands, can be dangerously choppy, with fast-running currents in the channels.

During the winter season the great storm waves that otherwise would be very effective agents of erosion, are broken up by interference of the tiderips, and it is only on a slack tide that the storm waves' action becomes erosive. As a result, a remarkably well developed wave-cut bench near high-tide level is encountered on all exposed shores throughout the region.

The latest geological movement occurring in the islands appears to have been a general uplift. More recent, upraised, wave-cut beaches are to be seen in many places at elevations of 20 feet or higher.

Most soil on the islands is loam, varying from rocky to gravelly to silt. Rocky outcroppings are prominent throughout the islands. Freshwater streams flow intermittently during the year.

Climate

The San Juan Islands are located within a dry belt. Along the west coastline of Vancouver Island, rainfall is about 150 inches; in Victoria, on the east side of the island, because of the island's high mountains, the yearly precipitation averages 23 inches. The Olympic Mountains create a similar rain shadow effect for the San Juans. While the western slopes of the Olympics are among the wettest areas in the United States, Friday Harbor's precipitation averages only about 9 inches. Somewhat higher averages occur at higher elevations on the islands as on Mount Constitution. Rainfall generally occurs during the winter months, though it can be expected at all times of the year. Snowfall is rare in the islands and generally does not remain on the ground for more than a few days.

Vegetation

Vegetation on some of the San Juan Islands is dense and considerably varied, while other islands appear to be all but barren, reflecting the many microclimates that exist here, as well as the decades of human use. Forested areas are dominated by Douglas fir, hemlock, and western red cedar. Several distinctive species, such as Arbutus and Garry oak,

reflect the unusually mild climate of the islands. Subordinate broadleaf and herbaceous species are commonly associated, particularly in open or disturbed areas.

Many formerly wooded areas have been cleared and are now pasture. Some of these pastures are in less than optimum condition, a consequence of past overgrazing and present rabbit depredation. At one time, much of the existing pasture land had been cleared and cultivated, but there has been a significant decline in commercial farming on the islands.

Presently, the islands are a mosaic of natural grass-shrub clearings, coniferous forest, and actively cultivated or grazed plots.

Appendix D includes an unpublished manuscript titled the "Key-Trees and Shrubs of San Juan Islands."

Wildlife - Terrestrial

The most conspicuous fauna of the islands is the black-tailed deer. The mild climate and diversified habitat are conducive to high deer population. More secretive mammals include the river otter, mink, raccoon, and red fox. Benefiting from land-clearing practices are the quail, chukar, and the "San Juan" rabbit. The latter originated from several domestic varieties that were introduced during the early 20th century. In 1971, the American wild turkey was introduced and is doing well.

Wildlife - Marine

Almost everywhere within the study area, the sea dominates the senses, from the conspicuous tidal zones to the depths of the channels. It is here, at the interface between the land and sea, that life's inexorable continuity expresses itself. The marine realm offers a niche to a starting array of creatures from the leviathans of the deep to the delicate and susceptible invertebrates of the tidal zone.

Notable pelagic mammals include: the harbor seal, killer whale, California and Stellar's sea lion, migrating fur seals, and several species of porpoise.

The most noticeable sea birds are the double-crested and pelagic cormorants, the pigeon guillemot, the tufted puffin, and glaucous-winged gull. Conspicuous shoreline birds include the great blue heron, kingfisher, and an occasional bald eagle or peregrine falcon.

The irregular coastlines of the islands, with their diverse configuration and substrate, play a major role in providing habitat for an extensive variety of shellfish and other marine invertebrates. A brief summary of the species present and their distribution follow.

Dungeness crabs are abundant through the island chain. Red and box crabs occur in small numbers. Private oyster beds--nonnative variety--are scattered throughout the protected bays; native oysters are found in isolated colonies on several islands. Butter, little-neck, gooey-duck, cockle, horse, and Manila clams are common in sheltered bays and shallow shorelines. Piddocks occur in the heavy clay or solid rock intertidal zones. Blue mussels cover the enormous boulders along the San Juan coastline. Pink scallop beds are located in several areas on firm sand bottoms. The rocky nature of the islands affords an ideal environment for rock scallops. The small pinto abalone, native to the Puget Sound area, is found attached to shoreline boulders and rock cliffs. Pink and spot shrimp, as well as octupus and squid, inhabit the deeper waters and channels. The large red abalone has recently been transplanted from California to these waters.

Point Roberts

Geology

The United States portion of the Point Roberts peninsula is an area of 3,151 acres, extending a little over 2 miles south of the 49th parallel into the Strait of Georgia. The land is generally rolling and varied. The extreme southwestern portion of the point is quite flat and slopes moderately to the water. Overall, there are three fairly

distinct land types: the wooded upland in the north and west, the sloping low-level pasture land to the southwest, and the shoreline. Elevations range from sea level to 235 feet.

Vegetation

A forest, probably dominated by Douglas fir and hemlock, covered much of the peninsula in the past, but a fire leveled much of the original forest in the 1840's. At present, about 1,600 acres, or one-half of the point, is covered with second-growth Douglas fir and hemlock. About one-third of the point is open pasture land, though a substantial portion of this is imperfectly drained, and agriculture is limited. The remainder is commercial and residential.

Topography

The 7 1/2 miles of shoreline at Point Roberts is highly variable. To the northeast of the point is a flat sandy beach of premium quality; the southeast is dominated by bluffs; the south has a narrow beach of marginal quality; while the west shoreline has a wider, sloping gravelly beach marked by rocks in places.

Tidelands to the north of the point extend outward about 3,500 feet on both east and west shores, but in the south they extend out only about 350 feet.

Marine Resource

A substantial portion of these tidelands has been classed by the United States Coast and Geodetic Survey as sand, but in some areas, particularly along the south shore, it is mixed with rocks, kelp and seaweed. A special situation exists in regard to tidelands on the southwest corner where there is very little shoreline and a sharp dropoff to very deep water.

Conspicuous fish within the waters off Point Roberts include salmon, sea trout, hake, lingcod, greenling, flounder, sole, surf perch, rockfish, herring, dogfish, ratfish, skate, and smelt. Deepwater fish populations are less diverse, owing to the more uniform habitat.

Though no definitive marine life studies have been conducted, there are at this time no known rare or endangered species or micro-environments along the Point Roberts' shore.

Climate

Temperatures and precipitation are moderate and typical of the Puget Sound region. The average annual rainfall at Point Roberts is 33 inches. Snowfall does occur during the winter months, but rarely remains on the ground for extended periods. Daily mean temperatures vary from 36 degrees in January to 63 degrees in July.

No detailed studies are in hand that describe the fauna or flora of the peninsula. Boundary Bay to the west is well known as an internationally important waterfowl area.

It can be assumed that the foreshore and related subtidal areas of Point Roberts serve as a habitat for marine birds and aquatic life and that this resource is highly susceptible to pollution and turbidity.

INVENTORY OF SHORELINE, ISLAND, AND MARINE RESOURCES

UNITED STATES AND CANADA

Resource Inventory of Shoreline and Island areas considered to have outstanding park potential U.S.A.

NAME	LAND STATUS	LAND USE	COMMENT
1. Ebey's Landing Whidbey Island	Public Land State Land 416 U.S. Land 185 Private Land 2,440 Total Land 3,041	Mixture of land use mostly farming - beach area is not under use.	Outstanding series of highly scenic bluffs unique to the area. Natural prairie present in 1850 when Ebey settled here is still existing today. The Bluffs are steep grassy slopes underlain with sand and the land has a very fragile quality. Extensive giant kelp beds extend along shoreline for many miles.
2. Deception Pass	1,767 acres State Park	State Park set aside for the areas preservation and land and water recreation	Deception Pass, a narrow passage between Whidbey and Fidelgo Islands, is subject to dynamic tidal action. There is state park land on both sides of the Pass with fresh and salt water fishing, trails, campgrounds and other land based forms of recreation. Outstanding coastal scenery in a coniferous forest setting.
3. South end of Lopez Island	Public Land U.S. Land 144 ac. St. of Wash. 80 ac. St. Sch. 79 ac. Private Land 3,868 ac. Total Land 4,171 ac.	A few permanent and summer residents - grazing land and coniferous forest - no active logging	An exciting area which faces on the Strait of Juan de Fuca, laced with deep bays, coves and small islands unusually diverse - deep water ecosystem in combination with rocky shoreline, open grass-lands and forest of conifer, Pacific Madrona and related understory. Fishing and Scuba diving. Good view of marine mammals such as sea lion, killer whale; and sea birds including the rare Oyster Catcher. Eagles are plentiful.

NAME	LAND STATUS	LAND USE	COMMENT
4. West side of San Juan Island	Public Land U.S. Coast Guard 38 ac. Private Land 2,173 ac. Total acres 2,211 ac.	Untouched except for scenic road skirting along a narrow beach	Mostly barren, glaciated mountain-side rising sharply out of the water with a scattering of Garry Oaks (Quercus garryana) - outstanding views over the Strait of Juan de Fuca to the Olympic Mountains and Vancouver Island. Excellent view of marine mammals, particularly killer whales, marine birds, also ships. Deep water with good fishing and scuba diving.
Mitchell Bay-Yacht Haven	Private - 510 ac.	One residence and barn open pasture	Ponds and marshland important to island bird life. Outstanding garry oak community; fields and coniferous forest.
5. Green Point	Public 145 ac.	Essentially undisturbed shoreline and forest resources	Three areas on the west side of Fidalgo Island. Natural in appearance, heavily forested with steep rocky shoreline. Highly scenic assets as viewed from Rosario Straits and Burrows Bay.
Burrows Island	Private 474 ac. U.S. Land 49 ac. Total 523 ac.		
Allen Island	Private 288 ac.		
6. Chuckanut Drive Samish Bay Padilla Bay	State Land 152 ac. Private Land 3,824 ac. Oyster bed 1,350 ac. Total 5,326 ac.	Scattered residential, farming and grassland - State scenic drive	Samish Bay - Highly scenic coastal drive high on a mountain side overlooking Samish Bay. Narrow road with some spectacular views of rock outcroppings, forest and tidal areas. Larabee State Park is in the vicinity, to the north.

NAME	LAND STATUS	LAND USE	COMMENT
7. Cypress Island	State Land 640 ac. U.S. Land 40 ac. Private Land 4,855 ac. Total 5,535 ac.	Very little use. Summer camp in Secret Cove. Half dozen summer homes	Situated near mainland, U.S.A. Essentially undisturbed island in recent times with terrain ranging to 1,500 feet. Eight fresh water lakes some that support fish. Outstanding natural beauty with a great variety of plantlife. Island offers fine views of surrounding San Juan Islands.
8. Blakely Island	St. Sch. Land 226 ac. Private Land 4,040 ac. Total 4,266 ac.	Summer homes on north end. Small motel, store and marina remainder of island is tree farm for Georgia Pacific Corp.	Forms north side of Thatcher Pass. Beautiful island largely unsettled except for the northwest shore. Two large fresh water lakes and large bay into which a waterfall plummets are on the island. Fascinating rock formations of every description. Several heavily forested hills ranging from 700 feet to 1,000 feet in elevation. Nearby Willow Island is highly scenic and enjoyed by ferry passengers coming to the San Juan Islands. The waters around Blakely are considered to be of considerable scientific importance.

NAME	LAND STATUS	LAND USE	COMMENT
9. Peninsula west of Deer Harbor, Orcas Island	St. Sch. Land 32 ac. Private Land 1,418 ac. Total 1,450 ac.	Zoned residential permanent or summer homes. Very few homes at this time	Some of the most spectacular scenery remaining in the San Juan Islands. Dramatic geologic domes rise several hundred feet out of a coniferous forest along the west side of the island. Dense forest cover cascades down steep and rolling terrain to a fascinating shoreline of sculptured rock outcroppings. Waters along the shoreline are dark emerald green in appearance. The area is relatively undisturbed except for a few summer homes which almost go unnoticed by this area's expansive undisturbed quality. Deep water off shore with excellent salmon and rock fish fishing. Jones Island State Park 1/2 mile away. Good possibility for moorage. Scuba diving is excellent. This area could be doubled in size by taking in similar and contiguous lands to the north.
10. Spieden Island	Private - 491 acres	Known as Safari Island because it is stocked with exotic African and Asian big game ungulate and managed as hunting preserve.	Virtually untouched island except for small dock, and undeveloped jeep road and small lodge. Interesting island rising dramatically out of the water with grass land on south side of island and coniferous forest on the north side. Outstanding marine water deep and dynamic. Excellent fishing nearby, as well as scuba diving.

NAME	LAND STATUS		LAND USE	COMMENT
11. Stuart Island	Public Land		A few summer homes, mostly	Coniferous covered island with numerous long bays,
	Wash. St. Park	89 ac.	forested land. No logging.	coves, and off shore island and rocks. Great
	S.J. Sch. Dist	146 ac.	Recreation in state park	numbers of sea birds. Excellent sea duck hunting,
	U.S. Land	70 ac.	including moorage, camping,	fishing, shell fishing including abalone. Scuba
	Private Land	1,488 ac.	and trails.	diving and excellent protected moorage. Excellent
	Total Land	1,793 ac.		potential for land based recreation. Johns Island
				is highly scenic essentially flat in character.
John Island	Public Land	5 ac.	Private-agricultural	Relatively unaltered probably no more than four
	Private Land	210 ac.	residential - a few	houses on the island. Several beautiful coves
	Total Land	215 ac.	homes	enclosed by sculptured rock outcroppings. Some
				boat wrecks litter the beach in one area. Heavily
				forested, shoreline has an open quality.
12. South end Lumni Island	State Land	642 ac.	North half of island in	Spectacular steep sided island-mountain rising
	U.S. Land	31 ac.	agriculture. Some summer	1,000 feet out of the water to Lumni Peak. Heavily
	Private Land	2,300 ac.	homes. South half	forested-rocky shoreline. The massive appearance
	Total	2,973 ac.	undisturbed.	of Lumni is striking and it is one of the more
				interesting islands in the San Juan area and a
				prominent landmark. It is distinctly visible
				from the mainland.

NAME	LAND STATUS	LAND USE	COMMENT
13. Sucia Island	Public Land 749 ac.	Sucia Recreation - State Park with marine access, camping, fishing, clamming	Unusual Sandstone Islands with display of fossil shells. Glacial Island laced with long protected bays with stately cover of conifers - excellent moorage. Patos, an isolated island with numerous marine mammals and birds and rookeries.
Patos Island	U.S. Public Land 245 ac.	Patos Little use	
14. Birch Point	Private - 260 acres	Residential and future commercial use.	Relatively unaltered rocky shoreline. One of the few unspoiled areas along the inland coast. Forested with a mixture of conifers and deciduous trees. Steep sloped, an existing road passes through the area and makes an attractive, but not spectacular scenic drive. A few houses have been built in the area.
15. Point Roberts	Entire Pt. Roberts & Rec. Dist. 102 ac. Private Land 3,049 ac. Total 3,151 ac. Shoreline of Pt. Roberts & Rec. Dist. 23 ac. Private Land 962 ac. Total Land 985 ac.	Mostly zoned for permanent or recreation homes.	Southeastern tip of Point Roberts attractive. Good shoreline area with potential for moorage. Sheer face falling off sharply to the beach with attractive forested head land. Excellent potential for joint U.S. - Canadian customs accessible to boaters.

Resource Inventory of Marine Area Considered to have Oustanding Scientific Values

NAME	STATUS	USE	COMMENT
a. Smith Island	National Wildlife Refuge created in 1914. U. S. Coast Guard ownership.	U. S. Coast Guard installation - unmanned.	Isolated island in Strait of Juan de Fuca off Whidbey Island. Flat island with fine, sandy beaches. Excellent seabird rookeries including the Rhinoceros Auklet.
b. Iceberg Point	State	Few private and permanent summer homes along uplands. Farms, grass land and conifer forests also.	Outstanding rocky shoreline with protected deep water bays and off shore islands. Rich in marine fauna including giant kelp forests, anemones and shell fish.
c. Jekyll's Lagoon	National Park Service. San Juan Island National Historical Park	Retained in its natural environment.	Small nearly land-locked lagoon facing on Griffin Bay backed by conifer covered Mount Finlayson. Rich in seabirds and wading birds. Eagles frequent this area.

Resource Inventory of Marine Area Considered to have Outstanding Scientific Value

NAME	STATUS	USE	COMMENT
d. Eagle Point and cove	Private	Shoreline zoned for private subdivision. Few homes at this time.	Glaciated point extending into the water. Drops sharply to depths of 100 feet. Outstanding scuba diving. Many rockfish and scallop beds.
e. False Bay	Private and corporative enterprise	Shoreline zone for permanent and vacation homes. Few homes here now.	Unusual marine feature. Sand-mud flats bay which drains dry on low tide. Excellent seabird and wading bird area. Unusually diverse marine fauna.
Kanaka Bay	Private	Shoreline zone for permanent and summer homes. Few homes here now.	Rocky point, grass covered, in association with deep water. Hazardous but excellent scuba diving with rich marine flora and fauna.
f. Lime Kiln Point	Federal	Lighthouse and related facilities.	Rocky seashore - Giant kelp beds provide rich habitat for a variety of fishes including bass and cod, excellent scuba diving area, but dangerous.

Resource Inventory of Marine Area Considered to have Outstanding Scientific Values

NAME	STATUS	USE	COMMENT
g. Battle Ship Rock	Undeveloped state marine park.	No human use.	Mostly barren rock that is inaccessible to boaters. Seabird rookeries and marine mammal hauling rocks. Rich fish habitat within giant kelp beds. Water generally too dynamic for scuba divers.
h. Wescott-Garrison Bay	Faces on San Juan Island National Historical Park and private lands.	Shoreline in ownership as national historical park. Permanent and summer homes and Roche Harbor resort. Some open shoreline.	Two connecting protected shallow bays including Guss Island - Sand-shell beaches with clams and limited rock oysters - Dungeness crab are plentiful. Numerous seabird including ducks.
i. North Bay - Argyle Lagoon	Private	Shoreline zoned for permanent residents and vacation homes.	Sand spit forms protected bay. Clams and Dungeness crabs.

Resource Inventory of Marine Area Considered to have Outstanding Scientific Values

NAME	STATUS	USE	COMMENT
j. Turn Island	National Wildlife Refuge operated under lease by state parks since 1959.	Recreation, undeveloped area. Primitive camping. Estimated 4,000 visits annually.	Small undisturbed island adjacent to San Juan Island. Conifers and madronia cover; rocky shoreline and one sandy beach. Excellent habitat for ling cod and rockfish. Eagle have been known to nest here.
k. Parks Bay and Pt. George	University of Washington	To be retained in its natural environment.	Picturesque point of land on the south side of Shaw Island, forming Park Bay. Rocky coast with sandy beach bites. Cover of conifer and madronia. Salmon habitat, Dungeness crabs in Park Bay.
l. Matia Island	National Wildlife Refuge. Operated under lease by state parks since 1959.	Recreation. Marine access with camping. Estimated 9,000 visits annually.	Tree covered glacial island north of Orcas Island. Protected bay for moorage. Good for viewing marine mammals and birds. Excellent area for scuba diving, fish and shellfish. Accessible from Bellingham. Part of Patos, Sucia Island chain. Seabird rookeries, marine mammals haul rocks.

Resource Inventory of Marine Area Considered to have Outstanding Scientific Values

NAME	STATUS	USE	COMMENT
m. Cactus Island	Private	No human use at this time.	Two picturesque, small glaciated islands. Situated in the Stuart-Spieden Island chain. Scattering of conifers and madronia. Interesting, prickly pear cactus grows here. Seabird rookeries and active eagle nesting area. Hauling rocks for sea mammals. Deep, dynamic waters.
n. Padilla-Samish Bays	Private and state	Shoreline consists of some residential development but mostly open space.	Padilla Bay contains some of the largest contiguous eel grass beds on the Pacific coast. Populations of waterfowl, shorebirds, seabirds, and marshbirds are extremely high in this area. Some of these birds nest on the bay. Padilla Bay is an integral part of wildfowl migration in the Pacific flyway. Over half the population of Black Brant in the flyway have been observed simultaneously using the bay. Birds of prey, including the bald eagle and the endangered peregrine falcon use the bay for various life requirements. The large inter-tidal area provides an ideal feeding zone for many different fish resources, including anadromous salmon and trout,bottom fish, rockfish, and forage fish. Clams abound in the bay and oysters were formerly cultivated on the tidelands. The area's contribution to overall productivity of Puget Sound is not known but believed to be significant. Samish Bay along with Padilla and Skagit Bays, provides a complex of virtually ideal habitat for waterfowl, shorebirds, seabirds, and marshbirds. Large eel grass beds found here are a prime item of waterfowl diets as well as having tremendous value to fishery resources. Anadromous fish migrating to and from the Samish River use the bay as a feeding and rearing area. Hardshell and softshell clams are found where suitable substrate exists and a thriving oyster industry uses the tidelands. Surf smelt spawn

NAME	STATUS	USE	COMMENT
			on the north shore of Samish Island and Pacific herring use the eel grass beds as substrate for spawning. Populations of bottom fish, Dungeness crab use the extensive intertidal zone as a feeding and rearing area.

In addition to the above areas, the Bureau of Sport Fisheries and Wildlife has identified the following areas with important wildlife values along the inland coast which should be considered for protection: Lake Hancock, Lake Crockett, Penn Cove shorelines, Dugualla Bay (Whidbey Island); Camano Island beaches, the Skagit River Delta; Similk Bay, March Point (Fidalgo Island); Lummi Bay and Hale Pass, Tidelands-sandy point to Semiahmoo Bay, Drayton Harbor, and the Nooksack River Delta. For detail description of these tidal areas, see Appendix C.

LOCATION	LAND AREA	LAND STATUS	LAND USE	PARK POTENTIALS
16. Tsawwassen Beach	400 acres	Area south of ferry causeway is Crown Provincial under recreation reserve. Question of shoreline rights involving Indian Reserve to be settled.	Generally undeveloped along shoreline; numerous homes along backshore below English bluffs.	Tidal flats and shallow waters with mixed gravel, sand and mud shoreline becoming almost all sand near causeway. Has potentials for 2-1/2 mile beach park for sunbathing, beachcombing, some swimming. Existing causeway creates potential opportunity to develop a small boat harbor in association with beach complex. Sport fishing in adjacent waters; important area for migratory and wintering waterfowl.
17. Boundary - Centennial - Grauer Beach Complex		1.2 miles of shoreline and backup lands acquired by Regional Park District. Tidal areas under Crown Provincial reserve. 300 acres outside dyke in private ownership.	Summer and permanent homes backup recreational tidelands at Boundary Bay townsite. Developed beach area with concession, showers, games area.	A vast sandy tidal flat adjacent to beach, coupled with warm sunny weather results in warm and sheltered waters ideal for sunbathing, swimming, clam digging plus strolling and picnicking. Important heronry and shore bird area.
18. Boundary and Semiahmoo Bays (A)*	Over 30 sq. miles of international waters; 12,000 acres of inter-tidal foreshore	Jurisdiction shared by federal and state/provincial governments in both Canada and United States. All foreshore lands in British Columbia under Crown Provincial reserves.	Area supports thriving marine life, commercial and sport fishing and crabbing. Border zone popular for salmon sport fishing. A conservation area of importance to migratory waterfowl which are protected by International Conservation.	These waters have been identified as one of the most important areas on the Pacific flyway (Alaska and Siberia to Mexico) for migratory (possibly 2-3 million birds) and Canada's largest population of wintering (200,000 birds) waterfowl. It is of outstanding international importance for conservation and interpretation of waterfowl resources. Offers potentials for a minimum of 8-10 miles of beach without undue environmental disruption. Adjacent farmlands require protection to assure feed for wintering waterfowl.

*Capital letters identify marine components. These are shown on Potential Park Resources map.
+The measured area as shown on Potential Park Resources map.
#Special features of ownership of park potential lands shown.

LOCATION	LAND AREA	LAND STATUS	LAND USE	PARK POTENTIALS
				Tidal area is a major clam, crab and herring spawning habitat, the latter being of particular importance as a source of feed for salmon and thus to the commercial and sport fisheries of Canada and the United States. In addition, there are resident populations of other small fish, invertebrates and mammals - including seals. The area has importance for international conservation and nature study purposes. Waters suitable for fishing, sailing, some cruising and controlled water skiing.
Mud Bay - Serpentine Nicomekl Sub-area (B)*	A sub-area intimately related to Boundary Bay	Foreshore lands under Crown reserve 145 Acres of foreshore privately owned Serpentine Fen area has been acquired for conservation purposes and likely to be restored as Canada Goose habitat 400 acres have been acquired under Provincial 'Greenbelt Fund'	Wildlife conservation and nature study Small marina at Blackie Spit and on Nicomekl River Sport fishing 55 miles of dykes provide immense pole. 16,000 acres in agricultural use in Serpentine-Nicomekl basin	Mud Bay is a silty sandy tidal estuary producing minute life forms which lie at the basis of the food chain for larger life forms in the bay and Strait of Georgia. Extensive waterfowl feeding area. Has great potential for nature interpretation. Railroad easement has future potential as equestrian or cycle trail. Serpentine-Nicomekl Rivers support fishing and diving birds. Inter-river marsh generates nutrients feeding shell and fin fish. Conservation values with potential dyke hiking and nature study; some canoeing. Serpentine Fen offers marshes which serve as inland feeding and resting area for waterfowl; conservation and nature study. 55 miles of dykes provide immense potentials for hiking, riding, fishing.
Crescent Beach	500 acres	110 acres owned by Surrey Municipality Tidal flats are Crown Provincial under public use reserve.	Natural beach area with limited improvements such as groynes, sand fill and developed beach with changing facilities. Small marina.	Additional fill along length of shoreline can create three more units of beach area suitable for swimming, sunbathing, strolling, nature study and picnicking. Important archeological site. Additional boat launching and small boat harbor facilities can be developed at Blackie Spit.

*Marine Component

LOCATION	LAND AREA	LAND STATUS	LAND USE	PARK POTENTIALS
				Scenic shoreline promenade or drive likely compatible with environment and municipal road system and development in association with small beach pockets.
20. Semiahmoo Bay	915 acres	Indian Reserve - 30 acres leased to individuals, 154 leased to municipality and 30 retained by Band. BNR owns right-of-way and land to high water Tidal flats are Crown Provincial under public recreation reserve.	Public wharf at White Rock Indian lands leased for park and cottage purposes. Existing beach area receives heavy use. Existing rail line along shore may be phased out.	Offers six mile waterfront strip extending from Crescent Beach to Peace Arch area at Blaine; ranges from tidal flat and sandy beach to a rocky strip in west. Capable of development as beach park (swimming, strolling nature study) at existing White Rock and Semiahmoo Beach areas. Additional boat launching and parking possible at western end of area. Upland areas including golf course suitable for golf course, picnic, and group camp development. Beach development must be carefully executed to avoid ecological disruption.
21. Sidney Island D'Arcy Islands and waters (C)	2100 acres 250 acres	208 acres D'Arcy Island Park, 170 acres Sidney Spit Marine Park. Provincial Marine Park on D'Arcy Island.	Sidney Spit Marine Park, D'Arcy Island Park. Radio tower on Sidney Island. Private ownership and sub-division development.	Interesting land forms (sand cliffs), good diving sea bird colonies on Mandarte and Halibut Islands. Heavy current between D'Arcy and Sidney Islands. Important as a marine resource area. Superb sand beaches with high recreation capability.
22. Brethour Island and associated waters (D)	300 acres	One owner per island. Rum Island, a Provincial Park.	Private ownership; limited development.	Brethour Island selected as representative of this group of small islands.
23. Moresby Island	600 acres	One owner.	Limited development.	High recreational potential on northeast section. South point an attractive land feature and includes a pebble beach. Archeological sites.

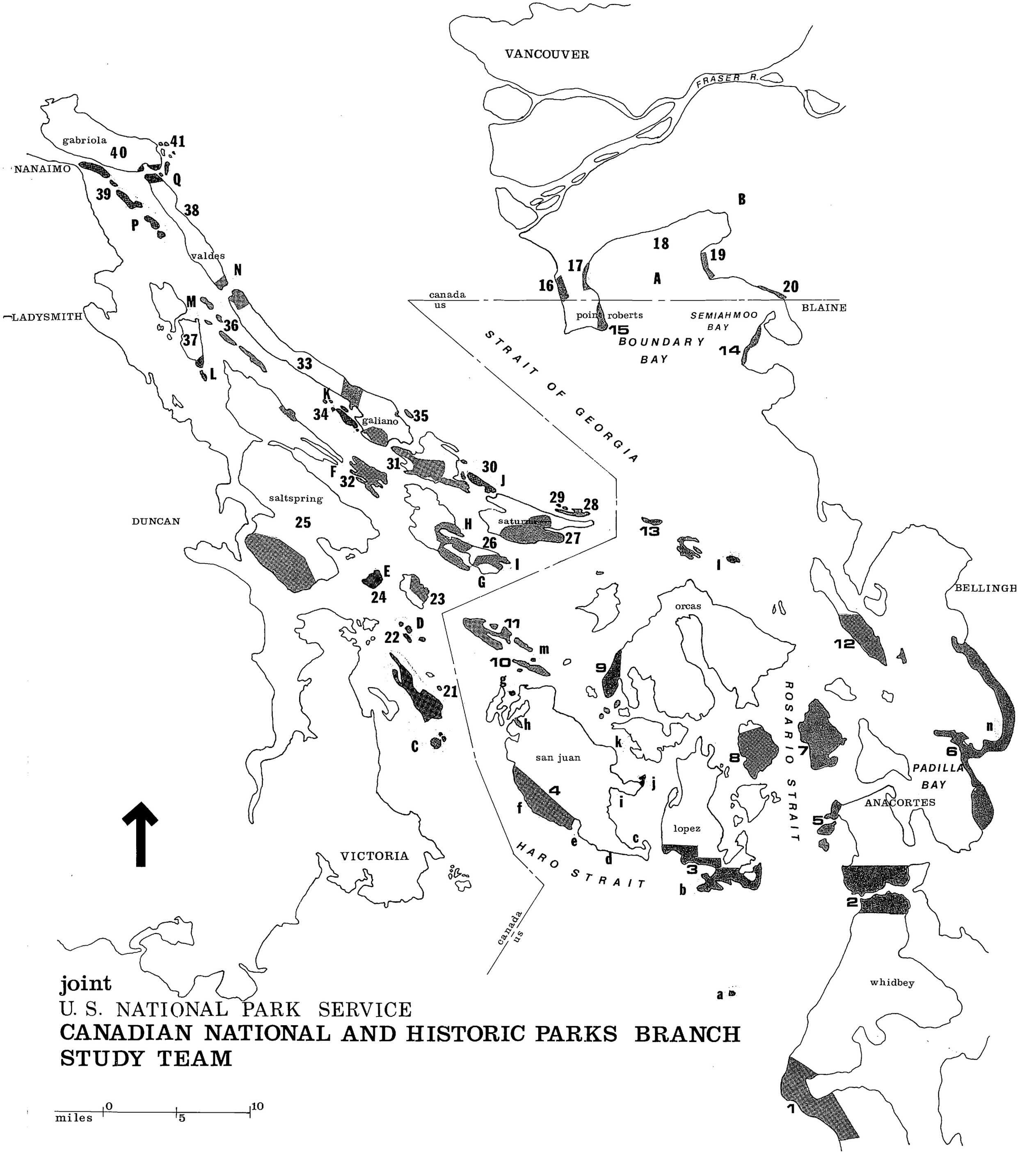
LOCATION	LAND AREA	LAND STATUS	LAND USE	PARK POTENTIALS
24. Portland Island and waters (E)	560 acres	480 acres Princess Margaret Marine Park	Provincial park. Island generally undisturbed	Typical of small islands associated with Saanich peninsula; off shore reefs, interesting invertebrates, and vegetation and rock forms, small boat anchorage, good beaches and diving. Archeological sites.
25. Saltspring Island a)- south part of island	10,000 acres	590 acres Provincial Park. 2194 acres provincial ecological reserve; 220 acres provincial ownership; 47 acres federal ownership. 1,500 acres recently acquired for provincial park at Beaver Pt. Balance private.	Most heavily populated island; considerable urban development on other than south portion of the island. Southwestern portion predominantly provincial park and reserve.	South part of island is the largest wild area on Saltspring. Good forest growth including Garry Oak. Excellent viewpoint.
b)- Walker's Hook Long Harbor (F)	100 acres	135 acres private ownership.		Walker's Hook is a shallow bay head and a geographic feature of the island. (Northeast area has native oyster beds and scenic coast and good beach potential. Long Harbour provides sheltered water and interesting marine invertebrates.
26. South Pender Island Bedwell Harbour (G) Port Browning (H) Camp Bay (I)	550 acres	83 acres Beaumont Provincial Park; 5 acres provincial reserve.	40 to 50 people reside on the island. Predominant natural growth cover. Commercial marinas. Customs in Bedwell.	Wallace Point and Bay have high recreational potential. Island has 1.34 miles of public waterfront. Central area contains crags and cliffs. An attractive valley and lake along with Mt. Norman form a valuable scenic and recreational unit. Camp Bay has high recreation potential. Area is important archeological cluster site.
27. Saturna Island	3,800 acres	Indian reserve. Provincial ecological reserve; federal lighthouse site; balance private.	Indian reserve, T.V. tower, cottages and houses on East Point; federal lighthouse. Considerable part of island undeveloped and relatively inaccessible.	Island has some first growth Garry oak and large Douglas fir. Good views from upland. Several recreation beach potentials. Small boat anchorage adjacent to Boundary Pass fishing area. Excellent reefs and sandstone cliffs at East Point. Old whaling site.
28. Tumbo Island	305 acres	All private ownership	Natural vegetation relatively undisturbed.	Island is extremely exposed to weather, wind and current. There are some good areas for beach activities, angling and diving. Eagle nesting.

LOCATION	LAND AREA	LAND STATUS	LAND USE	PARK POTENTIALS
29. Cabbage Island	20 acres		Natural condition.	Undisturbed natural area, good water-land contact, valuable in connection with marine potential.
30. Samuel Island & Belle Chain Islands, adjacent waters (J)	500 acres	All private in large ownerships.	Private cottage and residential use; natural condition.	Good reefs and shallow areas. Attractive deep bay; adjacent small islands and waters offer important marine park potentials.
31. Mayne Island	2,400 acres	80 acres provincial reserve 4 acres federal Indian reserve.	Island has considerable urban development. South central area relatively undisturbed.	Active Pass shoreline and south central area (contains Mt. Parks, Deacon Hill and Heck Hill) are scenic geographic features. Limited beach potential
32. Prevost Island	1,600 acres	Minimum park reserve, remainder private in large ownership (6 owners)	Lighthouse, limited residential use.	Coves, small beaches, anchorages, scenic features, land forms typical of most Gulf Islands. Warm water beaches, clam beds. No serious ecological damage. Recognized as island with highest priority for park acquisition.
33. Galiano Island a) southwestern tip	1,000 acres	Private.	Natural condition.	Mt. Galiano is one of the most prominent and scenic features in the Gulf Islands and can be seen from Vancouver - Victoria ferry in Active Pass.
b) Montague Harbor Area	1,300 acres	Indian reserve, Provincial marine park; balance private.	Boat anchorage facilities. Roads and minimum residential development.	Upland park resources associated with good recreation beach potentials; good harborage; important archeological cluster site.
c) Northern tip	900 acres	Indian reserve	Indian reserve with settlement some other residential use.	Northern tip has high recreational potential for beach recreation, camping and boating. Sea bird nesting. Interesting rock formations. Valuable in connection with Porlier Pass, a major fishing and diving area. Important archeological cluster site.
34. Parker Island and adjacent islets and waters (K)	500 acres	One owner.	Natural condition.	Valuable as part of land resource complementing marine resources in adjacent Montague Harbor. Ballingall Islets nearby are identified as a provincial nature park, protecting nesting sea birds.

LOCATION	LAND AREA	LAND STATUS	LAND USE	PARK POTENTIALS
35. Gossip Island	130 acres	Some private ownership	Residential use; natural condition.	Potential focal point for marine boating. Good diving area with drop off to gulf floor close to shore.
36. Secretary Island Group	700 acres	Wallace Island privately owned. Rose Islets north of Reid Island an ecological reserve.	Several islands - small anchorages.	Islands have high scenic quality, excellent beaches, small anchorages and good fishing. Significant clam beds.
37. Kuper Island Tent Island, adjacent waters (L) and Clam Bay (M)	650 acres	Some private land, remainder Indian reserve.	Tent Island is Indian reserve lands leased by the Province for marine park development.	Beaches have high suitability for recreation. (If Secretary Islands are not feasible, Tent Island could be an acceptable alternate.) Small boat anchorages; angling.
38. Southern Tip Valdes Island and Porlier Pass (N)	150 acres	Private ownership. Canoe Islets southeast of Valdes Island are ecological reserve.	Natural condition.	High shoreline recreation potentials; clam beds. Land valuable in association with the marine resources of Porlier Pass. Minor archeological site. Sand points and cliffs on west side of island offer additional boat access and beach potentials.
39. De Courcy Group and waters (P)	880 acres	700 acres Provincial Park. Balance private.	North part Mudge Island subdivided. Some subdivision on De Courcy and Ruxton.	Islands represent whale archipelago in miniature with micro climate conditions representing almost every vegetational zone in the Gulf Islands. (The islands range from the dry cactus zone to heavily forested uplands.) Small sea bird colonies on cliffs, boating areas, beaches, swimming and diving potentials.
40. Southeastern Gabriola Island north tip Valdes Island and Gabriola Pass (Q)	800 acres	Two Indian Reserves; 50 acres Drumbey Provincial Park. Balance private.	Roads and residential use.	Valuable land resource in connection with the marine values of Gabriola Pass, an important fishing and diving area; good recreation beach potentials; clam beds.

LOCATION	LAND AREA	LAND STATUS	LAND USE	PARK POTENTIALS
41. Flat Top Islands	150 acres	Private	Minimum development	Good variety of types of water and bird and sea life. Area of reefs, rocky inlets and small caves. High potential as part of marine park; angling; diving.

POTENTIAL PARK RESOURCES



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U. S. NATIONAL PARK SERVICE

CANADIAN NATIONAL AND HISTORIC PARKS BRANCH

STUDY TEAM

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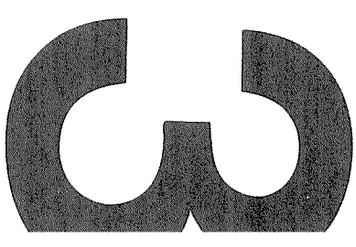


TRENDS AND PATTERNS

INTRODUCTION

The great world explorer, Captain George Vancouver, on his voyage to the Pacific Northwest in 1792, undoubtedly recognized the outstanding beauty of this area, its magnificent lands, and incomparable marine waters. Over 50 geographic features within the study area were selected by Captain Vancouver as prominent features of such beauty and magnitude as befitting those men of deed and stature for whom they were named. Today's vacationers are discovering these same islands and waters, seeking a period of re-creation from the complex problems of daily life.

GROWING RECREATION DEMANDS

A broad look at indications of the future suggests that growth of population will be the major factor behind expanding park needs, complimented by more leisure time, more money, and a greater interest in leisure-time activities. Demographic predictions for North America indicate its population greatly increasing by the year 2,000, although a recent leveling off may shift the overall population growth rate downward. In a region, as resource rich and as scenically attractive as the Pacific Northwest and southwestern British Columbia, the principal source of growth will likely remain migration from other regions. Thus continued population pressures on various recreation and conservation resources can be anticipated. This pressure will be centered on and generated by the populations of metropolitan Vancouver, Victoria, and Seattle, whose current populations are expected to increase from 5 million to 7 million by the year 2,000. This pressure will be compounded by growth of smaller populations outside these centers, as well as by increased tourist demands.

The current pressures to fulfill the leisure-time demands of tomorrow will be influenced by additional factors. Aggregate North American leisure time available for most North Americans--for recreation and travel--is expected to increase from approximately 50 to 58 hours per week between 1972 and the

year 2,000. In terms of recreation dollars, it is estimated that disposable income will rise an estimated 30 percent between 1972 and 1980, and undergo a similar increase between 1980 and the end of the century. This spending power is seen as a major catalyst behind recreational consumption.

Demands for certain forms of outdoor recreation--sport fishing, boating, and swimming--are increasing far faster than population growth. Many public recreation areas are experiencing a 10 percent annual increase in use. Of all forms of leisure-time pursuits, those which are water based attract the most participants. Studies conducted by the Outdoor Recreation Resources Review Commission in the 1960's revealed that 45 percent of outdoor recreationists preferred water-based activities over all others, and that an additionally large percentage favored water-related activities. This determination is of particular relevance in the marine-oriented study area under consideration.

In an uncomparable area of sea, island, and mountain resources like the Pacific Northwest and southern British Columbia, recreational pursuits are numerous and varied: sightseeing by automobile, bicycle, boat or on foot; fishing by boat and from shorelands; hunting of waterfowl and game, small and big; scuba diving; bird watching, and many other activities.

Scenic Appreciation

The scenery of the study area is diverse and spectacular. The topography ranges from the broad flat tidal expanses and floodplains to the low profile of the mountainous islands. And always as a backdrop to the study area are the high mountains of the Olympic Peninsula, Vancouver Island, and the inland region. The demand for such aesthetic values are difficult to measure, but perhaps the influx of new residents and tourists into the region and the ever-increasing markets for photographic and outdoor recreational equipment provides an indirect measure.

Sightseeing is recognized as one of the more popular forms of recreation in the United States and Canada, and many beautiful drives exist within the study area, as along Chuckanut Drive south from Bellingham, Washington.

A ferry service leaves Anacortes, Washington, each day and winds through the San Juan archipelago, making stops at the four major islands. One daily ferry continues on to Victoria. A similar ferry system serves the Gulf Islands. A trip through either group of islands can be quite exciting. The beauty and dynamics of these areas is more than land and sea. Seals, sea lions, whales, and other indigenous and migrating marine mammals can often be seen on such a cruise. Common and rare sea birds--gulls, cormorants, pigeon-gillemots, scoters, oyster catchers, auklets and sea ducks--can frequently be seen as well. For the serious bird watcher, there is the chance of observing the old world skylark which has recently established itself on the southern end of San Juan Island.

There are many miles of roads in the San Juan-Gulf Islands archipelago, and all are scenic to some extent or lead to beautiful areas that display quaint towns, rolling farm and grazing lands, coniferous forests, and outstanding tidal areas. In particular, the west side road on San Juan Island offers splendid views across the Strait of Juan de Fuca toward the Olympic Mountains and to Vancouver Island where Victoria is situated on the south end. Roads on the east side of the San Juan-Gulf Islands offer splendid vistas, opportunities from which to photograph Mount Baker and the North Cascade Coast Ranges, and vantage points to appreciate the islands' dotted seascapes. The slow-paced life in the San Juans and Gulf Islands allows bicyclists to explore the islands leisurely. Mount Constitution on Orcas Island, nearly one-third mile above the water, offers a bird's-eye view of the entire San Juan-Gulf Islands chain. Hiking and picnicking opportunities are plentiful, and many participate in these activities.

Boating

Pleasure boating is a major recreational activity in Puget Sound and the Strait of Georgia region. Much of this activity is concentrated in the study region, which embraces superb boating waters where enthusiasts engage in power boating, sailing, and canoeing.

Factors influencing boating

Between Vancouver Island in British Columbia and the mainland of the United States lie nearly 2,500 square miles of essentially landlocked saltwater forming Puget Sound, Hood Canal, the Strait of Juan de Fuca, and the Strait of Georgia.

Within this region, the Cascade Range in the east reach an altitude of 14,000 feet, while the Olympic Mountains to the west are lower in elevation. These mountain ranges protect the study area from cold arctic air and ocean storms. Maritime air entering from the south has a year-round moderating influence on the region's climate. Mean temperatures range from 70°F. in the summer to 40°F. in the winter. Mean precipitation within the study area is 20-30 inches annually. Mean daily range of tide varies from 7-14 feet with the difference between maximum depth and minimum low tides being about 19 feet.

The environment of the study area, with its great scenic attributes, its sport and shell fishing, and its sheltered ocean waters, provides one of the most outstanding recreational boating areas in the world.

Residents of the region participate more intensely in boating than anywhere else in the United States and Canada, with nearly 9 activity days per person annually. The temperate climate enables resident boaters with craft over 10 horsepower to use their boats year-round and counts indicate a third of them do.

Seattle has many saltwater and freshwater harbors and many saltwater harbor facilities are available at Vancouver and Victoria. Boat ownership in the study region in 1970 was roughly 46 boats per 1,000 persons, perhaps the highest on the continent. The rate of ownership is increasing because more families have larger incomes, lower costs of certain boat construction, and the more crowded conditions of land-based recreational areas. In Greater Vancouver, the number of boats is expected to increase to 53,000 by 1976 and 69,000 by 1986.

The growth of recreational boating in the study area, about 4 percent annually, will probably be slowed only by the lack of suitable moorage, particularly in populous urban areas. Moorages for sailboats or power-assisted sailing craft are more difficult to provide for, since they need deep water in which to navigate, require a greater area to avoid obstacles, and have more difficulty with tidal and river currents. Powered, shallow-bottom boats can use marinas having a variety of surface and subsurface influences, ones which would adversely affect sailing craft. A trend towards larger boats is increasing the demands for wet mooring space. In Vancouver, British Columbia, boat owners are finding it more difficult to secure mooring space, therefore, they are mooring their vessels in Blaine, Washington. It is estimated that demand for moorage in Vancouver alone will double by 1985. Additional moorage and launch facilities in the study region would go a long way towards supplying current demands, especially if complemented by boating facilities in the island archipelago.

In the United States, a recent survey of the Puget Sound area conducted by the U. S. Coast Guard revealed that there were over 60,000 registered pleasure craft of 10 horsepower or more, and estimated that there were an additional 120,000 unregistered craft. A similar survey of Puget Sound indicated that approximately 140 public and private marinas, and 50 state parks provide about 16,000 rental moorage spaces for pleasure craft, about 5 percent of this moorage being rented by people living outside of the study area. It is estimated that perhaps as many as 400-500 Canadian pleasure craft cruise American waters annually, particularly around the San Juan Islands. In 1972, about 10,000 American pleasure craft sailed Canadian waters.

Existing moorage, however, both summer and winter, is far short of the need, and many additional rental moorages will be required to satisfy demand. This demand will likewise intensify as population increases and as pleasure boating continues to grow in popularity.

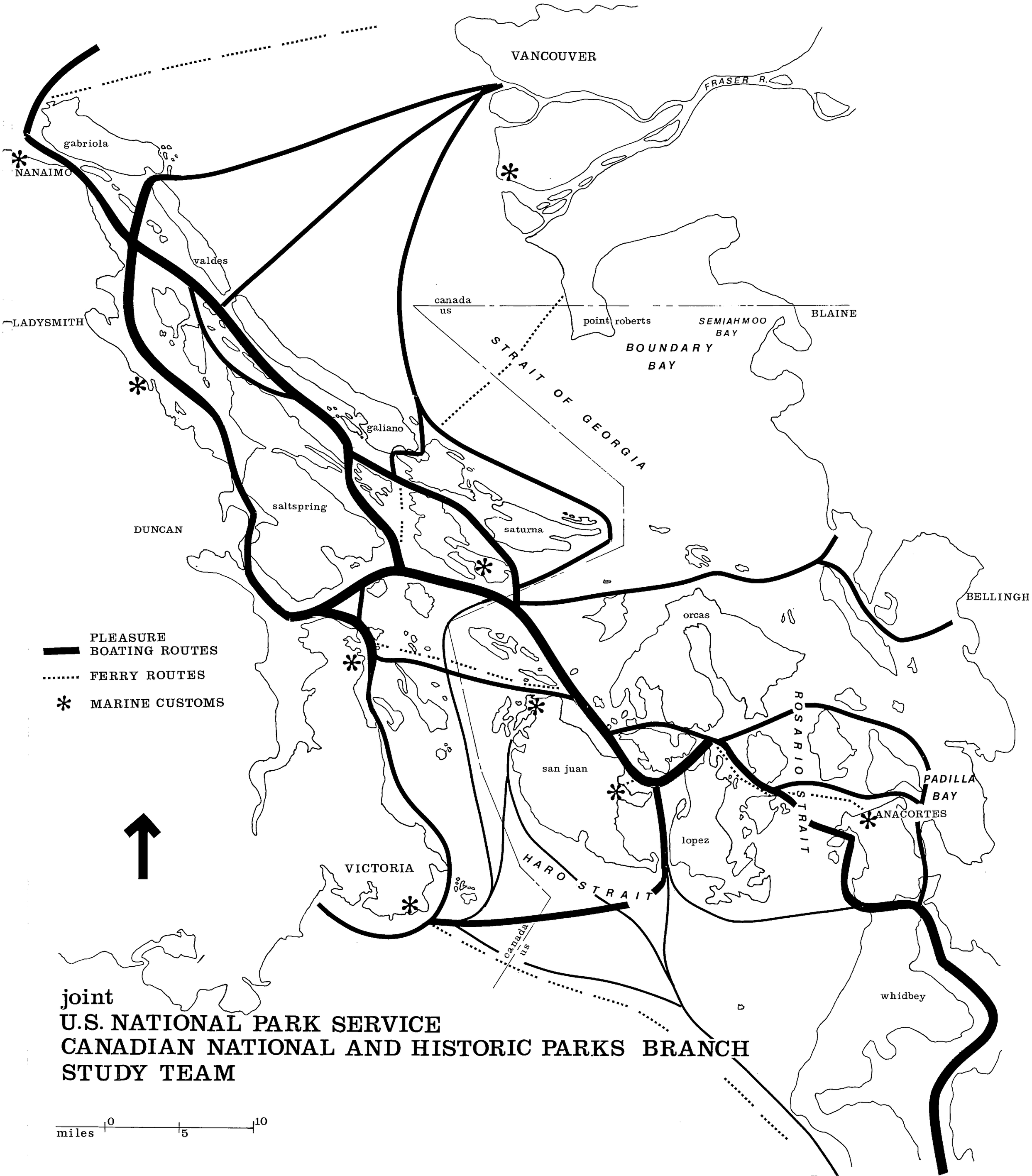
Boating trends and patterns

In the Puget Sound area over half of the pleasure boats are powered by outboard motors and 10 percent by inboard engines; 4 percent are sailing craft; and the remainder are small boats that would not normally navigate the open waters of the study area. A similar distribution exists in southwestern British Columbia.

Pleasure boats can be categorized as large or small, the distinction being drawn at a length of 40 feet for power boats and 25 feet for sailboats. The vast reaches of open water in the study area are subject to dynamic tides and unpredictable weather which presents many hazards that small-boat owners are usually not willing to risk. Smaller boats, therefore, seek the inland passages and protected waterways of the San Juan and Gulf Islands while cruising the study area. Fortunately for the many small-boat owners, these protected waters are numerous.

A summer cruise through the San Juan-Gulf Islands may last from 2 to 3 days, to several months if the cruise is to the northern end of Vancouver Island. Small boats might begin a cruise in the Seattle area and proceed northward to Whidbey Island in the protected waters of Saratoga Passage. Whidbey Island has several good moorages along the way and a number of state parks where boaters often stop. Deception Pass at the north end of Whidbey Island provides direct access to the open water of Rosario Strait. Pleasure boaters would normally hug the protected coastline of Fidalgo Island and proceed to the Skyline Marina near Anacortes. This is the preferred jumping-off point for a dash across the potentially hazardous waters of Rosario Strait and into the protected waters of the San Juan Islands. The San Juan Islands are bound on the south by the Strait of Georgia, and on the east and west respectively,

BOATING PATTERNS



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by Rosario and Haro Straits. The islands' many channels have natural water depths of several hundred feet. The San Juans consist of over 400 islands and rocks, with 275 miles of tidelands in public ownership. Once here, boaters follow their chosen route through the islands northwest toward the Canadian Gulf Islands. Frequently, the cruise is leisurely while in these sheltered island waters with an overnight stay at Lopez, Orcas, or San Juan Island. Marine facilities at Friday Harbor and Roche Harbor on San Juan Island provide an excellent opportunity for boaters to rest and take on needed supplies. Several state marine parks, such as Jones Island and Reid Harbor on Stuart Island, are accessible for those seeking an out-of-the-way place to layover.

Weather permitting, boaters dash across Haro Strait and the international boundary into Canadian waters. Here the American boater must clear customs. Presently this is done at Sidney on Vancouver Island or Bedwell Harbor on South Pender Island. Once again the cruise is leisurely with numerous evening moorages in a variety of protected bays and harbors. Small boats are joined by boats from Victoria or Vancouver and larger craft that may have crossed the open water of the Strait of Juan de Fuca. Here the boaters fan out and cruise the various passages mooring in a variety of protected bays and harbors, some of which are provincial marine parks. With the craft in readiness and an eye on the weather, a quick run across the open waters of the Strait of Georgia is possible for those wanting to get to Vancouver on the mainland of British Columbia. In the protected central Straits of Georgia north of Nanaimo and and far from population centers, the boaters are free to cruise at their own speed poking in and out of areas of especial beauty, such as Princess Louisa Inlet, and mooring on the 'hook' at night in one of any number of protected coves. Summer water temperatures reach 70°F., providing excellent swimming, sports, and shell fishing. Here the boaters' long winter's dreams come true; but all too soon time runs out and the boat is headed around to retrace the wake homeward. It is now necessary for the boaters coming from the northern waters to leave the mainland of British

Columbia again and cross the Strait of Georgia to clear Canadian and United States Customs, since boat customs are not available in the Point Roberts area.

Canadian customs is cleared at Bedwell Harbor, Sidney, or Victoria, and boaters go through American customs at Roche Harbor or Friday Harbor after reentry into American waters.

If Canadian and United States Customs were available to boaters at Point Roberts, it would be a simple matter for boaters coming from northern waters to continue along the mainland of British Columbia, clear customs at Point Roberts, and go directly into the San Juan Islands and then homeward to Seattle. This would also be true of Canadian boaters from the Vancouver area wishing to cruise within the San Juan Islands. Boats from Vancouver must now cross the Strait of Georgia, entering at Roche Harbor during the summer or Friday Harbor year-round, before continuing their cruise.

It should be recognized that the boating patterns around Point Roberts are separate and apart from those just described. The area is presently little used because of the lack of Canadian and United States Customs to serve boaters. Also, cruising boaters favor the scenery of the San Juan and Gulf Islands to that of Point Roberts. Further, the extensive mud flats off mainland British Columbia make boating unattractive and hazardous. Despite these conditions, boaters would likely use these waters if customs were developed at Point Roberts.

Still other boating patterns are seen along the Olympic Peninsula. Here boaters must cross the often hazardous Strait of Juan de Fuca, entering Canadian waters at Victoria. This restricts the use of Canadian waters by many small American boats.

Swimming and Beach Activity

The common factor in almost all studies of recreation is the intense popularity of water-oriented activities, swimming being the most popular. In the study area, it is estimated that a third of day-use outings involve swimming. In the Greater Vancouver area, for example, there is a projected need for 30 additional miles of beach frontage, 15 of which are potentially at Point Roberts and Boundary Bay. The

beach areas of upper Puget Sound are often silty and northwestern Washington residents would undoubtedly use the sandy beaches of Boundary Bay and Point Roberts were they developed. Oyster picking and clam digging are popular activities related to beach use throughout the study area.

Scuba Diving

The waters of the "inland sea" abound with marine flora and fauna, and provide excellent opportunities for scuba and skin diving. The generally cold--40°F.--subsurface water requires a wet suit for protection, and dangerous riptides and currents can be hazardous to the novice diver.

Diving schools and their student enrollments are steadily expanding as are diving clubs. Diving activity is most intense close to major population centers and has become popular at several sites in the "inland sea," particularly in the San Juan-Gulf Islands where good visibility and interesting diving conditions are found. Underwater wrecks, and cliff and reef formations are particularly attractive to divers. Preferred diving areas are deepwater areas just offshore where the land falls sharply into the water. Eagle Point and Pile Point on San Juan Island are easily accessible and are excellent diving areas. With a boat, divers can go to Stuart Island, Spieden Island, Henry Island, and Jones Island for their sport. The passages and bays of the Gulf Islands likewise offer numerous diving opportunities. A number of diving areas in the San Juan-Gulf Island archipelago are shown in Appendix K. While in island waters of the study area, divers can often view giant kelp forests with their associated fish life, crabs, various invertebrates, anemones, sea cucumbers, starfish, and many other interesting forms of sea life. Ling cod and rockfish are often seen and hunted. The wolf eel and dangerous tide are the diver's only worries.

Sport Fishing

Fishing on and along the shoreline of the San Juan-Gulf Islands is varied and excellent. Both fresh and saltwater fishing are available. The Puget Sound/Strait of Georgia area is one of the best sport salmon fishing areas in the world. Interest in this sport, like boating, is growing as fast or faster than

the regional population. Boaters can troll for silver salmon in the fall and king salmon during the winter. Salmon fishing is rather slow during the summer months.

In the study area, tidal sport fishing is popular off the banks at Point Roberts, in Boundary Bay off Crescent Beach, and in selected locations in the San Juan-Gulf Islands. Fishermen may jig for ling cod and rockfish around kelp beds. Halibut inhabit certain deepwater areas. For the fisherman who does not own a boat, spinning for ling cod, rockfish, and an occasional salmon is possible from many shoreline areas adjacent to deepwater.

Freshwater fishing for trout and large mouth bass can be enjoyed in the many lakes that lace the San Juan-Gulf Islands. Cypress Island and Blakely Island have isolated lakes of interest to the fly fisherman. Orcas and Lopez Islands have larger lakes easily accessible by automobile with trout that will respond to flies, spoons, or bait. Egg Lake on San Juan Island offers trout fishing without competition from other fishermen. Picking a trout out of the lily pads with a nymph fly as an osprey hunts at the opposite end of the lake is for many a dream come true.

And for the large mouth bass fisherman, there is Sportsman Lake on San Juan Island where plugs and bait are effective throughout the spring, summer, and early fall. Here the fisherman can pursue his sport far into the long summer evening under the near midnight sun, slipping his canoe in and out of lily pad haunts, happy with an occasional strike and a bass in his bag.

Hunting and Non-Consumptive Wildlife Uses

Pacific black-tailed deer abound on the San Juan-Gulf Islands and considerable forested and open lands are available to deer hunters. Half of the hunt is the outdoor experience away from crowds, which can be found on numerous hills and in valleys of the islands.

Upland game bird hunting is spotty, with mountain quail being the primary bird sought.

The "San Juan" rabbit--the Belgian hare--having found a near-perfect

habitat, has proliferated in great numbers. Grassland on the south end of San Juan Island offers opportunities for rabbit hunting on private land. San Juan National Historical Park is closed to all forms of hunting.

The study area includes a number of highly important wildlife habitats, particularly the intertidal areas and adjacent marshy uplands which harbor a variety of birds, shellfish and fin fish. Of special significance are the Fraser Delta and the Boundary Bay foreshores in Canada, and Samish and Padilla Bays in the United States, which provide resting and feeding grounds for migratory geese as well as accommodating numerous species of ducks and shore birds.

These areas are important stopovers for a variety of waterfowl that nest in Siberia and Alaska, and winter in California and Mexico. Of these, the snow goose and the Pacific black brant are protected by an international treaty, although there is a limited hunting season. These intertidal areas also provide a habitat for 100,000-200,000 wintering birds. The major

recreational activity associated with this wildlife is waterfowl hunting, with an estimated 250,000 man days annually in Boundary Bay alone. But bird watching and photography are expected to become the main recreational activities associated with this wildlife in the next two decades. Sea duck hunting occurs in the bays and harbors of the islands.

Bald eagle nesting sites are located throughout the San Juan-Gulf Islands and are an important part of the ever-decreasing North American nesting areas along the Pacific coast.

The intertidal and subtidal areas also provide habitat for abundant marine invertebrates and fishes. The silty flats and salt marshes generate nutrient materials feeding minute life forms that are the basic food for more complex life forms of the food chain. The following table gives some indication of the diversity and importance of the area's marine resources:

Abalone	Commercial and sport	Gulf and San Juan Islands
Shrimp and Prawns	Commercial and sport fishing	Fraser Delta; Gulf and San Juan Islands

Oysters and Clams	Commercial and sport fishing	Boundary Bay; beaches throughout the islands
Invertebrates		Boundary Bay; locations throughout the islands
Crab	Commercial and sport fishing	Fraser Delta; Boundary Bay
Herring	Commercial fishing	San Juan-Gulf Islands
Herring	Spawning	East side of Point Roberts; less consistently in other areas of Boundary Bay
Salmon	Commercial fishing	Fraser Delta and San Juan Islands
Salmon	Sport fishing	Fraser Delta; San Juan Islands; locations in Gulf Islands
Salmon	Rearing	Fraser Delta

Many people depend upon the harvest of these marine resources for their living. But an equally important aspect of this biological diversity is the outstanding nature study and recreation opportunities it affords an ever-expanding number of people living in and around the study area.

Picnicking and Camping

These activities are especially popular in the Puget Sound/ Strait of Georgia region, for residents and tourists alike. Picnicking is a favorite family recreation activity which can be the primary reason for the outing or an activity associated with boating, pleasure driving, or beach activity. With steady population growth in the study area, it can be expected that such outings will likewise increase, and new facilities for this activity will be needed.

Individual and group camping facilities are typically in short supply in populous regions as well as the study area. Individual camping facilities for travelers or for boaters cruising the islands in small boats are generally in short supply, and continued effort to meet the demand is desirable. More group camping facilities to provide for a limited stay and overnight camping opportunities for organized youth groups are also needed. Such facilities can form a major element in programs of outdoor education.

Hiking and Strolling

Increased interest in hiking and strolling partly expresses a general increase in availability of leisure time. The land areas needed for these activities can be supplied in park areas as well as along dykes, riverbanks, and abandoned railroad grades.

Riding

Equestrian activity has staged a resurgence among people who can afford it. This activity is often viable on a commercial basis where supporting populations are large enough to sustain use. Commercial stables and related trail facilities would probably be well utilized in this study region if properly developed.

Cycling

Cycling is becoming much more popular in North America, despite a shortage of designed bicycle routes. Designed routes, however, are being developed by many units of government in response to the increased popularity in this activity.

LAND-USE TRENDS

Population and Visitation

Three major population centers encircle the San Juan-Gulf Islands, Point Roberts, and the mainland coastline. The present populations of these three cities--Seattle, Vancouver, and Victoria--totals over five million. By the year 2000, this figure is projected to be more than seven million inhabitants, who will no doubt have an ever-increasing impact on the resources of the study area. Too, additional population growth is being experienced in the smaller cities and towns of the study area. These include Anacortes, Bellingham, Blaine, Sidney, Ladysmith, many smaller centers that are located along the inner Washington and British Columbia coastline, and within the San Juan-Gulf Islands. Large numbers of vacationers from throughout the United States and Canada come to this region each year to see such natural and cultural attractions as Mount Rainier, Olympic, and North Cascades National Parks in the United States, and Pacific Rim National Park in Canada.

They come as well to see the San Juan-Gulf Islands, and the urban attractions of Seattle, Vancouver, and Victoria.

Legislation has provided for the preservation of large scenically splendid areas adjacent to the urban centers of Seattle, Vancouver, and Victoria. But little exists in the way of comparable marine or island reserves within the immense complex of shoreline and waterways of the study area. The best and only example of a major marine and island park in the State of Washington is Deception Pass State Park on Whidbey and Fidalgo Islands. Several large federal holdings--primarily military--exist within the study area but offer little park potential.

The basic problem of establishing major island or marine parks within the study area is that the entire shoreline within the United States is almost entirely in small private ownerships; the same is rapidly becoming true in Canada. Access to public tidelands is severely limited by private ownership of the uplands.

This ownership pattern has tended to limit land acquisition for recreation and park purposes to small and dispersed parcels. As more residents move into the study area to purchase and occupy the shoreline, the difficulty of preserving areas will become increasingly acute, as competition for land forces the market values ever higher. Unless land acquisition for park and conservation purposes proceeds rapidly, many beautiful natural areas will be lost to settlement.

Impending Land Use: United States

San Juan County

San Juan County, comprising a majority of the 172 San Juan Islands and its adjacent waters, is a unique geographical area being composed of an endless variety of large and small islands, channels, bays, sounds, forests, and marine habitat. It has been estimated that approximately 375 miles of tidelands exist within San Juan County of which 275 miles are in state ownership. Despite this reassuring figure, however, only a very small portion of these tidelands have been made available for public

use because uplands are in private ownership and block free access. The Washington State Parks and Recreation Commission has been successful in preserving within the San Juan Islands a number of outstanding areas including the 5,000-acre Mount Moran State Park on Orcas Island, deeded to the state by shipping magnate, Thomas Moran: Sucia Island with its many sheltered bays, elongated coves, and marine fossils; and the smaller islands of Turn, Matia, and Jones which are managed under an agreement with the Bureau of Sport Fisheries and Wildlife. The Washington State Parks and Recreation Commission also gives protection to a number of other areas on the larger islands and has an important program of preserving some 50 small islands and rocks as undeveloped marine parks. Many of these state marine parks were originally administered by federal agencies such as the Bureau of Land Management, but have now been transferred to the state with a reversal clause, or have been leased to the Washington State Parks and Recreation Commission. Additional small islands and rocks are administered by the Bureau of Sport Fisheries and Wildlife to preserve marine and bird habitats, and eventually up to 80 islands and rock islets might come under their jurisdiction and the protection of the National Wilderness Preservation System. An agreement between the Washington State Parks and Recreation Commission and the Bureau of Sport Fisheries and Wildlife is now in the process of negotiation to resolve which of the many small islands will be protected by the state and which areas by the bureau. Generally, the agreement will be for the bureau to look after islands with wildlife values, while the state will manage islands with recreational values. The U. S. Coast Guard likewise has ownership of several small islands, and is responsible for aiding in the safe navigation of these waters, giving assistance with its lighthouse and warning devices monitoring marine and weather conditions, and providing rescue assistance when necessary.

A list of state parks, marine parks, Bureau of Sport Fisheries and Wildlife preserves, and additional island resources in undetermined ownership within the study area is located in Appendix B. A number of outstanding areas of smaller acreage

than inventoried in this study also exist in the San Juan Islands, those which have been identified by the State Parks and Recreation Commission follow:

Beach Haven Resort - west side of Orcas Island on President Channel

Edward Chavalier property - Stuart Island

Canoe Island - near Shaw Island

Cattle Point - southern tip of San Juan Island

Decatur Head - east side of Decatur Island

Shaw Island - several small areas

Obstruction Pass - between Orcas and Obstruction Islands

Griffin Bay - southeast side of San Juan Island

Spencer Spit - northeast side of Lopez Island

Henderson Camp - south end of Lopez Island

The San Juan Islands today are in a state of transition. To almost all who venture there, the area conjures up the thoughts of a paradise or a special place removed from the everyday of most people's lives, an area of great beauty and tranquility. But, like most paradises, everyone is trying to get there; and those who can afford it purchase a part of it to prevent its being lost to them. The effort, though, is perhaps fruitless as is evidenced in similar areas such as Lake Tahoe in California and parts of Oahu in the Hawaiian chain. The very freedom which people seek by going to the islands in the end destroys their paradise. Without a public commitment of what citizens want the island environment to be, and without adequate planning and laws and ordinances to bring it about, typical scatterings of development occur, wastefully destroying wildlife habitat and scenery. Yet it is possible, through sufficient public interest and adequate planning at all levels of government, for man to live harmoniously with nature, to define and build his settlements, and to reap the benefits of a good relationship with the land, the water, and the animals around him.

Several years ago, only a few real estate offices handled property in San Juan County, yet today a large number of offices do. Land values are escalating, summer homes are being built rapidly--and in increasing numbers--and the resident population continues to grow.

On the other hand, there are still special areas in the San Juan Islands that exhibit the natural qualities that have brought and continue to bring so many people to the islands today. Those areas are relatively undisturbed for a number of reasons: difficult access, steep topography, and high development cost. These areas within the San Juan Islands that can be considered to possess major national or international conservation values are listed in the resource inventory section of this report along with a similar inventory of marine areas possessing outstanding scientific values.

Whatcom County

Whatcom County is the farthest north county on Washington's inner mainland coast. Its saltwater shoreline extends for over 100 miles from Semiahmoo Bay at the international boundary south to Bellingham Bay. The shoreline is characterized by a variety of steep bluffs such as at Birch Point; and extensive mud flats as at Lummi, northern Bellingham, Semiahmoo Bays and Drayton Harbor. The Whatcom County shoreline is substantially altered by harbors, shoreline homes, resort communities, railroad tracks, and cities like Bellingham and Blaine. Whatcom County also contains Point Roberts, which is separated from the mainland by 14 miles of water and its only land access is by a 30-mile road through Canadian territory. There are three Washington State parks in Whatcom County--Larabee, Birch Bay, and Peace Arch Park on the international boundary. Although there are 100 miles of tidelands in the county, only 2 percent of these are in public ownership and the rest in private hands, generally in small parcels. The Department of Natural Resources has several small tideland holdings along Whatcom County shores that include areas at Lummi Island, at Gooseberry Point, and on the Strait of Georgia. The State Parks and Recreation Commission has identified Eliza Island as a potential state park. Portage Island is a large county-owned park. Other park sites and access to saltwater shoreline in the county are provided by the city and county governments, and by the State Department of Fish and Game. The City of Blaine has recently completed an important environmental inventory of Drayton Harbor and approved

plans for its use and conservation.

The primary factor concerning recreation in Whatcom County is that the area is in the urban shadow of Greater Vancouver; consequently, the majority of its park users are Canadian. This is consistently true at Point Roberts, Birch Bay, and Larabee State Park. Visitation of Whatcom County recreation areas falls easily within a day-use pattern for the residents of Vancouver, British Columbia. With this larger proportion of recreational use by Canadians, and such a large influx of summer vacationers, the county's permanent residents' demands on existing recreational facilities are relatively small by comparison. There are two areas within the county considered to have outstanding shoreline and scenic values in this study, Birch Point and Lummi Island; a description of these resources is provided in the resource inventory section.

Point Roberts

Of the 5.3 square miles of land constituting Point Roberts, an estimated 15 percent is dense suburban development; 20 percent is rural or low density development; 30 percent is agricultural; and the ramainder is second-growth forest and unaltered shoreline.

Point Roberts has roughly 660 permanent residents and an estimated 1,500 homes for seasonal occupancy. The homes are situated in a narrow band paralleling the southwest shoreline, in a cluster at the center of the southern end of the point, and the northeast corner near the international boundary. An estimated 85 percent of land owners at Point Roberts are Canadian, although 80 percent of the land is in large tracts owned by Americans. There are an estimated 2,000 property owners at Point Roberts, and there is considerable interest locally to expand this settlement for speculative purposes.

Skagit County

Skagit County is situated adjacent to and directly south of Whatcom County. The county is bordered on the southwest by Island County and on the south by Snohomish County. The county's shoreline is characterized by steep and scenic terrain rising dramatically from the shoreline; extensive marshlands and mud flats; and a number of islands, some possessing major scenic and recreation values. The largest town in Skagit County is Anacortes on Guemes Channel, and much of the town's industrial development is on Fidalgo Bay. The county is now exploring the possibility of creating a park adjacent to Deception Pass State Park.

Skagit County is one hour's drive from Seattle and, therefore, gets very heavy recreational use from Seattle residents. A majority of these recreational users, however, head to the eastern part of the county where North Cascades National Park and the Skagit River are located.

The State Parks and Recreation Commission has identified three possible state park areas within Skagit County; they are:

Saddle Bag Island - near southern tip of Guemes Island

Cypress Island - west of Guemes Island

Young Island - on Burrows Bay, south of Anacortes

There are state-owned tidelands and shorelands administered by the Washington State Department of Natural Resources in the following locations in Skagit County: Burrows Island, Allan Island, Hat Island, Jack Island, Vendovi Island, and Guemes, Cypress, Sinclair, and Fidalgo Islands.

There are four outstanding natural areas on the saltwater coastline of Skagit County and one marine area; these are identified in the resource inventory section of this report.

Island County

The islands of Whidbey and Camano comprise Island County, which is located at the northern end of Puget Sound. This county is bound on the north by beautiful Deception Pass and Fidalgo Island; on the east by Skagit Bay; on the south by Admiralty Inlet; and on the west by Rosario Strait, Admiralty Inlet, and the Strait of Juan de Fuca.

Whidbey is the largest island in Puget Sound and the second largest island in the United States. The island, extending in a north-south direction, is about 40 miles long and from 1 to 10 miles wide. Three small islands, Ben Ure, Strawberry, and Smith, are included within Island County.

Island County, with its extensive shoreline and excellent beaches, pleasant roads, charming towns, historic sites, and spectacular Deception Pass, attracts many visitors.

Beside the many charming towns on the islands, there are seven state parks: Camano Island State Park, Deception Pass State Park, Fort Casey Heritage Site; Fort Ebey Recreation Area, Useless Bay Recreation Area, South Whidbey Recreation Area, and Strawberry Island Marine Park.

Although roughly two-thirds of Whidbey Island's tidelands are administered by the Washington State Department of Natural Resources, only a small portion of the tidelands around Camano Island are owned by the State. Access to tidelands, important for activities such as beach combing, swimming, and shellfish gathering, will need to be provided. As in San Juan, Whatcom, and Skagit Counties, however, the problem of public access to tidelands for recreation is complicated by a large percentage of shoreline in private ownership. Because of its character, location, and topography, Whidbey Island has more potential for recreation development than Camano Island. The western shore of Whidbey Island has many excellent beaches; the eastern side has several excellent small boat harbors. Being less than an hour's drive from the greater Seattle area, the county receives very heavy use from this metropolis.

There is one outstanding area of considerable significance in Island County in addition to Deception Pass State Park; this is the bluff and shoreline areas of Ebeys Landing, which is discussed in the resource inventory section of this report.

Impending Land Use: Canada

The environmental amenities of southwestern British Columbia are a major factor contributing to steady population growth. Accompanying this growth is an intense competition for land resources.

The arbitration of the many demands for use of land is in large measure the role of local governments in British Columbia, acting individually as municipalities or in concert as Regional Districts. Regional Districts are multi-purpose agencies comprised of representatives of both organized municipalities and locally unorganized areas. Among the many functions they may adopt is that of regional planning, including implementation of basic development controls.

The study area embraces the four conterminous Regional Districts of greater Vancouver, Nanaimo, Cowichan, and Capital. The degree to which they have implemented planning controls varies considerably, but their present arbitration between urban and other uses as presently defined is shown on the Impending Land-Use Map.

Broad development guidelines for Greater Vancouver are presented in the Official Regional Plan for the Lower Mainland, which indicates long-range suitability of land for urban, industrial, park, public, and rural uses. This district has assumed the function of acquisition and development of regional parks. Park acquisition is proceeding but is constrained by the amount of available funding. The district, already active at Centennial Beach on Boundary Bay, hopes to collaborate with senior governments in joint recreational and conservation development on the bay.

The Capital Regional District has responsibility for metropolitan Victoria and most of the Gulf Islands. As recently as 2 years ago, there was no zoning control in these islands. Since that time the Regional District, in cooperation with island residents, has implemented basic zoning controls. This has been supplemented by a provincially imposed moratorium on land subdivision into parcels smaller than 10 acres, pending the final implementation of regional and community plans for the islands. The draft plans hope to provide for only minor population increases within existing settlements with major public land acquisition for park purposes. The regional park program, however, is presently confined to the metropolitan part of the Capital Regional District because of the greater

priority to secure park lands in and near its population center. This district, too, is hampered in its land acquisitions by shortages of funds, and places hope in receiving further Crown federal and provincial lands where available and suitable.

In the Nanaimo and Cowichan Regional Districts, implementation of land-use controls on a regional scale is still in its early stages. There are no formal regional park programs underway as yet, although the Nanaimo District accepts bequests of lands for regional park purposes.

A basic issue common to all regional districts in the study area is the growing real estate pressures for year-round and second-home developments, particularly on waterfront lands. This pressure is escalating land prices, compounding the difficulties of land acquisition for purposes of public recreation and conservation. These inflated land prices present hardships to regional and local governments since they must finance land acquisition as well as ongoing programs from a limited property tax base.

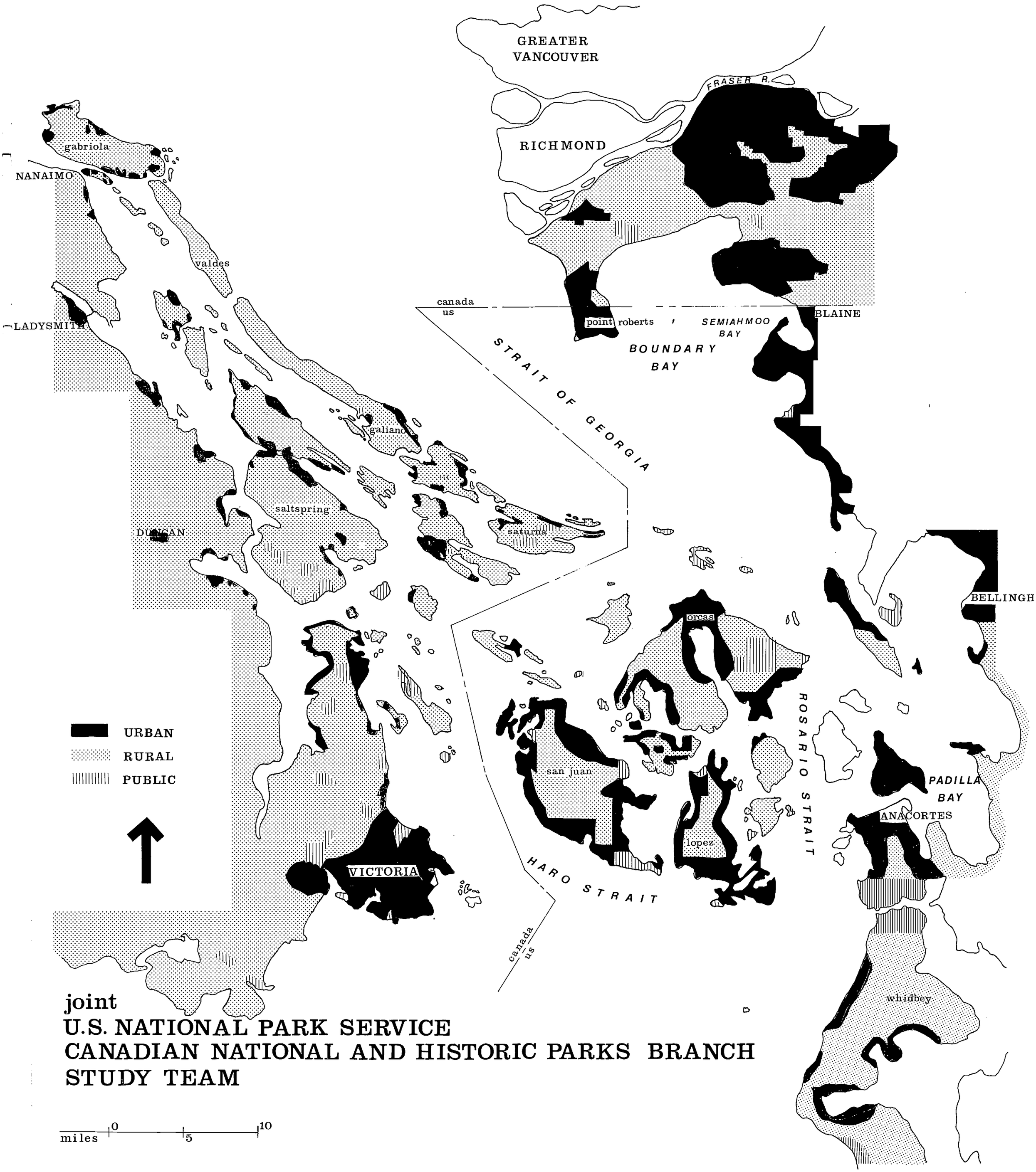
Within the Canadian segment of the study area, there are many provincial parks, ecological reserves, and federal bird sanctuaries. (See Appendix B .)

For the purposes of this investigations, provincial parks of British Columbia within the study area may be classified into two types: provincial marine parks, catering mainly to recreational boaters, provide anchorage, freshwater, and camping or picnicking facilities; and the less developed provincial foreshore parks which provide recreational water frontage.

Ecological reserves have been selected under the International Biological Program and are established and protected by provincial statute, serving as outdoor laboratories and classrooms for important natural environment studies.

Sanctuaries for the protection of wintering and nesting migratory birds have been established under federal Order-in-Council and in the case of Reifel Refuge, supported by a provincial Order-in-Council. A variety of provincial conservation and recreation reserves designations are applied to the foreshores of the Fraser Delta and Boundary Bay.

IMPENDING LAND USE



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4

CONCEPTUAL PARK ALTERNATIVES

INTRODUCTION

The International Point Roberts Board requested in its initial directive that conceptual park alternatives be developed for Point Roberts, and also for its surrounding region. In response to this directive, a broad inventory of potential parks or reserves within the study region has been made.

One consensus derived from this study was that most individual resource areas that have been identified as having park potential could--each on its own--fulfill some valuable recreation or conservation demand. Yet, it was also recognized that combining the various individual areas identified as part of a larger grouping of related parks, reserves, scientific or conservation areas made considerable sense, with each unit complementing the other. Regarding Point Roberts specifically, a portion could be considered as a park, but the inclusion of Tsawwassen Beach and/or the Centennial Beach area added contiguous and complementary resources, thereby enhancing Point Robert's park potential. More broadly, it was perceived that recreational use of western Boundary Bay could--and must--be harmonized with the conservation and recreation use of the east side of Point Roberts. The mobile wildlife resources of the area, however, are a management matter, and attempting to conserve these resources within Boundary Bay alone would provide inadequate protection. Incorporating Point Roberts' shoreline, Boundary Bay, and Semiahmoo Bay into a single park unit seems to be an appropriate answer.

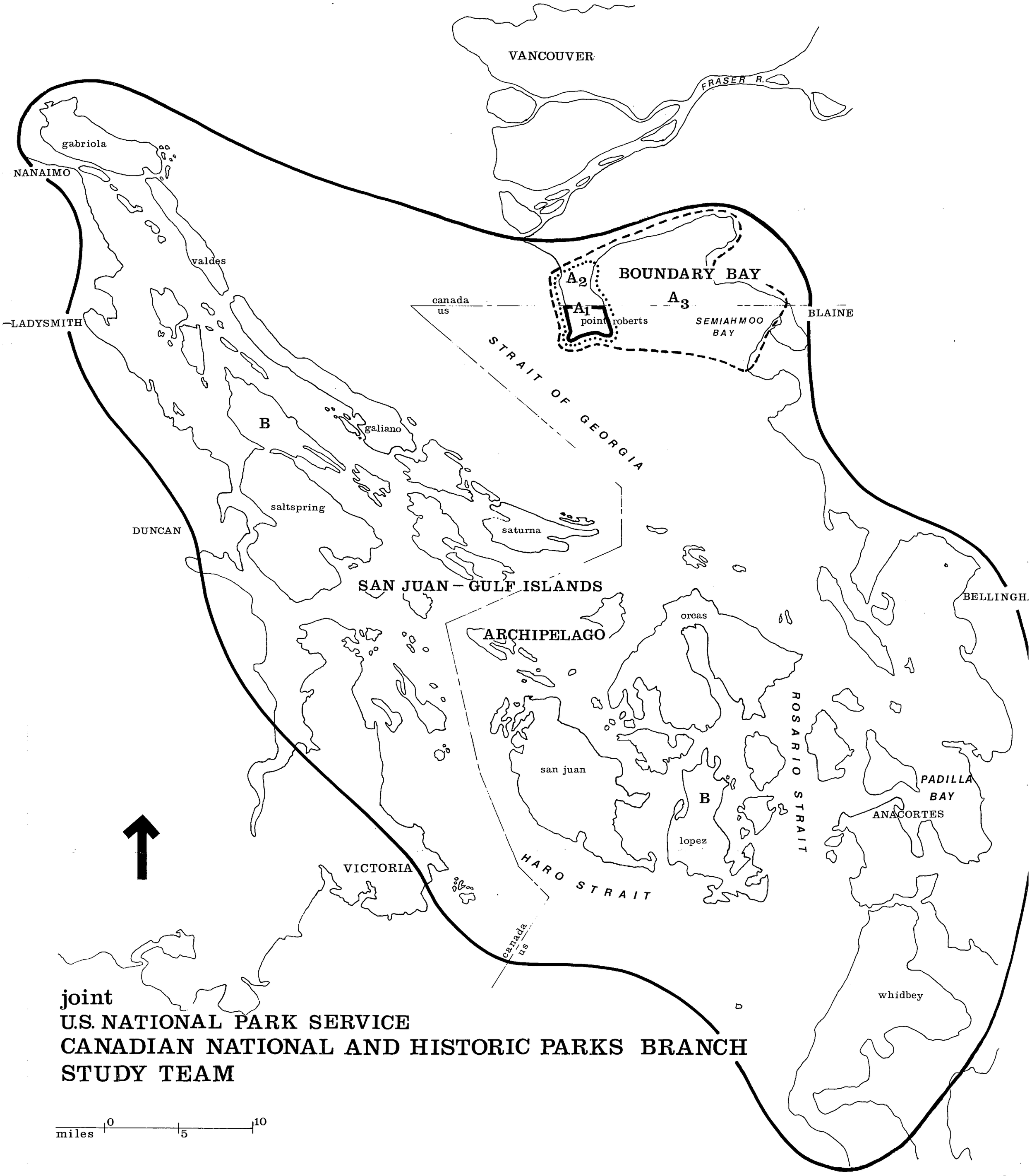
Recreational activities in the San Juan-Gulf Islands, which largely originates on the mainland of Canada and the United States, also transcends the international boundary. In the islands as well as Point Roberts and Boundary Bay, by combining various park and reserve resources, a variety of international park systems are possible.

Thus, relying on the original directive for guidance, the international park possibilities were explored at two

conceptual levels. Additional study revealed that these concepts could be refined to identify sub-alternatives within the larger ones, resulting in the following:

Conceptual Level	Alternative
A. Point Roberts and environs	1. Point Roberts
	2. Point Roberts and/or Tsawwassen and Boundary Centennial Beaches.
	3. Point Roberts, the adjacent beaches, Boundary Bay, and Semiahmoo Bay.
B. Point Roberts, its environs, and the island archipelago	Alternatives can be selected from a variety of choices within the San Juan-Gulf Island archipelago.

INTERNATIONAL PARK ALTERNATIVES



joint
U.S. NATIONAL PARK SERVICE
CANADIAN NATIONAL AND HISTORIC PARKS BRANCH
STUDY TEAM

PARK CONCEPTS

Alternative A1: Point Roberts

The suitability of Point Roberts as a park in itself is determined by evaluation of the present resources, how those resources that might be reclaimed from existing uses for recreation purposes, and the potential recreational demands for the area.

Point Roberts is a peninsula of land extending south from the Canadian mainland several miles into United States waters. As previously stated, the point is detached from the mainland of the United States (Whatcom County) by some 14 miles of water. The point is approximately 5 miles square, with over 7 1/2 miles of shoreline bordering on Boundary Bay and the Strait of Georgia.

Point Roberts' potential as a park--in its entirety--is, in all likelihood, not feasible. Point Roberts is an international problem and requires an international solution, which is to say the solution must be of interest and benefit to both nations. Without doubt, the beaches of Point Roberts are a major

recreation resource to the Greater Vancouver area, which is largely rimmed by steep mountains.

Beaches at English Bay, western Boundary Bay, Crescent Beach, and the White Rock areas in British Columbia, and Birch Bay and Larabee State Parks in Washington are the only water-oriented recreational areas of this type available to the Greater Vancouver population. Point Roberts on the other hand, being so distant from an American population center like Seattle, and being detached from the United States mainland, is limited as a recreational resource for Americans.

The natural features of certain areas of Point Roberts are still relatively attractive, but the large amount of settlement that has been developed there greatly dominates any park values. An exception to this is on the southeast. Here a marvelous geographical relationship exists between forest, high bluffs, and marine waters, providing a great habitat for many varieties of birds and fishes. This special area is worthy of concern. And this concern should emphasize conservation of the area rather than recreational development.

Point Roberts proper has previously been studied for its national and international park possibilities, and although the area contains some amenities, it does not meet criteria for national parks of either the United States or Canada, which are used to select areas like Mount Rainier, Olympic, and North Cascades National Parks in Washington and Pacific Rim National Park in British Columbia. The Point Roberts area is deficient in a number of national park land requirements including significance of resources, size of the area, and pristine condition of the resource. But other management options are available.

Attractions might be developed to stimulate American interest in Point Roberts such as a joint U.S. - Canadian customs office serving marine boaters returning towards Seattle from their cruises far to the north of Vancouver. Such a facility would also accommodate Vancouver boaters wishing to go to the San Juan Islands who now have to cross to Bedwell Harbor and then to Friday Harbor to clear customs. Such a service would generate considerable boating use in the now boatless waters off Point Roberts. Other attractions such as golf courses, marinas, and youth camps would have strong appeal to users from Vancouver, although they would not stimulate extensive American use.

Making the entire Point Roberts area a park and eventually buying out its residential population would eliminate many of the jurisdictional problems that now exist. Such action, however, would have to be seriously evaluated after all other alternatives had been explored. The key to solving the Point Roberts situation seems to be for all parties to recognize the limits of its capacity for sustaining human use and habitation. Then, with this basic carrying capacity in mind, develop a program to restrict or perhaps reduce human settlement and recreation attractions to a size the resources, in particular artesian water resources, can support.

Cost of purchasing Point Roberts in its entirety for a park would seem to be considerable and no doubt extremely difficult to accomplish given the large amount of settlement and subdividing

interest in the area. The total land area of Point Roberts is 3,151 acres, and its estimated value is quite high considering how one might spend park dollars region wide. If this plan were developed, it would require a variety of techniques to acquire lands from 2,000 owners, including development phasing, lifetime tenancy, and a variety of leasing arrangements. These arrangements could allow for occupancy of all structures that are in good repair until they were required for park development. Orderly disposition of surplus structures would be a problem. A sensitive regard for community relations would be required to assist in the human problems related to the large number of relocations.

Establishing the whole of Point Roberts as a park seems difficult for several reasons: Point Roberts, as previously stated, does not meet the national park criteria of either Canada or the United States. A large park would attract great numbers of visitors and exchange the present problem of residential use and water shortage for a problem of recreational users and water shortage. Without special arrangements, there is no solution to the Point Roberts situation, since a remedy would be in the interest of only one nation; a solution requires a joint reason or common ground in order to be accomplished. Costs of acquiring the entire area would be great, and more appropriate and financially productive solutions to the situation seem available.

Areas of Point Roberts do, however, possess park potentials but these would be best utilized in association with broader international park possibilities.

Alternative A2: Point Roberts and Adjacent Beaches

The basis of this alternative is to improve Point Roberts park Alternative A, by the addition of adjacent lands in Canada along both shores of the Point Roberts peninsula. This action adds Canadian components that possess desirable beach lands and broaden the park concept in a way that may attract limited, but greater numbers of American users. The additional components of this alternative are described below.

Tswwassen: This area consists of the beach and waters at the foot of English Bluff north of Point Roberts, fronting on the Strait of Georgia. Tsawwassen's addition to this proposal would add a Canadian shoreline component, secure more beach for public use; add an area suitable for marina development as a point of origin for boats going to the island archipelago; and also protect the foreshores of this area that are important to brant, herring, salmon, and shellfish. Features the area possesses which could be interpreted include its seashore beaches and cliffs, the off-shore tides, the Fraser River Delta, the nearby ocean port access, the peaceful boundary and the fisheries of the area. The recreational activities Tsawwassen could accommodate include beach activities, limited swimming, and waterfowl observation. Here part of the story of the Coast Salish can also be told. Development costs for this area, including land acquisition, could total $2,000,000 because of extensive breakwater requirements.

Boundary/Centennial/Grauer Beaches: This complex is part of the warmwater and sandy tideland unit of western Boundary Bay. Adding this component to Alternative A1 provides a desirable beach that can accommodate many recreationists and complements the beautiful, but more stony beaches of eastern Point Roberts.

Features which the area possesses that could be interpreted include the natural phenomena of the tidal flats, beach accretion, the tides and intertidal ecosystem, agricultural utilization, and the dyking out of the sea. The area provides excellent views and hence opportunities to interpret Boundary Bay and the coastal mountains. Its position in the regional sunshine belt could also be interpreted.

The area possesses great potential for beach activities such as swimming, paddling, picnicking, day sailing in light craft, viewing, clamming, and crabbing.

The Greater Vancouver Regional District already owns 2.1 miles of beach. Funds for additional land acquisition and facility

development--an estimated $250,000--will be required to fulfill recreational demands.

Point Roberts - The Bays and Tidelands: Alternative A3

The Point Roberts and adjacent beaches concept (A2) could be substantially enhanced by adding Boundary and Semiahmoo Bays and their tidelands as part of a broader international park concept. This combined area is an integral geographic and ecologic unit with many close biologic and oceanographic relationships. Point Roberts, within this broader area, serves as a splendid viewing spot for the entire bay complex, and its western beaches and waters are part of the Boundary Bay water system.

The Boundary/Semiahmoo Bays and Tidelands: This combined area is a geographic unit of over 30 square miles spanning the international boundary. It is such a diverse and complex unit that its eastern subunits--Crescent Beach, Semiahmoo Beach and Grauer Beaches--will be described individually. The recreation values of these areas are centered on the sandy beaches and protected waters.

The salient characteristics of other parts of the bays are of high biological significance. They are a vital link in the food chain of the entire Strait of Georgia area. The intertidal zones contain a variety of habitats ranging from salt marsh to eel grass and are the primary food-production belt for invertebrates, ducks, brant, geese, fish, and seals. The bays offer a range of habitats ranging from nutrient-rich and brackish waters to highly saline and silt-free waters. British Columbia's largest herring spawn occur in the eel grass of Boundary Bay. The larvae are swept by gyral currents past Point Roberts into the low salinity waters of the Fraser "plume" where they provide feed for other species, especially salmon. The Fraser Delta foreshores together with their bays constitute habitat important to wintering waterfowl and shore birds. A vital objective of any combined management of this international area would be to work towards the protection of the waters of these bays and the related land habitats of aquatic plants, marine fauna and bird communities. These management

activities within the area of Boundary, Mud, and Semiahmoo Bays would require multilateral cooperation to combine and coordinate the efforts of various jurisdictions.

The qualities these areas possess relate to the sea, and the phenomena which might be interpreted to the public include: the tides and intertidal ecosystem, the food chain within the bays, and the role of eel grass as a herring brooder and food producer for migratory waterfowl. The dependence of waterfowl on upland refuges and feeding areas near the bays could also be demonstrated.

The large flocks of migratory waterfowl in Boundary Bay could be interpreted, with perhaps 10,000 or more birds serving as stout testimony. Fish migration might well be interpreted in the Serpentine and Nicomekl Rivers.

Conservation and observation of waterfowl, shore birds, and other fauna are basic uses of this area. Fishing in the estuarine Serpentine and Nicomekl Rivers is possible, as well as hiking upon the dykes. Continued efforts to improve and maintain the water quality of these rivers through watershed protection is an obvious key of this proposal. Cycling and horseback riding would possibly be additional activities should the railroad right-of-way through Mud Bay be relocated. Limited harborage and canoeing in the rivers could be increased. Controlled hunting of waterfowl might well continue.

A basic requirement of this alternative would be to secure the tidelands and related uplands as a permanent conservation area. Acquisition of private foreshore may be essential. For example, 145 acres in Mud Bay are being considered for acquisition at $50,000 from the Second Century Fund. It is entirely possible that an additional $300,000 might be required to secure the private tidelands in Boundary Bay. Additional public costs will most likely be incurred in the process of the relocation of the railroad tracks. A public-access easement on dykes for hikers and anglers could possibly be obtained by local government at no cost.

The development of facilities and operation of programs for wildlife management is currently being undertaken by federal, state and provincial governments. Additional facilities, such as observation towers and picnic and comfort stops used to stimulate recreational use of the area through nature study, could easily cost $100,000 - $200,000. Additional marina development in the tidal rivers might be considered, but the potential impact of any additional dredging would first have to be carefully studied. Locations at White Rock and Tsawwassen appear to be preferable for marina development. If considered acceptable, this development could be undertaken by private enterprise, which is eligible for a Canadian federal subsidy.

Crescent Beach: This area is situated on the eastern shores of Boundary Bay, and securing it as part of this alternative would add more beach shoreline for recreational uses. Crescent Beach could also be used to elaborate the general interpretive story of the sea, especially the tidal process and intertidal ecosystem. Primarily, though, its main value is as an area suitable for swimming, sunning, strolling, and picnicking. Additional boat-launching and marina facilities in this area could be accommodated at Blackie Spit. A scenic shoreline drive or combined foot and cycle path has been suggested here as well. Human, pre-history values are also an important asset of this area contained in two archeological sites: a rare Coast Salish entrenched fort at Crescent Beach and a midden at Blackie Spit.

Additional land acquisition costs for this area could be $500,000 for beach improvements and recreational development. Marina development could be a joint private-federal enterprise if existing federal programs continue. A scenic shoreline drive coupled with pocket beaches might well cost $1,000,000. A combined cycle and foot path traversing Crescent and Semiahmoo Beaches could well cost $300,000.

Semiahmoo Beach: This area possesses a waterfront strip approximately 6 miles long, extending from an area west of White Rock, British Columbia, south to the vicinity of Blaine,

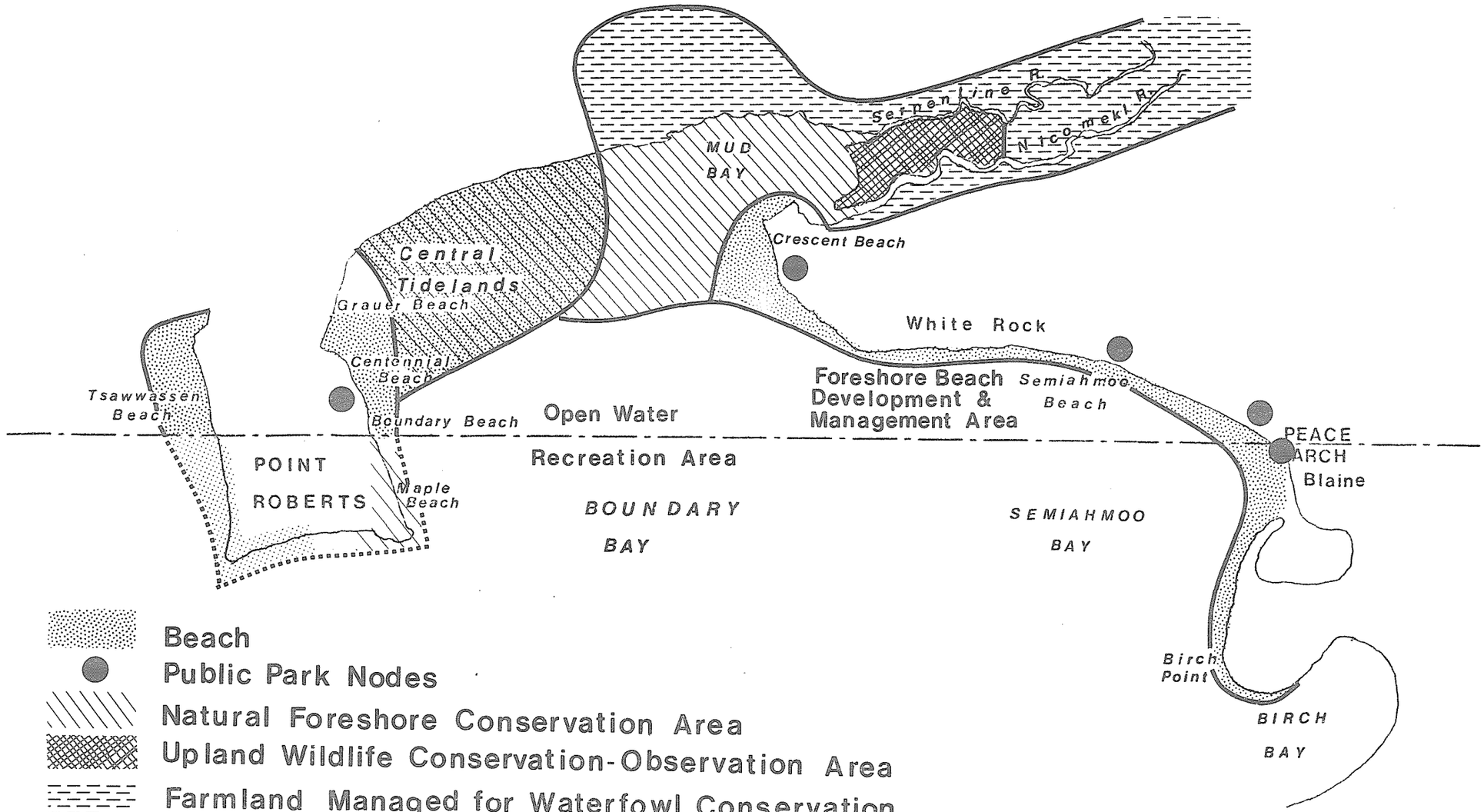
Washington. Acquisition of this area as a part of this alternative would be to ensure that this strip is made a beach park and developed in a way that will not adversely effect the overall area. Qualities which the area possess that could be interpreted to the public are tidal actions, intertidal areas, and their fauna. Activities the area could support include recreational boating, swimming, strolling, and nature study.

Area	Activities	Possible Development
Boundary Bay Open Waters	Recreational power boating and sailing	
	Sport Fishing	
Adjacent Uplands	Possible waterfowl feeding area	- Acquisition and habitat development
Mud Bay	Strolling, Hiking, Cycling, Riding	- Trail development - possible use of R.R. right-of-way
	Wildlife Conservation and Observation	- Viewing towers and interpretative facilities
Serpentine-Nicomekl	Wildlife Conservation and Observation	- Habitat development
		- Interpretative facilities - trails, centre, towers
	Picnicking	- Facilities and parking
	Stream Fishing	- Fish rearing area
	Strolling, Hiking and Riding	- Trail development
Crescent Beach	Intensive Beach Recreation	- Beach Improvement and Facilities
	Strolling, Hiking, Cycling	- Trail Development; possible use of R.R. right-of-way
	Boating (sail) (power)	- Marina development at Blackie spit*
	Sport Fishing	
	Day Use Outdoor Recreation	- Recreation Park
		- (Games and sport facilities behind beach)
	Pleasure Driving	- A Marine Drive 'parkway' possible

Area	Activities	Possible Development
Semiahoo Beach	Intensive Beach Recreation	- Beach Improvement and Facilities
	Strolling, hiking, cycling	- Trails; possible use of R.R. right-of-way
	Tourist Recreation	- Major tourist services at White Rock
	Boating	- Marina Improvement
	Pleasure Driving	- A Marine Drive 'parkway' possible
Campbell River	Fishing - fresh and salt water	- Habitat Improvement
	Boating	- Boat Launching or Marina*
	Day Use Recreation	- Recreation Park
	Picnicking	- Facilities
	Camping	- Facilities
Birch Point	Nature Study	- Interpretative facilities
	Hiking	- Trails
	Pleasure Driving	- Scenic Drive
	Picnicking	- Facilities
	Camping	- Facilities

*Denotes development possibilities warranting particular study before decisions to proceed or not to proceed is made.

PARK CONCEPT A_3



Most acquisition costs would be for the railroad right-of-way, a matter now in hand. Camping and other recreational activities such as golf course development could be undertaken commercially by the Indian Band at Campbell River. Public boat-launching facilities if developed here could cost around $100,000 or more.

Birch Point: This area, south of Drayton Harbor, is a steep wooded promontory. Acquisition of this area would be to secure a narrow strip of land along Semiahmoo Bay which would protect the shoreline and scenery of this area.

The point offers opportunities for study of tidal areas and uplands. It would provide a land base for limited public recreational uses including nature study, hiking, scenic driving, picnicking, and possibly camping. Its primary purpose after purchase, however, would be for conservation uses related to all the areas discussed under this concept.

Summary: The Boundary/Semiahmoo Bays complex including the shores of Point Roberts and Tsawwassen Beach is a prime recreational and conservation resource area. It is blessed with sandy beaches, warm waters, and extensive sunshine. Additionally, the waterfowl, sea bird, and marine wildlife resources of this area are of concern to both Canada and the United States in their distribution, movements, and importance. Conserved and developed as a total, this unit could be a great attraction to visitors from both countries because of the diverse recreational and conservation potentials it affords.

Concept B: Point Roberts, Its Environs and the Island Archipelago

Concept B provides a broad evaluation of the international park and reserve possibilities that exist in the San Juan-Gulf Island archipelago. Many opportunities exist, and a variety of park and reserve combinations are possible for creating an international park. The island archipelago offers a rich array of areas warranting public acquisition for recreation, scientific and conservation purposes. The chief limitations will undoubtedly be those imposed by a limited public purse. In the following sections, the potentials of the Gulf Islands and the San Juan Islands are reviewed separately for easy reference only, for as we have noted a recreating public knows no boundaries when the border is as peaceful as that between Canada and the United States.

The Gulf Islands

The Gulf Islands are part of an archipelago that offers diverse opportunities for preservation and enjoyment of magnificent natural scenic and recreation values. A principle objective in the Gulf Islands should be to secure both representative and outstanding island and marine areas having park potentials for public use, enjoyment, and education. These potential park and reserve areas have been documented in the resource inventory section of this report. Generally, these areas have been selected on the basis of scenic quality, recreational potential, archeological or human historical significance, or importance for biological conservation.

Owing to the diversity of the islands, a wide range of land and marine natural history themes as well as cultural themes are found. The dominant land themes--features the area has that could be enjoyed and interpreted--include bays, narrows, and passages. Tides, currents, and water clarity profiles would be interpreted as oceanographic phenomena. Closely related to the foregoing conditions is the sculpture of the land by continental glaciation and more recent marine erosion forces. Other qualities found within the islands include intertidal areas, shallow waters, deep waters, rocky substrate and unconsolidated sediment ecosystems, and seabird rookeries. The unique island ecology is evidenced by the Garry oak and Arbutus vegetative communities that grow in this sub-Mediterranean climate. The richness of the island's flora and fauna reflects the range of water conditions from cold and saline to warmer and fresher.

Cultural themes could focus upon the prehistory (archeological) and historic aspects of Coast Salish culture, European settlement and the boundary waters history, the local fishing industry, and ocean commerce. With such diverse potentials, the objective will be to ensure that a system of park and reserves in the islands is structured to ensure some protection or interpretive potential for each of these resources.

A wide spectrum of recreational uses can be anticipated, most of them oriented towards the enjoyment of the sea. Boating

and coastal cruising is a major activity, with Plumper Sound being the main entry point for American recreational craft cruising Canadian waters. This sound, together with Trincomali Channel and San Juan Channel, is a main cruising axis because of the sheltered waters it offers. These waters are suited for day cruising, and more shore-based boating accesses and marinas will be increasingly required to facilitate this activity. Sport fishing and scuba diving are popular in selected locations throughout the islands. Beach activities such as swimming, picnicking, and clam and oyster harvesting are popular, although there is already a deficiency of good public beach accesses especially for non-resident tourists and recreationists to pursue these activities. Camping for recreationists arriving by car*, yacht, and ferry is a popular activity, and a greater demand for facilities is expected. These facilities could well be related to trail systems to assist the hiker, cyclist and viewer. The Gulf Islands are significant for various seabirds including gulls, cormorants, terns, ospreys, and eagles. The island environment is also rich in marine invertebrates. Together these resources present many opportunities for nature study, and special habitats such as seabird nesting areas will require conservation measures.

A major cost component will be land acquisition. To acquire all the park potential lands identified, an estimated $30 million (1973 dollars) would be required. Accordingly, it is suggested that the following set of priorities for acquisition, based on analysis of the resources of the Gulf Islands, be used for guidance of any acquisition activities that might follow:

First Priority	Prevost (TOP PRIORITY)
	Sidney and James Islands
	Small islands rimming Portland Island
	Bedwell - Browning Harbor area
	Curtis Park - Camp Bay expansion
	Samuel Island and vicinity
	Parker Island - Montague Harbor area
	Porlier Pass (north end of Galiano; beaches and cliff of Valdes)
	De Courcy Islands
	Flat Tops and Gabriola Passage
	Cabbage and Tumbo Islands
Second Priority	Helen Point - Mt. Galiano
	Saturna Highlands (S.W.)
	Montague expansion
	Gossip Island

*It is doubtful if unrestricted automobile access to the islands can be considered feasible.

Walker Hook, Salt Spring Island
Long Harbor, Salt Spring Island
Kuper - Tent Islands (portion)
Secretary Group (portion) including
Clam Bay

Third Priority

Moresby Island (portion)
Central Mayne Island (portion)
Mt. Tuam, Salt Spring Island
Brethour Island (portion)

It should be noted that each of the areas designated as potential parks represents some of the finest lands in the Gulf Islands. These have been selected on the basis of both inherent potentials as park and conservation reserve units, as well as currently being large land parcels held in few ownerships and containing very limited land development. Acquisition of the lands identified as first priority would cost an estimated $13 million (1973 dollars).

The emphasis on acquiring these areas is to obtain the land base necessary for recreational access to and enjoyment of the water. The water areas themselves are under consideration by inter-governmental committees that are considering the questions of both water-quality maintenance and establishment of specific marine reserves. Land acquisition will complement these environmental conservation measures. It is to be noted that although this study limits itself to Point Roberts, its adjacent bays, and the San Juan-Gulf Island archipelago, a number of other areas having outstanding park and conservation potentials are being studied farther north and south by Canada and the United States, respectively.

Development costs for a range of facilities could undoubtedly, over a time, equal if not exceed the amounts of capital invested in the land. Harbors for pleasure craft and boat launching, beach facilities, hiking trails, camping facilities and nature conservation and interpretive facilities could all be involved. All parks entail continuing operation and maintenance obligations.

It bears repeating, however, that expenditures on park acquisition yield continuing and permanent benefits.

The San Juan Islands

A large measure of the suitability and feasibility of establishing international parks or reserves in the San Juan Islands is dependent upon the natural or historical significance of the inventoried resource areas--either individually or collectively--the fulfillment of a national responsibility to protect and preserve areas with important scenic and scientific values, and an evaluation of how these lands and waters could contribute towards satisfying the recreation demands of one of America's larger metropolitan areas.

The resource inventory in the United States portion of the study area covers a zone of approximately 1,500 square miles from Ebeys Landing on Whidbey Island to the United States-Canadian border near Blaine. Within this study zone, 15 shoreline and island areas have been identified as well as 14 tidal or marine areas. The mainland and island areas have been selected using several general criteria:

- Having an expansive feeling
- Being highly scenic
- Being essentially undisturbed lands - or giving a natural appearance
- Having potential for providing a variety of recreational activities like: wilderness hiking, fishing, scenic drives, bird watching, photography, camping, and water-related activities such as boating and scuba diving
- Possessing representative examples of irreplaceable land and water assets of the United States

The marine areas have been identified with the assistance of the University of Washington marine research laboratory at Friday Harbor and the Bureau of Sport Fisheries and Wildlife and have been selected on the basis that they possess important scientific values for marine studies, or possess considerable significance or uniqueness regarding the marine flora and fauna of the study area. One very important single criterion for land section selection--like bald eagle nesting areas--has been considered, but lands have not been included in this study solely for this purpose. Of the known eagle nesting areas in the San Juan Islands, for example, approximately half or 15 known

nesting areas would be included in a proposed complex of parks and reserves if all the areas identified in the San Juan Islands were included in this proposal. Each of the areas identified has its own characteristics and distinctions relative to geology, scenery, flora and fauna, suitability for public recreation and a common concern that a majority of them are at present under subdividing pressures or will be within the next 10 years.

The shoreline, island, and marine resources identified are important public resources, not only for the greatly expanding metropolitan complex of Seattle, Vancouver, Victoria, and all the small cities and towns surrounding the study area, but for the millions of vacationers from the United States, Canada, and abroad who visit this vacationland each year. These island resources are without doubt tied to the quality of life in America and to the way the working man on his weekend or vacation spends his leisure time, whether it be hiking, boating, fishing, or just getting away for a change of pace.

It is not the purpose of this study to make specific recommendations on the potential park and reserve areas but rather to ascertain if possibilities exist--and they do. Each of the areas that has been identified as a potential park or reserve could not by itself meet the standards for any National Park System management. But some of the same areas combined as a proposal might meet the criteria for National Park Service management. Thus, collectively, or as small groupings, these areas possess sufficient size, contain a diversity of important scientific and scenic values, and can accommodate a variety of recreational pursuits which could be of natural prominance.

An international park proposal might be oriented towards preserving a representative example of the irreplaceable scenery, flora, fauna, and marine habitat of the San Juan Islands through the protection of 4 or 5 land areas and a similar number of marine areas. Such a proposal might seem at first to have a dramatic effect on the future settlement of the islands, however, with careful planning at all levels

of government, there is no reason why a representative portion of the San Juan Islands could not be preserved as a part of an international park or reserve for the enjoyment of everyone. Local settlement through zoning and ordinances could likewise be provided for in a manner sensitive to these areas. The alternative to such planning is a scattering of vacation homes everywhere and a marked decline in the scenic quality and marine habitat of the area, which adversely affects the outlook and attitude of the local resident, the boater, the fisherman, and the vacationer.

Another international park or reserve proposal involving areas of the study zone might be oriented towards preserving a representative example of the many coastal features which are found within this area. The beautiful headlands and interesting giant kelp communities of Ebeys Landing, the rugged coastline, and flora-and-fauna-rich area of south Lopez Island, the highly scenic Chuckanut Drive, and the abundant bird and plant life of the tidelands of Samish and Padilla Bays, along with other areas, could be part of a long-range international park proposal.

Another international park or reserve proposal might be based on the general theme of boating and public recreation of shoreline and upland areas. In association with the existing marine parks in the San Juans, additional international park destination points might be added to the boaters present tour by providing land base parks with docking facilities that would offer a range of recreational opportunities such as interpretive facilities, wilderness hiking and interpretive trails, skin and scuba diving, and other activities. Shorelines and uplands might also be added, as might areas which are highly scenic and offer bicycle routes or scenic drives.

An international park or reserve proposal of this type might provide for the protection of Stuart, Johns, and Spieden Islands, or in addition, the west side of San Juan Island, the south end of Lopez Island, Lummi, Blakely, and Cypress Islands, Ebeys Landing, Chuckanut Drive, and Samish and Padilla Bays. Such a park could have a similar Canadian component.

The combined resource areas of the study zone, although they could stand on their own as units of an international park or reserve, represent only a portion of the total resources that should be inventoried in regard to the protection of the larger marine environment of Puget Sound and the Strait of Georgia. The San Juan Islands fall into a weekend or vacation-travel zone of Greater Seattle. There are, however, many outstanding resource areas which are much closer to the Seattle metropolitan area. These resource areas are found on Puget Sound and on the Strait of Juan de Fuca and should be inventoried and given protection as should certain Canadian areas. They are, however, not a part of this study.

Summary

The creation of parks and reserves in the island archipelago will require both funding and legislation. Any parks acquired through special funding or by regular park programs could become a part of an international park system under several formulae to which both countries agree.

Point Roberts itself does not meet the criteria for national park land status because of the lack of significance of and alteration to its resources. It, however, does possess a great recreational-conservation potential within international scope when joined with the Boundary/Semiahmoo Bay areas.

Reclaiming beaches for public use and marine facilities, and perhaps including short-tour services to the Gulf Islands, could promote Canadian interest in the international park possibilities at Point Roberts. Development opportunities for marinas, joint customs for returning boaters from northern waters, and a full range of recreation and conservation programs developed around Boundary Bay would stimulate American interest and use of the area. A special international park centered on Point Roberts and environs would complement park proposals under a number of administrative formulae for the island archipelago.

5

ADMINISTRATION AND MANAGEMENT

ALTERNATIVE ADMINISTRATIVE ACTIONS

Conceptually, there are a range of administrative actions available to establish a system of parks within the study area. Independent actions by existing park and conservation agencies operating with various degrees of consultation and coordination is one possibility. Parks independently acquired could, at some point in time, be designated as part of an international park system. This would symbolize the close relations between the United States and Canada,and recognize the practical need for cooperation to mitigate visitor-use pressures and to preserve park areas.

Joint arrangements between the two countries establishing an international park could range from a symbolic form of cooperation to joint or parallel programs of land acquisition and varying degrees of joint administration. This spectrum of conceptual avenues for creating an international park is shown in the table following this section as the basis for policy deliberations and discussions.

GUIDING PRINCIPLES AND MANAGEMENT OBJECTIVES

In the evaluation of these various conceptual avenues for creating an international park within the study region, there are a number of principles and objectives to be considered, namely:

1. The larger and more diverse the geographic area being considered for international park purposes, the more embracing yet flexible must be the administrative and management options.

2. There are a variety of agencies already active or actively interested in the conservation of recreational, wildlife, and historic resources in the study area. This established capability or interest must be considered in any analysis of how areas might be preserved and managed.

3. Full coordination of park and conservation planning, administration, and management of conservation areas of both countries is necessary. A forum, creating opportunity for

international liaison and avenues for coordination of many agencies active in the study area, appears essential to deal meaningfully with recreation demands and conservation problems that transcend international boundaries.

4. Any international park proposal should embrace both American and Canadian components. This will demonstrate goodwill, as well as enhance the attractiveness of the park to visitors from both nations.

5. No loss of territorial sovereignty is implied by international park proposals, and an understanding of this would appear necessary in achieving popular support for any proposal in either country. This factor is important in view of the established populations, albeit small, in all potential park areas in the study region.

6. Adequate funding to ensure proper execution of recreation and conservation programs as part of a selected international park concept is essential.

7. A supply of recreation facilities created anywhere in the study area will generate international demand for their use both from local residents and the fact they will attract many additional recreationists. Thus, in order to assure a degree of equality in coping with these demands, coordinated and parallel development of both American and Canadian potential park areas is desirable. In this way, excessive international recreation demands are not made on individual park developments in either country.

8. Point Roberts, by reason of its history, settlement pattern, and border situation presents a situation that lies beyond the interest and capabilities of established park agencies. The international nature of this problem warrants a diplomatic solution of an international character.

9. Maintenance of a high and preferably common standard of water quality is fundamental for maintaining the viability and attractiveness of any marine park or similar land based park created within the study region.

10. In financing the establishment of international parks, the large expenditure that would be necessary to acquire all of Point Roberts for a park must be weighed carefully against alternative park land acquisitions which may secure greater park values at less cost. The unique nature of Point Roberts may, however, warrant special attention.

SUGGESTED ADMINISTRATIVE ACTIONS

In considering the forms of joint action recommended for the study area, a number of practical considerations help structure the possible solution.

Firstly, Point Roberts has, without question, potential roles as a park and as a strategic marine access point to and from the San Juan-Gulf Islands archipelago and joint U. S.-Canadian boating customs. The nature of the problems created by the boundary and existing settlement, however, place it beyond the capability and specific interest of established agencies. Thus, a solution that provides for specially tailored administrative agencies established by joint international agreement appears most appropriate.

Secondly, Point Roberts as a park by itself is too small and isolated to attract many American visitors. A larger international proposal involving Canadian components appears desirable, not only to symbolize international cooperation but to enhance the areas attractiveness to both American and Canadian citizens. This proposal could embrace the uplands and the western foreshores of the entire Point Roberts peninsula as well as Boundary and Semiahmoo Bays. This alternative not only presents a more attractive park for international use, but it contributes to the conservation of marine resources having substantial international values--commercial, aesthetic, and spiritual. A range of administrative options, utilizing existing agencies under this alternative, could be considered.

Thirdly, the island archipelago or parts thereof could be designated as an international park under a variety of formulae with varying degrees of international involvement. This is desirable but not essential to the viability of an

international park on the mainland centered on Point Roberts and the Boundary and Semiahmoo Bays area.

To summarize, the analysis of the study area indicates that the Point Roberts/Boundary Bay/Semiahmoo Bay complex makes a logical and highly desirable international park, offering a convenient marine access point to the islands, a convenient United States-Canada marine customs unit at Point Roberts, attractive beaches, and potential for joint conservation and enjoyment of internationally significant wildlife resources.

Analysis also revealed that there are other international needs focused on the island archipelago, especially the need to promote and accelerate land acquisition in the islands for public conservation and recreation purposes. The International Joint Commission could well play a catalytic role in this activity. It also appears imperative to achieve a high degree of coordination in the development of parks and park facilities in the United States and Canadian islands in order to distribute more equitably the growing recreational loads, and avoid exceeding the environmental carrying capacities of individual parks. An ongoing forum comprising representatives of all park and conservation bodies active in the Puget Sount/Strait of Georgia region would, therefore, be desirable.

It must be emphasized that maintenance of high water quality standards in the inland sea region and related watersheds is basic to sustaining the diverse and rich marine resources that lie at the base of much of the region's park and conservation importance. Continued efforts to achieve an international accord on this matter, comparable to that achieved for the Great Lakes, should continue.

MANAGEMENT GUIDELINES: POINT ROBERTS AND ENVIRONS

This study suggests that immediate action on the Point Roberts/Boundary Bay/Semiahmoo Bay complex is appropriate. A major requirement is to coordinate all planning and resource management programs for this area.

A basic guideline is to utilize the capacities and interest of

existing agencies, thus placing reliance on the resource management capabilities of the Canadian Wildlife Service, the British Columbia Fish and Wildlife Branch, the United States Bureau of Sport Fisheries and Wildlife, the State of Washington Department of Natural Resources, and other park and conservation agencies that may in the future assume a role in the area. A coordinated program must be created to integrate the diverse and complementary capabilities of these agencies. Similarly coordinated and harmonized in relation to an overall plan, recreational developments of various kinds could well be undertaken by state/provincial or county/regional authorities, either under their present programs or under contract.

Special arrangements will be necessary to deal with any residential populations at Point Roberts. The population itself may range from a limited one necessary to sustain essential park and recreation services, to a restricted residential population living in closely defined residential enclaves. In either case, these people will require essential local services including water supply, fire protection, and waste disposal. The park administration should provide such services for its own facilities. For any residual, residential population, local services should be handled by the present county administration. Special legislative exceptions concerning health services and rights to employment could be made part of an international agreement covering Point Roberts residents. Maintenance of full local autonomy for residential development within or adjoining park lands could prove troublesome. Total reliance on local government to restrict private development and to control growth could involve a risk to nationally financed public investment.

Certain powers would be required by whatever form of agency is created to develop and operate a park at Point Roberts, including the power to:

- Acquire land
- Exercise controls on private development within or adjoining park lands if appropriate local zoning controls cannot be

established for these areas.

- Hire staff
- Grant concessions for food service, marina development and operation, and various commercial recreation services
- Enter contracts and accept title to gifts.
- Develop and enforce necessary regulations to ensure visitor safety and to protect park resources.

Financially, the administrative agency would have to be adequately funded to develop and operate a park. In this respect, it must:

- Have sufficient money for land acquisition, physical development, and operation
- Have the ability to receive monies and charge admission
- Have the capability to enter a variety of contractual relationships including leasing.

Finally, it would also be desirable for the administrative agency of any international park to be exempt from all forms of taxation.

TABLE

CONCEPTUAL AVENUES FOR CREATING AN INTERNATIONAL PARK

ACTION ALTERNATIVE	DESCRIPTION	COMMENT
Voluntary coordination of efforts by existing state/provincial and local agencies	State/provincial and local parks and conservation agencies voluntarily agree that all or certain of their parks embraced within a designated region will comprise an international park. Some special vehicle to catalyze this initial agreement as well as to provide for at least informal coordination of continuing planning and management efforts seems essential.	There would appear to be no financial or other incentive to participate in such a program. No additional funding is made available to provide for additional protection of park and conservation values, or to address the practical problems of creating a park at Point Roberts that appears to be beyond the scope and capability of state/provincial and local agencies alone. Achieving coordination of various agencies may be difficult to initiate and maintain on a strictly voluntary basis.
Special federal funding assistance program	Following an international accord, the federal governments of the two countries agree to provide special acquisition funds towards the creation of an international park. The lands acquired are to be developed and managed on a continuing basis, in accordance with guidelines established by the funding agencies. Funds or loans would be turned over to existing agencies. Lands are turned over to state/provincial or local agencies to develop and operate as part of their system. Funding might also provide for assisting some of the development and management programs.	This approach provides a financial incentive to participate in an international park program. Special arrangements for land acquisition must be made, as well as arrangements to alleviate any border "problems" at Point Roberts.

ACTION ALTERNATIVE	DESCRIPTION	COMMENT
Direct involvement of federal agencies	The appropriate federal agencies of both countries agree to undertake in cooperation with state and provincial governments acquisition and development of a system of parks and conservation reserves to comprise an overall international park. Land acquisitions within a designated area could be undertaken on a priority basis, but supplemental funds might be required in order to avoid disrupting existing agency programs. A formal accord creating an international park embracing the acquired lands would be made. Some funding might be made available to all government agencies to assist in meeting their designated responsibilities.	In both Canada and the United States, there are precedents for internal cooperation between park and conservation agencies on joint programs. Some provision for achieving continuing inter-agency, inter-governmental, and international cooperation for such a proposal will be necessary. A precedent for an international park embracing established American and Canadian national parks exists at Glacier-Waterton. Ongoing coordination of planning and management is a feature of this arrangement. In the case of Point Roberts/Boundary and Semiahmoo Bays, multilateral and international cooperation is essential to establish an international park because the area does not strictly qualify under the park criteria of federal agencies in either Canada or the United States. Point Roberts as such lacks the regular criteria for national parks and wildlife conservation areas.
Create a special commission	An international accord must be reached declaring the intention to establish an international park, and creating, funding, and empowering a special commission to undertake park acquisition, development, and operation in a defined international park area. In addition to direct engagement on its own lands, the commission should assume a role in coordinating the activities of existing park and conservation agencies to support its program.	Precedent for a special commission charged with development and operation of an international park exists at Roosevelt-Campobello International Park. Application of a special commission approach to a wide variety of non-contiguous sites in two countries could raise concerns about duplication of efforts and territorial sovereignty. The special commission might be the appropriate vehicle for dealing with the many special concerns presented at Point Roberts by existing settlement and the international border. No concerns about duplicating efforts of existing agencies are likely for this area. Special arrangements under this formula could provide for a truly international solution.